Bay 221

THE

Medical Times and Gazette.

A

JOURNAL OF MEDICAL SCIENCE,

LITERATURE, CRITICISM, AND NEWS.

VOLUME I. FOR 1867.

ST. MARY'S HOSPITAL
RADFORD LIBRARY
MANCHESTER.

LONDON:
PUBLISHED BY JOHN CHURCHILL AND SONS, 11, NEW BURLINGTON-STREET;
AND SOLD BY ALL BOOKSELLERS.

MDCCCLXVII.

LONDON:
BENJAMIN PARDON, PRINTER,
PATERNOSTER-ROW.

WELLCOME HISTORICAL MEDICAL LIBRARY

WELLCOME INSTITUTE LIBRARY
Coll. SER
Call No. W1 / 04421

ORIGINAL COMMUNICATIONS.

MICROSCOPICAL RESEARCHES ON THE CHOLERA.

By LIONEL S. BEALE, M.B., F.R.S.,
Fellow of the Royal College of Physicians, etc.

No. VI.

OF THE ALTERATIONS IN THE INTESTINAL VILLI.

The structural alterations in the villi were very distinct, and of remarkable interest. In no case were the changes about to be described present in every intestinal villus examined, but in every small intestine (taken from patients who died of cholera) which has been brought under my notice I have found certain of the villi, and usually a great number, exhibiting well-marked morbid changes.

Of the Changes in the Capillary Vessels of the Villi.

I propose to devote one paper to the consideration of the state of the vessels of the textures generally and their contents in cholera, but I shall here briefly describe and endeavour to explain some of the appearances I have demonstrated in the vessels of the villi.

The capillaries in many of the villi have wasted in a manner and to an extent which is very remarkable. Two specimens have been represented in the plate, Figs. 19 and 20, which show the alterations very distinctly. At the summit of the villus in Fig. 19 many of the capillaries have become reduced to mere lines, and the texture a short distance from the surface has wasted, indeed much of it had completely disappeared. In the intervals between the lines which mark the positions occupied by the capillaries is a little indeterminate tissue, in which several oil-globules are seen. In Fig. 20 the vessels have not wasted to the same degree, but their outline is irregular, and they are filled with an almost colourless material. A greater quantity of the tissue of the villus remains in the meshes of the capillaries in Fig. 20 than in Fig. 19. It is clear that the blood could not have circulated in these vessels at all for some time before death. Any blood that remained stagnant in the larger ones had become altered. Its colouring matter had disappeared, and those constituents which were incapable of absorption had undergone change. Among the resulting products was fatty matter in considerable quantity.

In some cases there was demonstrative proof that some time before death blood had actually passed through the capillary walls into the surrounding textures. Crystals of hæmatoidin, as well as oil-globules, were found in considerable number, as represented in Fig. 30. This circumstance proves that the villus had not been in a healthy condition for some time before the attack.

Villi exhibiting the structural alterations described cannot be organs of absorption. Neither could secretion have taken place from these villi. The passage of fluid out of the vessels must have ceased long before they became reduced to the state figured. They must now be regarded as mere processes of degenerated tissue, useless to the economy, and destined to be removed, and their place occupied by new organs, if the life of the individual had continued.

Now, it is quite certain that the morbid changes represented in these drawings must have been progressing some time previous to the attack which destroyed life. It may be confidently affirmed that such changes as those described could not have taken place in a few days. There is evidence of alterations which, I think, must have been going on, even for weeks, before death. The kind of degeneration which has been observed obviously requires some time for its completion, although I have not the data to enable me to fix the precise period. The time taken for the changes which occur in blood-clots can be ascertained accurately in some cases, and we have no reason for inferring that the red blood-corpuscles could be much more quickly disintegrated in the tissue of the villi, or hæmatoidin crystals formed in a shorter time, than in other situations.

In many of the specimens of small intestine from cholera cases I have found villi in every stage of wasting—the villus in which the change has only just commenced, and villi of which all that remained were little stunted elevations, projecting slightly from the surface of the mucous membrane. Had the patient lived, I am of opinion that such villi as those represented in Figs. 19 and 20, and those delineated in my last paper, would have been gradually removed. As I have already remarked, in a given area of intestine in cholera cases there are fewer villi and fewer Lieberkuhn's follicles than in health, and I believe that the victims of this disease have been suffering from degeneration of their villi for long before the occurrence of the attack of cholera. I think the evidence advanced in favour of the view that *healthy* persons die of cholera is defective and inconclusive, and believe, if this scourge is ever to be prevented, it will be by constant and unremitting attention to the food and general habits of life of the poor, not merely while we are appalled by the actual presence of the epidemic, but at all times. There seems reason for thinking that it is possible by good management to prevent people from being attacked by cholera. Have we not reason to think that much may be done to prevent people from becoming subjects for the cholera poison? But we know, alas! that we can do little, sadly little, to cure those attacked—though perhaps something, to improve the health of those liable to attack, and may thus mitigate to some extent the severity of the disease, and improve the patients' chances of recovery. I should waver in these views if I should obtain a single specimen of small intestine in which I could not find diseased villi. So far, without exception, I have found them in every case I have examined, and hence I have been led to form the above opinion, which becomes stronger as I work on.

Of the Transudation of Fluid through the Vascular Walls in Cholera.

Perhaps one of the most remarkable circumstances discovered in connexion with the vessels in cases of cholera is the very rapid transudation of fluid through the capillary walls after death. Although this has not been observed in every case, it has been noticed in too many to be regarded as a mere accident. Moreover, the fact was so striking that it could not fail to excite immediate and careful attention.

In order to make a good artificial injection of healthy capillary vessels, it is necessary to employ some force in pressing down the piston of the syringe, and the injection is seen to spread very slowly from the points where it first appears. It is only after several minutes that the injection becomes complete. In several of these cases of cholera, however, the injection seemed to run into the most minute capillaries almost instantly, and under very slight pressure indeed. The capillaries seemed to be filled at once, and extravasation occurred, without any force having been exerted, within half a minute after the injection had been commenced. While injecting the vessels, one was forcibly reminded of what takes place when fine injection is introduced by the aid of very slight pressure into one of the large vessels of a mollusc—the force required to inject the smallest vascular ramifications, which in this class are very large, being so slight that the injection passes as freely into the smaller vessels as it does through the opening made in the larger one, in which the pipe is placed without being tied.

I think there is little doubt that this increased facility of injection depended upon the extreme stretching to which the coats of the capillaries had been subjected during the course of the disease. It is probable that the elasticity of their walls had been much impaired, and I think it likely that in many instances the stretching had been carried to such an extent as to reduce the capillaries to a state of extreme tenuity, and to produce slight fissures in every part of the capillary wall through which injected fluids readily escaped after death. In some of these same cases we know blood-corpuscles escaped during life.

Now there can be no question as to the extreme distension suffered by some of the capillary vessels. In Figs. 23, 24, and 25, some capillaries are shown stretched to three or four times their ordinary diameter, and yet there is no evidence of actual rupture having occurred. It appears probable, however, that in many instances the distension is succeeded by giving way of the capillary walls, and hæmorrhage takes place into the surrounding tissues. This appears to have occurred in the specimen from which Fig. 30 is taken. In various parts well defined crystals of hæmatoidin were observed, as well as numerous oil-globules which result from changes having taken place in matters which have extravasated from the blood. The tube of the capillary vessel may be traced up to a point indicated by the letter *b*, but beyond this the only indications which remain of its further course are a few irregular lines. This

vessel was pervious, and was injected with fine Prussian blue fluid as far as the point marked. Below this point its walls were very permeable, and permitted the fine Prussian blue injection (a) to pass through them readily.

Capillary hæmorrhage, as is well known, although frequent in cholera, is by no means constant. It is probable that in many capillaries extreme distension is followed by cessation of the circulation and stagnation of the blood, which then undergoes change, much of it being reabsorbed. The vessel after shrinking very much gradually wastes, as has been already described.

I shall give drawings of many small arteries at the bases of the villi, which were completely impervious and irregularly contracted. One figure was published in the last paper.

Of the Thick Transparent Basement Membrane-like Structure on the Surface of the Villus.

This thick transparent layer on the surface of the degenerated villus results from a gradual wasting of the tissue of the villus, which appears to commence on its surface, just beneath the epithelium, and proceed in a direction inwards. That it is not a new structure formed by deposit upon the surface of the villus is proved by the circumstance that the vessels may be traced into it—and in extreme cases the remains of wasted shrunken capillaries are seen, while it is invariably found most thick in the wasted shrunken villi. The same facts seem to me conclusive against the notion that this tissue results from thickening of the supposed basement membrane of the villus, a texture which does not invariably exist. I do not think that any morbid change occurring in any organ can be properly described as "thickening of basement membrane." I have already shown that the change in question results from wasting of important textures, the *débris* of which constitutes the material supposed to be added, and which is regarded as the result of hypertrophy affecting the basement membrane or subjacent connective tissue. It seems to me almost certain that the mere lines or extremely narrow tubes seen in the transparent layer on the surface of the villus, represented in Figs. 19 and 20, were long ago, at a time before the villus had undergone change, capillaries which ramified just beneath the epithelium. Here and there, as the vessels gradually degenerate, stellate spaces are left in which what was once the nucleus of a capillary sometimes remains, and thus a body which would be called by most pathologists a *connective tissue corpuscle*, results. I have already shown that when the secreting structure of various glands undergoes wasting and degeneration, portions of irregular form remain here and there which have been regarded as connective tissue corpuscles, but these angular bodies really represent what was once secreting structure. Glandular structure, nerve structure, muscle, capillaries and other textures may so waste as to give rise at last to irregular bodies which are considered to be *connective tissue corpuscles*.

Of the Lacteal, Cells, Muscular Fibres, and Nerves of the Villi.

Lacteal.—We have yet much to learn concerning the arrangement and nature of the material which occupies the interval between the capillaries, and which extends from the lacteal, which may be often seen in the central and upper part of the villus, to its free surface. The appearances seen in some specimens would lead to the inference that the lacteal divided into numerous branches, and that these reached the surface of the villus in the intervals between the capillaries, as represented in Fig. 21. I think that, at least in many cases, the intercapillary space and the body of the villus in its upper part is in great part occupied by masses of germinal matter, which either lie within ramifications of the lacteal vessel itself, or else intervene between the bases of the columnar epithelial cells upon the surface of the villus on the one hand, and the cæcal origin of the lacteal on the other. I believe that these are the agents by which materials are absorbed from the attached extremities of the epithelial cells, elaborated, and afterwards passed on to the germinal matter of the lacteal or capillary, as the case may be. Arrived here, the altered material is taken up by the free germinal matter in the lacteal (chyle corpuscles), or that in the capillary (white blood corpuscles). In the wasted villi almost all these "cells" or masses of germinal matter, without envelopes or cell membranes, had disappeared (Figs. 19, 22, 23, 30), and in the upper part of the villi all traces of the lacteal were lost (Figs. 19, 20, 30), but towards the base the remains of the wasted chyle-carrying vessel were distinctly seen.

Muscular Fibre Cells.—Unstriped muscular fibre cells may be seen near the surface of the healthy villus. Some pass round it, and others are arranged longitudinally. I have seen both kinds of contractile fibres in some of the villi in cholera cases, but in the shrunken and wasted villi not a vestige of either was to be discovered.

Nerves.—Bundles of nerve fibres can be traced to the base of each healthy villus, and in many cases I have succeeded in following these for, perhaps, two-thirds or more of its height; but in the degenerated villi of cholera, fibres of connective tissue, which may in many cases be followed to the ganglia, alone mark where nerves once were. The ganglia may be seen distinctly enough in the submucous areolar tissue; and although some exhibited change, the majority, even just beneath numerous diseased villi, appeared healthy. Those bundles of fibres which passed to the villi, and those which ramified upon the degenerated obstructed arteries, had undergone the most striking change. This part of the subject will, however, be more fully worked out, and the changes described, when the general alterations observed in connexion with the nervous system in cholera are considered.

(To be continued.)

(a) "The Microscope in its Application to Practical Medicine." 3rd edition.

REVIEW OF A YEAR'S PROGRESS IN OVARIOTOMY.

By T. SPENCER WELLS, F.R.C.S.
Surgeon to her Majesty's Household and to the Samaritan Hospital.

The close of a year is a very convenient time for reviewing the work that has been done during its course. From such a review we may hope to learn how past errors may be avoided in years to come, and to gain from success such encouragement as may enable us to meet, with courage and confidence, the responsible labours which the new will bring with it.

In reviewing the progress of ovariotomy in 1866, I cannot attempt in the present article even to glance at the labours of others at home or abroad. It is difficult to compress within moderate limits any account of my own unpublished observations alone, although these are only the cases which have occurred in private practice; for (with the exception of the last case recently performed) every one of my cases in the Samaritan Hospital, since the first 114 cases appeared in the first volume of my work on "Diseases of the Ovaries," has been published in the *Medical Times and Gazette*. Two cases operated on in the Chester Infirmary have appeared in the *British Medical Journal*, and the only cases which have not been published in full are the cases in private practice of the last fifteen months. I had begun to think that the day had gone by when it was necessary to publish every case. But as it appears from a recent discussion at the Glasgow Medico-Chirurgical Society that the chairman of this Society has stated, without the correction of any member present, his conviction that a greater success than one in three is unattainable in the present state of our knowledge (see *Glasgow Medical Journal*, page 326), it appears almost incumbent upon any one who values the reputation of British Surgery to correct so notable an error.

But before I proceed to narrate the more important particulars of my recent experience of ovariotomy in private practice, I must first glance at a discussion which has arisen in Germany on the history of the *extra-peritoneal* method of dealing with the pedicle. Dr. Stilling, of Cassel, published in March, 1866, an octavo book of 204 pages entitled "Die Extra-Peritonäal-Methode der Ovariotomie;" and in June, 1866, Dr. Küchenmeister, of Dresden, published a German translation of the first volume of my "Diseases of the Ovaries." These two works have been made the subject of a very able review in four successive numbers of the *Kritische Blätter*, published in November and December last; and the reviewer blames Dr. Küchenmeister for following me in giving the credit of the introduction of the extra-peritoneal method to Mr. Duffin, whereas, he says, it ought to be called "*The German Method*," as it is due to Stilling. This is a matter of some interest in the history of Surgery, and it may be well to ascertain exactly to whom the credit is due.

Mr. Duffin's operation was performed in August, 1850. The pedicle was transfixed and tied, and the ligatures were so attached as to keep the strangulated pedicle outside the

peritoneal cavity. In my paper "On the History and Progress of Ovariotomy in Great Britain," published in the 46th volume of the *Medico-Chirurgical Transactions*, I say (page 39): "In 1850 Mr. Duffin inaugurated a new era in ovariotomy, by pointing out the danger of leaving the tied end of the pedicle to decompose within the peritoneal cavity, and by insisting upon the importance of keeping the strangulated stump outside." Dr. Stilling claims that he preceded Mr. Duffin by ten years, but admits that his remarks were buried (*vergraben*) in a Hanoverian journal. The case in his favour is stated as follows by the reviewer in the *Kritische Blätter*:—

"In 1837 Dr. Stilling performed ovariotomy after the old method, and the patient died on the fourth day of secondary hæmorrhage into the peritoneal cavity. This led him to consider what alteration in the proceeding could prevent such an unfortunate accident, and so he came to the determination to fix the pedicle and a part of the tumour between and outside the wound in the abdominal wall. This he published in 1841 in Holschen's *Hannov. Annalen*, 1841, 3 Heft, p. 306 ff. Thus he made known the principle which is now almost universally acted upon. By the publication of a second operation which was partially carried out after this method and proved successful, he again drew attention to its advantages (*Jenaische Annalen*, 1 Bd. 2 Heft, 1849, 129 ff.) and, as I studied then in Jena, I remember perfectly well the sensation which Stilling's work produced on the Medical public in Jena, and that Professor Martin soon afterwards performed an ovariotomy after the same method. Before this, Langenbeck had operated in Berlin (*Med. Centr.-Zeitung*, 1848, p. 98, 788 f.) after the same principle, though with some modifications. In England this method was first recommended and carried out by Duffin in 1850, ten years after it first occurred to Stilling, and after it had been repeatedly practised in Germany."

The reviewer goes on to argue that this alteration in former practice is not a mere modification, but is an essential and important improvement, or an entirely new method, which first made the extension and the fortunate results of the operation of late years possible. Stilling himself, in the preface to his book, says, "It is because my communications upon this new method of operation, which I made nearly thirty years ago, have lain buried in a journal, that my discovery, ten years after its publication, was brought forward in England by Duffin as a new discovery of his own, and has been recognised both in Germany and elsewhere as an English discovery."

Stilling's arguments, nearly thirty years ago, which he published in 1841, are certainly remarkable, especially as they were deduced from the observations of a single case. He says—I am quoting from his recent work, p. 21, an extract said to be a reprint of the old paper which I have never seen—"If the situation, the length of the tube, and the ovarian ligament—in a word, the length of the pedicle—make it possible for the whole tumour to be withdrawn and hang external to the skin, so much the better, and the wound may be united as closely as possible around the pedicle. But if the pedicle is so short that the whole of the tumour cannot be drawn out upon the surface of the integument—(and this can only be done with such an amount of force that the tube, etc., are not torn or stretched)—without too much traction and displacement of the uterus, then the edges of the remains of the tumour may be united by sutures on both sides with the edges of the divided abdominal wall, so closely that the surface of the ovarian remnant fills up the lower angle of the wound, and plugs it like the cork of a bottle."

It was not till seven years after the publication of these remarks—namely, in November, 1848—that Stilling first carried out his ideas in practice. In this case the pedicle was very short, and he transfixed it by a needle carrying a double ligature, tied one on each side, then cut away the tumour, and left the stump, consisting of the pedicle and the portion of tumour attached to it, "lying in the lower angle of the incision." "The lower angle of the wound remained open for a breadth of half to three quarters of an inch; it enclosed the stump of the pedicle, the ends of the ligatures passing outwards, and a narrow strip of linen which I had placed to conduct fluids from within the abdominal cavity outwards." This narrow strip of linen keeping up a communication between the abdominal cavity and the outer dressings is a proof that in 1848 Stilling had a very imperfect idea of the extra-peritoneal method. And further, it appears that no precaution was taken to prevent the strangulated stump from sinking inwards; and this took place, the patient suffering from septicæmia for upwards of a month after the operation. But she ultimately recovered. It was not till June, 1863, that Stilling, in his third case, really carried out the extra-peritoneal method of treating the pedicle. After transfixing it and tying in two halves as before, he carried a needle four inches long through the pedicle and through both sides of the wound in the abdominal wall, including the peritoneum, beneath the double ligature, so that the divided extremity of the pedicle projected an inch above the level of the integument. By means of a twisted suture the lower angle of the wound and the pedicle were fixed closely together. The patient recovered.

I had adopted this method five years before Stilling. In my second case, operated on in August, 1858, it was reported at the time that the pedicle was tied in four separate portions—"the lowest pin transfixing both edges of the wound and the pedicle, so as to prevent its sinking into the abdomen." This observation was not buried in a Hanoverian journal. It was published in the *Medical Times and Gazette*, August 28, 1858, and quoted both in French and German journals.

(To be continued.)

OPERA MINORA.

By BENJAMIN W. RICHARDSON, M.A., M.D., F.R.C.P.,
Senior Physician to the Royal Infirmary for Diseases of the Chest.

ON SUBSUTURE SURGICAL INCISION.

In this short paper I wish to call attention to a simple, painless, and bloodless method of removing pendulous external and superficial tumours by what may be called Surgical incision on a subsuture, with underclosure of skin previously to the application of the knife.

Since the introduction of the ether spray process for removing pain, I have had occasion to suggest one or two modifications of Surgical practice to enable the Surgeon to meet the requirements of the local method of anæsthesia. This, my primary object, has led, I think, to a little improvement also in operative art, and has assisted the process of cure.

One of the modifications thus suggested relates, as above said, to the removal of pendulous external superficial tumours. For the operation of removing these growths local insensibility ought always to be practised; it is quite as effective as general insensibility from chloroform inhalation, it is much quicker, and it is devoid, of course, of all danger to life.

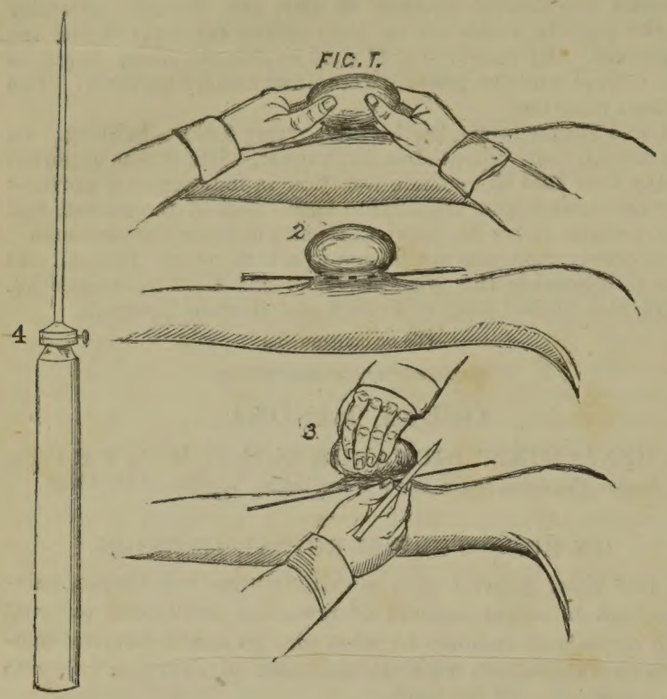
The class of tumours to which I refer hardly require any further definition than is conveyed in the words external, superficial, and pendulous. They are tumours in loose skin which, in dependent positions, hang lax of themselves, and in other parts can be easily raised by the Surgeon and drawn out so as to leave a neck or isthmus of skin between them and the structures subjacent to the skin. Granting that there be no deep attachment, the nature of the tumour does not interfere with the operation.

The operation itself is performed as follows:—An assistant taking the tumour in his hands, and grasping it firmly, lifts or pulls it gently from the body of the patient, and holds it so as to give as broad and as long an isthmus of skin between the tumour and the body as can be obtained. (See Figure 1.) Next along the isthmus of skin, comprising as it does two layers, the ether spray is directed on both sides, until both layers are quite dead to pain. This effected, the operator takes a strong sharp needle, having a rather broad cutting edge, and threaded at its lower part with strong silver suture. He passes the needle at the upper part of the isthmus of skin and above the level of the tumour through the skin, and draws a fair length of the suture through the opening; next he returns the needle through the skin from the opposite side an eighth of an inch lower down, and repeats the same processes as many times as may be required along the isthmus to a point a little beyond the lower margin of the tumour. When this is finished, and when the skin, if it be puckered, is drawn straight on the wire, the tumour is left with its connecting isthmus of skin traversed in and out by the wire precisely as though it were transfixed by an acupressure needle.

To complete the operation, a little more ether spray is directed along the isthmus, and then with a knife (as shown in Fig. 3), or still better with a pair of good scissors, the tumour is cut away at one sweep immediately above the suture.

The tumour thus removed, the edges of the wound are dis-

covered sewed up closely together, and the sewing can be tightened at pleasure by merely passing a cleft shot close down upon the silver wire at each of the points where it escapes from the skin. The wire is, of course, left in position as a suture, and the wound is dressed with strapping or with water dressing, as the Surgeon may think best.



When the skin is properly insensible, the tissues are very condensed, and some force is required to get the needle through the skin. To meet this, I have requested Messrs. Krohne and Sesemann to construct, so as to fit the second finger, a Surgical thimble, having at the top a few small openings just wide enough and deep enough to hold the needle lightly but securely. In this way the needle becomes for the moment the continuation of the finger, and not only is great power obtained over it, but a delicacy of manipulation which with the needle forceps is unattainable. This thimble, I think, will become a little instrument which may be turned to account generally in cases where a needle has to be inserted.

When the tumour is so small that the skin connecting it with the body need only be transfixed twice, it is simply necessary to fix a needle in a handle (as shown in Figure 4), to transfix with the needle in and out once (as shown in Figure 2), then to cut above the needle (as indicated in Figure 3) and to leave the needle in position as a suture.

The advantages of this operation are fourfold :—

1. It saves ether, as but a very small and thin surface of skin requires to be rendered insensible to pain.

2. It saves blood, the small vessels being all secured as by acupressure.

3. As an operation it is clean, neat, simple, and ready.

4. It renders the operation virtually subcutaneous, the skin being closed beneath before the incision is made above.

On this occasion I refer only to the operation in the special case of pendulous tumours ; but I think the practice of stitching previous to cutting might be applied to several other Surgical operations, and that one of the dangers of pyæmia, exposure of a cut open surface to the air, might be avoided. If this were so, a department of Surgery could be elaborated, which should in a measure rank with subcutaneous incision. In cases of vascular tumours fed by numerous small vessels, and of very large pendulous tumours affecting loose parts, such as the scrotum, and in which hæmorrhage is the first danger, I believe that, with skilful manipulation, every vessel could be commanded by subsuture and needle, and that every point of skin could be underclosed before the knife were touched for the amputation. In instances where the parts are unusually vascular and the incision must be very long, the stitch made with two needles, and commonly called the "shoemakers' stitch," would be safest and best. It would secure every vessel as safely as a ligature.

12, Hinde-street, W.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

THE ROYAL LONDON OPHTHALMIC HOSPITAL (MOORFIELDS).

The propriety of establishing Special Hospitals has been much discussed, and though the general verdict has been against them, still certain exceptions are almost universally made, and amongst such may be placed Ophthalmic Hospitals. Yet we must not only acknowledge, but we ought to keep constantly in mind, the truism that the ocular apparatus is a physiological unit of the whole organism. Whilst, then, its diseases and accidents require special skill, there are great objections to the narrowing of any one's mind to the study of the physiology and pathology of the eye, as of a complex optical organ liable to get out of order. At the special Hospital about which we now speak, it is a rule, without an exception, that each member of the staff is, or has been, a member also of the staff of one of the large general Hospitals. Thus the narrowness that special study might foster is rendered next to impossible. Still, the variety of diseases and accidents to which the eye is liable renders the study of them very extensive, and sufficient to employ most of the time and intellect of a goodly number of Surgeons. From their minute investigations and particular experience the members of the Profession at large can profit, and become enabled to treat with greater advantage such cases as come under their care.

We purpose in this article to bring before our readers some account of the Royal London Ophthalmic Hospital, Moorfields, and of the work that is carried on there.

This institution is held, we believe, to be the father of similar ones. It was founded in the year 1804, and for the first eighteen years its home was in Charterhouse-square. At this time it was known by the name of the London Eye Infirmary. In the year 1822 it was removed to its present site.

It makes up forty beds for in-patients, sixteen being allotted to women, and twenty-four to men. The number of beds seems small, and at the present time is not sufficient for the large number of patients that apply for relief. However, as the length of stay in the Hospital is generally short, a great many are admitted in the course of a twelvemonth ; thus last year there were 839 admitted as in-patients, and of these 742 were operated on. Indeed, few patients are taken in except for operation. Now, if diseases of the eye are to be thoroughly worked out at a special Hospital, we think it would be very desirable that more cases of acute cerebral disease, in which optic neuritis so often occurs, should be admitted. There is a vast amount of Ophthalmic Medicine in Physicians' practice, and if some of our dexterous ophthalmoscopists would frequently visit the Medical Wards of our large Hospitals they would supplement the knowledge they acquire at a special institution in a very valuable degree. As has been remarked elsewhere, the differentiation of Medical practice requires more scientific integration. Ophthalmologists require to see the ophthalmic aspect of severe diseases of the nervous system in which amaurosis dwindles to an incident ; and Physicians should use the ophthalmoscope more frequently, in order that they may not ignore altogether ocular symptoms of great value in diagnosis and prognosis.

The wards contain only a few beds each ; three are devoted to males, and three to females. The wards are lofty and comfortable ; the walls are painted a pale green colour, and light is nearly excluded by green Venetian blinds. The fireplaces are surrounded by high wire guards—a necessary precaution to prevent the patients falling into the fire, as there is so little light, and many of them cannot see, or are not allowed to uncover their eyes.

The operating theatre is on the first floor, and is necessarily rather small, there being only two rows on each side of the area in which the operating couch is placed. As the operations are mostly of a very minute character in a very narrow field, visitors can see nothing of them unless they are very near to the patient.

There is a waiting-room adjoining the theatre, in which patients are seen who are in the house, and who cannot be brought downstairs. This room is used on Sundays as a chapel.

The plan of the out-patient department is as follows :—There

is a waiting-room for the men and another for the women; the patients pass from these as required into a very large lofty room, which is lighted by two bow windows extending nearly from the floor to the ceiling. The surgeons sit at desks with their backs to the light, and see all their patients in this room. Against the walls are suspended some of Jaeger's and Snellen's test types, with which to test patients' sight for distance. Boxes containing convex and concave lenses are placed on ledges under the windows. These glasses are numbered according to their focal distance, instead of being arbitrarily numbered as is usually the case at opticians'. Boxes of glasses thus numbered are to be got at Doublett's, of Moorgate-street, or at Pillischer's, Bond-street.

A short passage (which serves also as a waiting-room for patients who are to have their eyes examined with the opthalmoscope) leads to the opthalmoscope room. This is a dark, gloomy-looking chamber, which has no window in it; its walls are papered black, and it is divided into five compartments, each of which forms what we may call an opthalmoscope box. Each compartment contains a table and two seats—one seat for the Surgeon, the other for the patient. The necessary light is obtained from an argand gas burner at the extremity of a jointed arm, so that the light can be moved up or down, or from side to side.

Besides the obvious necessity for such a lamp in Ophthalmic Hospitals, we think it most desirable that there should be in every Physician's out-patient room of our general Hospitals a gas lamp for ophthalmoscopy and laryngoscopy. We may here digress to mention the kind of apparatus the use of which we advise. A lamp giving a bright light, and admitting of easy movements both perpendicular and horizontal, is required. As fulfilling these conditions most conveniently, we recommend an argand gas burner of porcelain, the jets of which are exceedingly small and very close together. The burner should be supported by a double-armed gas bracket, admitting of horizontal and of vertical movements. The horizontal action is very commonly seen, and the arrangement for effecting it is easily made, but the perpendicular movement requires a rack apparatus to oppose the tendency of the arm to sink. This rack runs between the two tubes which constitute the attached arm of the bracket, and though desirable even when no lens is employed it becomes absolutely necessary when a condensing apparatus is fixed at the free extremity of the bracket—as is the case in laryngoscopy. A lamp of this kind is in use in the out-patient department at the London Hospital, and it is found to be very useful. There is a gas-lamp for the ophthalmoscope in the room adjoining the operating theatre of this general Hospital, in which room lectures and ophthalmoscopic demonstrations are sometimes given by the Surgeons. We learn that at the Leeds General Infirmary much ophthalmoscopic work is done in the Medical out-patient room. We know of but one large metropolitan Hospital in which there are conveniences for this kind of clinical investigation. There is a gas-lamp in the out-patient room at the National Hospital for the Epileptic and Paralysed, and the ophthalmoscope is frequently used as a means of investigation. But in general Hospitals, as we have already remarked, ophthalmoscopic work in the wards is even more important, and here a paraffin hand-lamp is perhaps the best that can be employed. Before we end this digression, we may remark that a good portable lamp—one that can be carried to the homes of poor patients—is a desideratum.

Adjoining the ophthalmoscope room is the room which contains the Hospital library of ophthalmic works and plates, and also the museum, in which are many valuable preparations showing different changes in the eye. Most of these preparations have been put up by Mr. Bader, the curator.

As the want of additional room has been much felt, the Committee have, during the past year, covered in with glass two small yards, converting them into rooms, in which notes can be taken of cases, and in which minor operations can be performed.

For some time the Committee have had under consideration the question of enlarging the Hospital by building a new wing, and a sum of money has already been collected towards defraying the expense, but hitherto the work has not been commenced, partly on account of the present site being possibly required by one of the railways.

Besides the Consulting Physician, the Physician, and the Consulting Surgeon, the staff consists of four Surgeons and five Assistant-Surgeons, who attend the Hospital twice a week each. To assist them and to take notes of particular cases, Clinical Assistants are nominated by the Medical board, and on the approval of the committee are appointed for a year, but are eligible for re-election. They are selected from the pupils of the Hospital, and during the term they hold office, have an opportunity of becoming intimately acquainted with diseases of the eye and their treatment. The practice of the Hospital is attended by a good number of students from the metropolitan Hospitals. Yet it is a matter of great surprise to us that more students do not attend the practice. Here they can learn to diagnose and to treat diseases of the eye very accurately, and they can get their knowledge quickly. In those Hospitals where there are special eye departments this attendance may not be necessary, but for students at those schools where there is no one appointed to teach diseases of the eye, a visit to some special Hospital is a matter of necessity for completeness of Medical education.

A great many Practitioners from the country, as well as Medical men from various parts of the world, avail themselves of a visit to London to add to their knowledge of ophthalmic science.

About three years ago the Surgical staff instituted evening demonstrations with the ophthalmoscope; these are held once a week, on Fridays, whilst the course lasts. Arrangements are made with a few patients to attend on these evenings, the cases selected being typical of certain forms of disease. Besides the examination of the eyes, there is a short lecture by one of the staff.

These demonstrations are becoming more and more numerously attended. Many Practitioners and students, who are prevented by their other occupations from attending in the morning, avail themselves of the opportunity thus offered to make themselves practically acquainted with the use of the ophthalmoscope. The demonstrations have been conducted by Messrs. Wordsworth, Streatfeild, Hulke, and Hutchinson, and lectures have been given by each of these gentlemen.

It may be useful to some of our readers who have no opportunity of visiting the Hospital, to inform them that the staff issue a publication called the "Royal London Ophthalmic Hospital Reports," which contains papers by themselves and by other ophthalmologists, and also by Physicians and others who are not ophthalmologists. This publication, like its fellow, the *Ophthalmic Review*, is a very useful one, and is very ably conducted. It may be well to say that it is in no sense a commercial venture; on the contrary, we believe it devours the whole of the fees from the pupils the staff would otherwise receive. It contains usually papers of a general as well as of a special interest. By the expression of "general interest" we do not mean that any of the papers are not on eye subjects, but that some of them have an interest far beyond ophthalmology. We may instance Hulke's papers "On Retinal Degeneration in Bright's Disease," and Hutchinson's recently published cases of herpes zoster about the eyelids.

Considering that there are several eye Hospitals in London, and that many of the general Hospitals have established an ophthalmic department, it is somewhat startling to find the large attendance of patients at this single institution. Last year over 16,000 new cases were registered, involving nearly 80,000 attendances. Many of the patients come up by railway from the neighbourhood of London, but some come from distant counties. We heard of one man some time ago who walked all the way from Wales to have the advice of one of the Surgeons. He intended to walk back, but he was enabled by a grant from the Samaritan Fund to return by rail.

Every now and then people apply for relief who are able to pay for Medical attendance. Once a patient was discovered to be a lady, who came in her carriage, but left it in Finsbury-circus. This is, no doubt, one of the evils of special Hospitals. Persons think that they will get better advice at these institutions than from their ordinary Medical man; and though they may give a handsome donation to the funds of the institution, they forget that they take up the time that the Surgeon only intends to devote to the really indigent. This last phrase—REALLY INDIGENT—is printed in bold type on the heading of the Hospital letter, but these words do not stare out of countenance many patients who come in silk dresses. But the evil is not confined to special Hospitals. The House-Governor of a large general Hospital told us the other day that "ladies" used to send their servants to secure and keep for them early places in order that their own valuable time might not be wasted in waiting for the Assistant-Physician or Surgeon. He believed, however, that the Committee had put a stop to that practice.

From the House-Surgeon's report we find that about a

quarter of the patients are affected with diseases of the conjunctiva. One form of ophthalmia which is very prevalent seems to be the same that affects our army and large bodies of people, like workhouse schools. It is encouraged by overcrowding, bad feeding, and by many using the same towels. Constantly various members of the same family are patients, and many of the children catch it at school from their playmates. We have mentioned ophthalmia rather to speak of its effects than to make any observations on the disease itself. The treatment of the condition known as pannus, produced by a granular state of the lids following ophthalmia, is one of the great advances recently made in Ophthalmic Surgery. The condition of a patient thus affected is very pitiable. He would, perhaps, be strong and healthy, but is debarred on account of blindness from earning his living, and many a soldier has been discharged from the army in this state with a blind pension. Since the introduction of the treatment of such cases by inoculation many have been restored to fair sight who thought themselves hopelessly blind.

The matter for inoculation is generally obtained from children suffering from ophthalmia neonatorum. The effect is more severe if the matter be taken in the early stage before treatment than in a later after lotions have been used. Thus the Surgeon is able to set up a more or less severe inflammation, as he thinks best. Gonorrhœal matter is sometimes used instead. There is some danger that the inflammation produced by inoculation may be so severe as to cause perforation of the cornea; but in Mr. Bader's report on the cases inoculated from October, 1857, to October, 1862, he states that out of 170 inoculated eyes two corneæ only were entirely lost, and but ten became perforated during suppuration. Those who attend the Ophthalmic Hospital may sometimes see there a man who was some years ago discharged from the army as incurably blind. Mr. Critchett inoculated this patient's eyes, and he became able to see to read and write. In consequence of old corneal opacities, which inoculation will not affect, Mr. Critchett had also to make him an artificial pupil. Where the structure of the cornea is normal, the results are sometimes most brilliant. A short time back we saw an old patient who came to show himself. He had formerly been led to the Hospital as a blind man. His eyes were inoculated, and now they appear as healthy and sound as possible. All the granulations have disappeared, and the palpebral conjunctiva has the pale colour of health.

As inoculation can only be used where the cornea is entirely vascular, another method is now frequently employed in cases of partial pannus. This is called Syndectomy. The operation consists in removing a tolerably broad ring of conjunctiva and subconjunctival tissue from round the cornea, so as to cut off to a certain extent the supply of vessels to the cornea. If benefit does not result from the operation, it seems to be of use in lessening the intensity of the inflammation if the eye be afterwards inoculated, and it reduces the danger of perforation of the cornea. Syndectomy was introduced by Furnari, of Paris. He gave an account of this operation in 1862 (*Gaz. Médicale*).

We find that the most numerous class of patients that attend this Hospital, next to those of diseases of the conjunctiva, are injuries to the eye. Upwards of 1000 of these were treated during last year. Mr. Lawson, in a paper published in the reports of this Hospital, has pointed out that the mechanics in and around London who suffer most severely from injuries to the eye are engineers and boiler-makers, and that a large number of these accidents might be prevented if the men could be persuaded to wear protectors made of plate-glass. Though often only particles of metal are lodged on the cornea, yet not unfrequently the globe itself is penetrated, and damage more or less irreparable is done. If the fragment has buried itself in one of the deep structures, there is great danger of the other eye being affected and destroyed by sympathetic ophthalmia, unless the injured eye is removed.

We saw an interesting and typical case of this class of injury at the Hospital the other day. The man was struck on the eye by a piece of metal; the particle penetrated the cornea, and wounded the lens. As it was doubtful whether there was any foreign body in the eye, an attempt was made to save it. The lens became cataractous, and was removed. Subsequently, a low form of inflammation came on, and symptoms of sympathetic ophthalmia appeared in the sound eye. This showed pretty clearly that a foreign body was lodged in the eyeball, and the globe was accordingly excised. On a section being made a small fragment of metal was found buried in the ciliary processes. Three weeks after the operation all sympathetic irritation had left the sound eye, and the man, who before could only read No. 4 of Jäger's test-types, could read No. 1.

Sometimes cases are seen in which the eye narrowly escapes being lost. Some time ago a man came to the Hospital for a wound of the conjunctiva. On examination, a large piece of iron was found lying between that structure and the sclerotic. The force had evidently not been sufficient to make it penetrate the globe, but enough to make an opening in the conjunctiva, and to enable it to travel a little way beneath it.

The variety of cases of accidents that come under treatment are very numerous. In some the surface of the eye is damaged, perhaps by molten lead, by lime, or from the explosions of gunpowder. In others the globe is ruptured, or the lens is dislocated, by a blow. Injuries are too commonly seen from the flying off of pieces of gun-caps made of inferior metal, and especially those used in firing at targets for nuts.

A large number of patients are admitted into this Hospital who are suffering from cataract. Last year 283 eyes were operated on for this affection, and the record of the method of treatment is interesting. It is as follows:—

By extraction by large flap	29
Ditto, with iridectomy	8
By extraction by traction instrument, with iridectomy	152
„ „ curette (soft cataract) . . .	15
„ „ suction instrument . . .	38
By solution	41

By this we see that the traction operation is very largely practised. Modifications have been made in the original method known by the name of Waldau's (Schuft's) operation. Mr. Critchett and Mr. Bowman have each altered the shape of the spoon. In Mr. Critchett's instrument, instead of having a lip all round, the end only is slightly recurved, so as to be somewhat slipper-shaped. It has the advantage of passing more easily behind the lens, and it does not take up so much room as the original instrument.

Mr. Bowman has introduced two modifications, which he thus describes in the *Hospital Reports*. In one "the body of the spoon is very nearly flat from side to side, a little concave forwards from end to end, and the incurvation of the end is, in fact, a continuation of this concavity, though inclined to it at an obtuse angle. Where the end joins the side of the spoon, this incurvation gradually ceases, and the sides, except towards the end, have no edge above the general level. The whole is as thin as possible consistent with due rigidity, and the breadth about half or a third that of the lens."

The second form "is nearly flat from side to side, and but slightly concave from end to end. The end has a very thin, though not a sharp edge, only slightly incurved, and the concave surface at the end is roughened by transverse lines." This instrument Mr. Bowman considers preferable where, from the entire absence of soft surface matter, there is the least room for the insinuation of an instrument between the lens and its capsule. In other cases the former spoon is suitable.

Recently we have seen Mr. Bowman remove with a syringe any circumferential matter that has been left after the extraction of the nucleus, if the matter be soft enough. By this means he saves the frequent introduction of the spoon, and so lessens the danger of bruising the iris.

The results of the traction operation seem to be very good, and many eyes that would be unfavourable for the old flap extraction are successfully treated in this way. Moreover, it is a boon to be able to administer chloroform, which is unadvisable in the old method on account of danger to the eye in case of vomiting.

Soft cataracts are frequently removed by the syringe after they have been broken up by a fine needle. This method has partly superseded the old plan of treating them by solution or linear extraction. The suction instrument used is a glass syringe, to which is adapted a tubular curette. The Profession is indebted to Mr. Pridgin Teale, jun., of Leeds, for this useful addition to our means of dealing with cataract.

Among the operations most frequently performed is iridectomy. This is done in some cases of inflammation affecting one or more of the structures of the eye—as corneo-iritis, choroido-iritis, or recurrent iritis. Artificial pupils are sometimes made in this way, and sometimes by the method introduced by Mr. Critchett and called iriddesis. In this operation a piece of the iris is drawn out, and is secured by a small ligature of fine silk instead of being cut off with a pair of scissors. Recently we saw Mr. Bowman make an artificial pupil in a slightly different way from either of these operations.

He punctured the sclerotic with a broad needle about a line from the margin of the cornea, and then passed it into the anterior chamber very obliquely, thus converting the opening into a small canal. He then drew out a piece of the iris with a blunt hook, and left it in the wound instead of cutting it off or ligaturing it. The result was very good. In his observations afterwards he said that this was merely an old method modified by making the incision very oblique.

A large number of cases of glaucoma are treated by iridectomy. Probably no mode of treatment has excited more discussion than this, and it is strange that the *rationale* of its effects has not been satisfactorily explained. To produce a good result, two points have to be carefully attended to—1st, to remove a large enough piece of the iris, and, 2nd, at the same time to take away its whole breadth, thus including its ciliary border.

In acute glaucoma, iridectomy seems like a specific in arresting the disease and restoring the patient's eye to sight. Such good results are not expected in the more chronic forms of glaucoma, but these are usually more or less benefited if the operation is done early enough; at any rate, it reduces the tension to a normal standard, stops the further progress of the disease, and even if improvement does not take place in the amount of vision, it is found generally to preserve for the patient what he had at the time of the operation, which otherwise would have been gradually extinguished. It is not found advisable to operate on glaucomatous eyes that have been lost some time, as there is great danger of hæmorrhage occurring between the choroid and sclerotic, and there is no hope of restoring any sight. Such eyes, if painful, are generally excised.

Some cases of detached retina have been treated by puncture, as proposed by Professor A. von Graefe.

The site of the detachment is previously made out accurately by the ophthalmoscope, and then a fine needle, such as is used in the operation for congenital cataract, is passed through the sclerotic into the vitreous chamber at the spot. A second needle is then introduced at a little distance from the first; the handles are now made to cross each other; by this means their points are separated, and a larger opening is made in the retina. On withdrawing the needles, a small quantity of the subretinal fluid may be seen escaping from the punctures under the conjunctiva. At present a very large number of these operations have not been done, but in several cases marked improvement has followed.

A great many patients apply on account of strabismus. In a large majority of these the strabismus is convergent, and the truth of Donders' observation that this form of strabismus is due to hypermetropia is constantly verified. Until Donders' investigations, squinting was frequently ascribed to irritation from worms, from cutting of the teeth, etc. Usually the operation that is adopted in these cases is that which has been called the Moorfields operation, in which the tendon is divided subconjunctivally through a small opening in the conjunctiva at its lower border. This operation was introduced by Mr. Critchett. Occasionally Graefe's method is employed instead. Here a small conjunctival opening is made over the tendon, and the hook that is used has a shorter curve and a bulbous extremity. Both eyes are operated on, or only one, according to the amount of convergence.

These operations are a great improvement on the old plan of dividing the tendon through a large incision in the conjunctiva; this was often followed by a sinking in of the caruncle and divergence of the eye from excessive retraction of the divided tendon, which attached itself to the globe far back. Such cases come every now and then to the Hospital, and are greatly improved by a readjustment operation, which is done in the following way:—

A vertical incision is made in the conjunctiva, a little distance from the inner margin of the cornea; a flap is dissected back towards the caruncle, and is made to include the tendon; a piece of this flap is then cut off, the size being regulated according to the amount of the divergence; this being done, the edges of the wound are brought together by four silk sutures, care being taken that the tendon is included in these by the needles being passed through it; they are also made to take up the outer piece of conjunctiva close to the cornea; all the sutures are passed before either of them is tied, and whilst this is being done, the eye is rolled inwards by a pair of forceps by an assistant. By this operation the tendon is attached to the globe more forwards, and the general appearance of the patient is much improved.

Great advances have been made in the treatment of other affections of the eye besides those we have alluded to in these observations, and it is since the invention of the ophthalmoscope that an exact diagnosis has been possible in cases in which the cause of the defect of sight was formerly more or less obscure, and especially in those diseases which used to be vaguely classified under the name of amaurosis.

The frequency of ophthalmic diseases should induce the various examining boards to require from their candidates proof, at least, that they have attended a three months' course of special ophthalmic practice, and so have made themselves acquainted with the ordinary diseases of the eye, and have learned to use the ophthalmoscope. We repeat that it is simply impossible for ordinary students to learn enough of ophthalmology for practical purposes unless they learn in a special department in their own general Hospital or at some ophthalmic Hospital. We hope that each of the large Hospitals will soon establish ophthalmic departments and eye wards.

We hope in a few weeks to give a further report from this Hospital. We shall then relate cases, in more detail, from the practice of each of the staff.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0

Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.

Post-office Orders and Drafts on Army or Navy Agents, should be made in favour of Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d.	A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d.	A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, JANUARY 5, 1867.

SPECIAL *VERSUS* GENERAL HOSPITALS.

Special Hospitals come into being for one of two reasons—either to supply a public want or to promote the interest of some Practitioner. On public grounds they are sometimes necessary for the relief of classes of cases which it would be quite unfair to throw on the general Hospitals, even if the latter were able to provide for them. Examples are afforded by the late temporary Cholera Hospitals, by Lock Hospitals; by Hospitals for the consumptive, insane, and epileptic, who are expressly shut out from general Hospitals; and by those established for the relief of maladies which are said, truly or not, to be treated more successfully than in general Hospitals.

The prime cause of the existence of other special Hospitals is the ambition of some Practitioner. A man who desires to be distinguished as a specialist finds a special institution as necessary as his modest book "On Diseases of the ———," whatever it may be.

But though special Hospitals, under certain conditions, may be necessary for the public good, and eminently conducive to the interests of some Practitioners, and although it must not be denied that they have given opportunities for increasing our knowledge in several directions, yet unless kept in check they act prejudicially to the real interests of the Profession and of the public. A thoroughly able and completely educated Physician or Surgeon loses none of his general skill if it so happen that the suffrages of the Profession or of the public cause him perforce to confine his practice to one special organ. You may go to some Practitioner eminent for his skill in treating the eye or the skin, and feel that you are consulting a man to whom the whole of his Profession is well known. But assuredly the tendency of specialties is to breed

a class of men who pretend to know one thing only, and to discourage the most generally useful Practitioner—the man in whom the highest Professional type is exhibited—the first-rate general Physician or Surgeon—the man whose cases are not picked, but who treats all that come.

Now it must be some discouragement to this order of Practitioners, if every single condition and member of the human body be seized by some specialist. What a mere *caput mortuum* is left! or rather not *caput*, but *torso!* What has the general Physician or Surgeon left? Divide human beings according to sex, and you find Hospitals for women grasping the better half. Divide them according to age, and you find special Hospitals for children. There are special Hospitals for the very poor, and for the genteel who can afford to pay. There is a trace of special Hospitals for people of different creeds. But when we come to organs, what a division there is! Insanity, epilepsy, idiocy, mania, and nervous diseases are claimed by one class of special institutions; the eye by another; the ear by a third; the throat by a fourth; the chest by a fifth; whether the heart really has a Hospital we know not, but we have heard of one, which we must call number six; the urinary organs are claimed by a special institution under the patronage of St. Peter, the Prince of the Apostles, whilst his bosom friend, St. Mark, is supposed to interest himself in maladies of the nether end of the digestive apparatus; this makes eight. The whole of the female system claims a ninth, whilst parturition specially demands a tenth, deformities an eleventh, the teeth a twelfth, and the skin a thirteenth. If we include the Hospitals for special diseases, as fever, small-pox, cancer, sore legs, and syphilis; for different classes, as for seamen, etc.; for the use of special remedies, as those admirable Hospitals at Margate for sea-bathing, at Bath and Buxton for mineral waters and the like:—in fact, if we include all the known bases of specialisation, we shall find that the number of kinds of special Hospitals requisite to make a complete set for the metropolis is at least twenty-four, and that many of these admit of subdivision. All that is wanted to complete the list is a special Hospital for dyspepsia, and disorders of the stomach, liver, and bowels.

But whilst specialties are flourishing apart, Physic and Surgery, as adapted to the wants of the great mass of mankind, are discouraged. The Physicians and Surgeons attached to general Hospitals lose popularity and employment; the general Hospitals lose subscriptions; money is frittered away in advertisements and management; the Medical Students lose the opportunity of seeing cases of all known diseases in one Hospital, and the public suffers in the long run.

But as special Hospitals show a want, there clearly is but one way to put them down, and that is, to supply the want—to make the interests of the general Hospital, of the special Practitioner, of the student, and of the patient, one. For instance, the Committee of every general Hospital with a school attached should look on the school as an intrinsic part of the establishment, to be fostered in every conceivable way, and made as perfect an instrument of Medical education as possible. Thus its benefits will not be confined to the immediate patients. Let us suppose that a Practitioner practises twenty-five years, and sees 200 separate patients per annum. 5000 persons are thus benefited by the training of one Medical student.

Then, if men of activity and talent are driven to set up special Hospitals because they cannot get into general Hospitals, would it not be a better and sounder plan to open special wards for them in the general Hospitals than to let them set up separate institutions—to affiliate to the Medical school the men who would be the rivals?

General Hospitals ought to be stimulated to do all that the special pretend to do, so that there may be no excuse that the latter are necessary for the sick poor. If special wards or apparatus be necessary, why not have them? Above all, why allow the special Hospitals to boast that any operation whatever cannot be done safely in the general Hospitals? Is it true that ovariotomy cannot be safely attempted in the latter?—if so, is there not here a reproach and the strongest possible motive for wiping it off? Is Mr. Walter Coulson justified in quoting from Mr. Charles Hawkins's article on Lithotrity (in Holmes's System) to the effect that general Hospitals do not and cannot afford poor patients the benefits of that operation because of the necessarily long sojourn in a Hospital atmosphere? If so, by all means let there be a detached house for lithotrity adjoining the general Hospital, into which no "Hospital atmosphere" shall enter. Considerations of Professional credit should urge the managers of general Hospitals to take away every ground for asserting that special Hospitals are necessary for patients, Practitioners, or students.

"QUID RIDES?"

In a certain sense, all the professions may be looked on as parasites upon the body corporate of society. Naturally the Medical Profession in its epizootic character is a quiet, unobtrusive creature, "doing the work assigned to it in the order of nature"—whatever that may be, or whatever the phrase may mean—without much fuss or seeking after notoriety. But for some few years past things have changed, and it has become discontented—grumbling. It protests that it has reason to be dissatisfied with its social status and treatment; and the easy much-enduring host opens its eyes and wonders what the fractiousness is about. Nobody exactly knows. But if there be any neglect on the part of the public—any shortcomings of respect, any disposition to chaff about odd ways and doings—after making allowance for the irreverence of the age, we suspect the fault must as usual lie mainly at the door of the complainant. We don't altogether deny the fact. Tolerant and considerate and respectful to its servitors and dependents as society generally is, it cannot always suppress a grin, or check a rebuke, when it sees antics or listens to folly. We don't deny that the Profession has sometimes been laughed at, but it has made itself ridiculous. It has been bantered, but it has unwittingly shown its weak points. It has met with sarcasm and reproof, but not more than it has justly brought upon itself.

We are not going into a discussion of all the causes which have let down the Profession into the somewhat absurd position of having to make these complaints. Some of the answers to the *Quid rides?* are more noticeable than others, but altogether there are many of them.

Medicine does not always sufficiently bear in mind the fact that it lives and thrives upon society in virtue of the existence of sores and evils which it is not in human nature to look upon with any complacency. It cannot eradicate them, and only professes to cure them; about which, as they never cease and mankind goes on dying, some are apt to be a little sceptical. People endure pain and sickness as seemingly necessary ills, and priestcraft tries to teach us that we deserve all we get. But pills, potions, and Physicians are conventional appendages of the common curse, and are often put up with, like many other aggravations, only from apathy and want of inquiry into their worth or worthlessness. The sore exists, and the fungus exults in a congenial habitat. If it is not very pert and sprouty, it is let alone, but when it begins to court public honours and coronets, the notion of cultivating strawberry leaves in gallipots for the sake of decorating Doctors is a little too titillating for lay gravity. The public is accustomed to pay its own fees for physic. It does so pretty freely and in a very direct manner. We have nothing like church endowments, army and navy estimates, parliamentary grants, or intervening attorneys to keep us in a state of mysterious professional isolation. The ideas of the fee and the Physician are closely identified. The debt of honour ends satisfactorily enough in a hand-to-hand transaction. It would be difficult even for the

most courtly Lord Doctor to slip guinea after guinea gracefully under the ermine. Jenner was a man of good common sense. He found himself for a season among headless royalties at Charing-cross, but is no more seen. Truly and fairly, the laugh is against physic in the peerage.

Parasitically, the Profession has sometimes shown a strong tendency to parthenogenetic reproduction. It has thrown off a succession of aphidian growths—hydropaths, homœopaths, speculists, clitorotomists, and suchlike—things which, if let alone, would soon have budded forth something else weaker and more grotesque than themselves, and which only wanted a little smoke to kill them, or time to reassume the parent form. But no; the dignity of the Profession was at stake, and the public must be protected at all hazards. So infinite pains have been taken to argue, and caution, and denounce. Of course, curiosity has been aroused, and good-natured weakness brought out into active support of the supposed victims of jealousy. The laugh is always against those who labour to break a fly upon the wheel; especially when the particular fly has been thought to have made the ointment of the apothecary to stink, and the would-be executioner has happened to be the apothecary himself.

Then what Doctor has not felt himself shrink into insignificance when he has heard the club and breakfast-table jeers at the newspaper reports (spontaneous, of course) of quasi-judicial exaggerations about crinoline catastrophes and sensational statistics of metropolitan infanticide? What but mortification has of late come out of Professional appearances in the witness-box; and how many "sworn advocates" have gone away to their proper sphere of "private practice" from the presence of the Chief-Justice, smaller and smarting if not wiser men? These things are not done in secret. Lookers-on will laugh, wince who may.

Another step down the social scale was taken when the Profession split itself up into specialties. Old-fashioned Doctors and Surgeons inspired confidence as men of science skilled in arts "*quæ prosunt omnibus;*" but who knows how far he may trust a sort of pinhead-making specialist? There must be something wrong when you find "general Practitioners" half ashamed of their position, and men who always run in grooves everlastingly talking and writing about general principles. A Doctor's knowledge used to be like the water of the pool of Bethesda—it flowed over all and healed all that came. Now-a-days the sick, blind, and lame have the double task of finding out first what they ail, and then "who is the proper man to go to." Molière, if among us, would get great fun out of a group of modern Doctors in consultation, and the race of Molières is not yet extinct.

And Medical education—can there be anything absurd in that? We shall see.

THE PHYSIOLOGY OF RESPIRATION.

Some weeks ago we put our readers in possession of the latest results of Professor Pettenkofer's investigations into the physiology of respiration, with special reference to the elimination of carbonic acid and the absorption of oxygen by day and by night, and during work and repose. It was then seen that large quantities of carbonic acid are produced during the day, in waking, whether we work or not, and that the absorption of oxygen during the day is comparatively trifling; while at night, during sleep, large quantities of oxygen are absorbed and stored up in the system, in order to enable us to compensate the previous extra waste of oxygen, and to be again prepared on the day following for the requirements of waking life. These facts have not even been guessed at by previous inquirers into the physiology of respiration, because they had extended their observations only over a very limited space of time, most of them being satisfied with noting the results obtained during ten or twenty minutes, and that, too, under unnatural conditions. Professor Pettenkofer was the first who carried on such observations over the whole twenty-four hours, while the subject of the experiment was at the same time placed under as natural conditions as could possibly be obtained. How important it is that the observations should be carried over the twenty-four consecutive hours is shown by the fact that M. Henneberg, who worked at the University of Göttingen with an apparatus constructed on the model of Professor Pettenkofer's machine, has, in his investigations, arrived at results which were perfectly unintelligible and seemingly absurd, until it was shown that he had confined himself to the phenomena of the day, but neglected those occurring at night, when the apparent discrepancy of his results was at once satisfactorily explained.

The Munich investigations make it evident that the oxygen which is absorbed is not by any means at once used up for oxidation so as to give the ultimate products of combustion—viz., carbonic acid and water—but that the oxidation proceeds through a great many intermediate stages, which occupy the oxygen for hours within the system, before it is eliminated finally in the form of carbonic acid and water. This is quite in accordance with the results previously obtained by experiments on marmots during hibernation. These animals, unless they lose weight by micturition and defecation, often actually increase in weight during hibernation, in spite of continually exhaling a little water and carbonic acid. If the watchmaker who, for the benefit of science, spent the nights of July 31 and August 3, 1866, in Professor Pettenkofer's machine. had retained the urine in his bladder and exhaled less water—that is, about 200 grammes—he would have found his weight increased by 60 grammes between 6 p.m. and 6 a.m., as he gave off only 400 grammes of carbonic acid, while he absorbed 660 grammes of oxygen. The sleep of man, therefore, does not materially differ from the hibernation of marmots.

If we compare the numbers showing the elimination of nitrogen (urea) with those obtained for the absorption of oxygen, the two series appear to be perfectly proportionate. The more albumen is taken with food, the greater becomes the capability of the body to store up oxygen during sleep for the purpose of actively employing it afterwards during the day; and, on the other hand, if little albumen is swallowed during the day, only a small quantity of oxygen is absorbed during night. Thus the conditions of respiration and assimilation are seen to be most closely connected and interweaved.

Professor Pettenkofer has also made respiration experiments on two patients in order to further examine the question of the necessity of stores of oxygen within the system for the possibility of physical exertion. There are two incurable diseases which generally last several years, and in which the patients have continually a good, or even a ravenous, appetite, but where, in spite of the most abundant and nutritious food given them, they have not the slightest feeling of muscular power, and a total want of refreshing sleep; and they continually complain of utter weariness and weakness. These diseases are diabetes mellitus and leucæmia lienalis. A patient was some time ago in Professor Rothmund's ophthalmic clinique, suffering from cataract and diabetes. This man, aged 21, took about three times as much food as a healthy person would have taken if allowed to take as much as he liked. He produced within the twenty-four hours 100 grammes of urea and 700 grammes of sugar, but was, nevertheless, so weak that he could not lift a chair. If he walked a few hundred yards he was utterly exhausted. This patient remained under observation for a twelvemonth, and was put into the machine seven times for twenty-four hours in order to allow the rates of absorption and elimination in him to appear. The following table shows the numbers obtained:—

Time of Day.	Eliminated.				Absorbed Oxygen.	Proportion.
	Carbonic Acid.	Water.	Urea.	Sugar.		
Day .	. 359·3	308·6	29·6	246·4	278·0	94
Night	. 300·0	302·7	20·2	148·1	294·2	74

Dr. Ranke lately drew the attention of Professor Pettenkofer to a very severe case of leucæmia in a patient aged 40. This man had, at the time he was put into the machine, one-third of white, and only two-thirds of red, globules in the blood. His appetite was always strong, but the patient was, nevertheless, emaciated to the last degree, and utterly powerless. He used to sleep six or seven hours a day, felt dyspnœa before he fell asleep, and a good deal of swelling in the stomach, which was probably due to a periodically increasing tumescence of the spleen during digestion. During sleep he always perspired copiously, and felt weaker on waking than on going to bed, and he felt a little better some time after getting up. The following table shows the proportion of absorption and elimination :—

Time of Day.	Eliminated.			Absorbed Oxygen.	Proportion.
	Carbonic Acid.	Water.	Urea.		
Day . .	480·9	322·1	15·2	346·2	101
Night . .	499·0	759·2	21·7	329·2	110

These numbers show that, in the two patients mentioned, the difference in the elimination of carbonic acid and the absorption of oxygen by day and night was not nearly so marked as it was in the healthy person previously alluded to. The patient suffering from diabetes seemed to be even better off in this respect than the one affected with leucæmia. The differences between day and night in the healthy person were 218 and 44 during the day of work, and 175 and 58 for the day of rest. In the patient suffering from diabetes the numbers were 94 and 74, and in that one affected with leucæmia 101 and 110. Thus, while there was a variation of 107 for the day of rest, and as much as 174 for the day of work in the healthy person, the variation in the diabetic patient was only 20, and in the poor fellow with leucæmia even 9 on the wrong side! In this latter patient the elimination of urea was also exactly the reverse to what it was in the healthy man; for while the former eliminated 16 grammes by day and 21 by night, the latter gave off 21 by day and 16 by night. It is therefore evident that a system containing so much white blood works quite differently from one containing red blood-globules in due proportion.

Professor Pettenkofer promises soon to experiment on patients suffering from febrile diseases, with regard to their eliminative and absorbing properties. The respiration apparatus will no doubt answer the question why such patients are so much worse towards evening. We must certainly congratulate ourselves on the prospect of getting so much valuable information for Medical science and practice as will no doubt result if the learned Professor fulfils his promise.

We conclude with an admirable simile of the Professor's, which illustrates in a striking manner the events continually taking place in the system. The current of albumen in the body is, as it were, the main road by which the oxygen is carried along. It constitutes the means of communication for the intercourse of the body with the atmosphere, and serves for import as well as for export. The blood-corpuscles which are continually swarming about constitute a fleet of vessels laden with oxygen, and carrying their loads to the most distant parts of the system and all the different organs, where part of it is at once consumed for works which are going on there, while another part is stored up and accumulated for future use. The carbonic acid is the return-load put on those Lilliputian vessels, which are only visible under the microscope, and a much larger number of which may, of course, steer in a large stream than in a small rivulet. In spite of their tiny form, they are able to transport forwards and backwards four pounds and a half of oxygen and carbonic acid in the twenty-four hours without any noise or commotion, to condense within themselves more than 700 litres of oxygen from the atmosphere, and at the same time to give off nearly as much carbonic acid, without anything of their speedy and airy work being so much as guessed at by the casual observer. Up to the present time we have imagined that these little transport-vessels are engaged in export and import all the day in equal proportion; but we have now found out that they export much more carbonic acid during the day than they import oxygen, and that during night they bring back rich treasures of oxygen to supply our wants, and disinterestedly serve the most out-of-the-way places and organs, so that our work may be done and our troubles may be borne on the day following as it was on the one that preceded, without damage to ourselves or to any part of us.

THE WEEK.

PAROCHIAL MEDICAL OFFICERS.

The parochial authorities of St. Pancras and Devonport would seem to be in a fix just now. They want a Resident Medical Officer at St. Pancras Workhouse, and a special meeting of the vestry was held to examine the testimonials of the applicants for the vacant appointment. Two or three were to be selected as a leet whereon the sapient body might exercise their powers of exact discrimination at the next general meeting. All were tried, and all but one found wanting. The obvious plan would have been to recommend the election of this gentleman; but no. One could not be sent up—that would give no choice; besides, the applicant was 35 years of age, and, had he been a clever man, should by that time of life have been far above applying for an appointment to a Workhouse. Logic prevailed: the candidates were dismissed, and they are to advertise again in hopes of greater success. At Devonport, however, it is not Medical but religious qualifications which are wanted. There, two guardians lately proposed that two candidates for an out-of-doors Surgeoncy to the union should be had up before the board, in order that it might ascertain whether they had any ritualistic tendencies, such being, of course, totally incompatible with the proper performance of the duties of a Medical man at Devonport.

THE PATHOLOGICAL SOCIETY'S ANNUAL REPORT.

The Annual Report of this Society shows that it has during the past year been increasing in numbers as in usefulness, there having been received no less than 314 annual subscriptions, without reckoning members who had paid the composition fee. It refers to the great expense connected with the publication of the last annual volume of *Transactions*, and regrets that this should have so nearly swallowed up all available funds. It proposes to change the Society's place of meeting, provided Government can be persuaded to permit it to occupy a portion of Burlington House; by this alteration the Society would be freed from its somewhat heavy rent, and so enabled to devote more money to the publication of its annual volume. A committee is to be appointed for examining and reporting on all specimens offered to the Society as "cancers," as soon as press of other business will permit. The total income for the year was £464 6s. 6d., and the total expenditure, exclusive of £100 invested in the funds, was £518 19s. 8d., £339 6s. 6d. of this having been spent on Vol. XVII. of the *Transactions*. It is hoped, however, that a portion of this will be recovered by the general sale of the work in question.

THE OBSTETRICAL SOCIETY.

This Society held its annual meeting last Wednesday, but there was a small assemblage of Fellows, owing probably to the inclemency of the weather. The Society's accounts were read, and found to be in a highly satisfactory condition, over a thousand pounds being lodged to its credit in the Three per Cent. Consols. Like other of the Medical Societies, they want Government to provide them with accommodation, and a committee has been appointed to look after their interests in this respect. Unanimous votes

of thanks were given to the Conversazione Committee, and to the officers of the past year, after which the President (Dr. Barnes) delivered his address before vacating the chair. First of all he referred to the prosperous condition of the Society, stating that it numbered no less than 536 Fellows, after which he proceeded to enumerate the losses death had caused during the year. With pardonable pride he dwelt on the great success of their grand *conversazione*, and referred to the laborious and successful endeavours of Dr. Meadows towards its success. He then pointed out quarters in which renewed exertion would be highly advantageous to the world at large—one proposed by Dr. Farr, as to the influence the different modes of treating newly-born children in various countries, as well as in the several districts of the same country, had on infantile mortality. Another he brought forward himself, as to the effects of zymotic diseases on women in the pregnant and puerperal states, as well as in children born under such unfavourable auspices. Finally, he referred to the position Medical men ought to take with regard to any new mode of treatment, whether it was proposed for the good of society at large, or for private aggrandisement—insisting, at the same time, that whilst no absolute opinion could be pronounced as to Medical doctrines or even facts, the mode in which any one engaged in a particular line of practice was open to the criticism of the Profession at large. Papers were read by Dr. Fairbank, Dr. Short, Mr. Hunt, and Dr. Boulton.

MEDICAL EXAMINATION PAPERS.

We suppose we shall shortly arrive at that point of intellectual culture when all society will fall naturally under the two great divisions of the examiners and the examined. A hundred years ago, when poor Goldsmith got plucked as a Surgeon's mate, the British cockpit losing an ugly blundering Irishman, and the world gaining the "Deserted Village" and "Vicar of Wakefield" through the admirable sagacity of the examiners, the Medical was almost the only Profession to enter which it was necessary to pass an examination. Even up to the present day the bar resists the Chinese example which has fascinated all the rest of the world. True, it by no means allows of quackery. To become a barrister one must not only pay large fees, but must set by a considerable portion of time, which it is presumed is spent in study. But the barristers go on the principle that if a man's own self-interest and ambition do not make him work to good purpose, nothing else in the shape of a pass examination will. Somehow it answers very well, for perhaps, if the amount of brain-power of the various professions in England were estimated, the barristers would rank—shall we say?—only second to Medicine. However, the public may have bad law and bad divinity even now, but they have long seen the necessity of protecting themselves against bad physic. As we are the oldest examiners, so amongst ourselves the art and practice of examining is perhaps furthest advanced, and is yearly, we think, advancing. The Medical examination papers of the British Universities for one year would make "a very handsome and highly suggestive" volume. All we can say is, that if the young men answer all or half the questions that are put to them they must do an amount of genuine work, or undergo an amount of cram, which will test tolerably well their mental powers. One of the best features in the modern examinations we take to be, not their length or the number of subjects which they embrace, but the fact that they nearly all endeavour to apply some practical test of the student's acquaintance with laboratory, mortuary, and clinical work. This week we have received the examination papers of the University of Oxford for the M.B. degree. In the first examination for that degree the knowledge of the student is tested in laboratory and anatomical manipulations; and in the second examination in making post-mortem examinations and describing pathological specimens, as well as in examining and diagnosing the diseases of the living. We are glad to find that a like spirit is leavening the whole mass of the examining bodies. We hear that the Court of Examiners at the Apothecaries Hall have added to the ordinary written and *vivâ voce* examination a practical chemical and pathological one. If the present divided state of the Profession is to continue, and it is still to be—to quote Sir Dominic Corrigan—"a battle of the shops," we hope that the object of emulation will be to turn out the best article in the shape of the educated Practitioner, and not to fill the coffers of the examining body, be it University, College, or Hall.

THE CORONERSHIP FOR THE SOUTHERN DIVISION OF NOTTINGHAMSHIRE.

This office is vacant by the death of Mr. C. Swann. We hear of two Medical candidates, Dr. Robertson and Dr. Lory Marsh. There are also, we believe, two lawyers in the field. We trust that an arrangement will be made between the Medical candidates, and that the full force of Medical influence will be employed to return one of these gentlemen.

THE LINCOLN COUNTY HOSPITAL.

Whatever may be the merits or demerits of the system of lady nursing which has been tried at the Lincoln County Hospital with such disastrous results to the ladies themselves, there can be no doubt that there is something radically wrong either in the drainage or the position of the Hospital. This, we think, has been proved by the prevalence and fatality of zymotic diseases within its walls. We believe that considerable county support was recently promised to a project for building a new Hospital, but that there is a difference of opinion in the Committee of Management as to the necessity of a new building. A recent number of the *Guardian* states that the Rev. Christopher Nevile, of Thorney, Lincolnshire, has given £200 to the County Hospital, as a memorial to his daughter (who lost her life there as the lady superintendent of the nurses), provided that money be "found to put the Hospital into a healthy state, and meet the expenses of a really good system of nursing." The reverend gentleman, in announcing his intention, quotes the authority of Mr. Hewson as to the frequent occurrence of low fever among the patients. It is evident that something must be done if the Hospital is no longer to continue a pest-house.

DR. LETHEBY ON DISEASED MEAT.

Dr. Letheby's paper on diseased meat, which we publish at length, amply deserves the attention of our readers. The account it gives of the organisation in the City for the purpose of checking the sale of unwholesome food and punishing the vendors, would be interesting at any time; and the light he throws on the etiology of carbuncle cannot be passed by without notice. But the radical evil of all which it throws light upon is that want of unity and proper municipal organisation in the metropolis, as a whole, which allows bad meat to be sold practically without check outside the City.

PULPIT PHYSIOLOGY.

We believe it is a well-known Medical Coroner who has proposed that the clergy should diversify theology and its special teachings with addresses on hygiene and popular physiology, and suggested that Sunday afternoons in Westminster Abbey should be devoted to enlightening the masses on these subjects. The example is being set us in France, for the eloquent Carmelite preacher, Père Hyacinthe, has been discoursing to large congregations at Notre-Dame on the delicate physiological topic of the causes of the want of increase in French population and the small numbers of French families.

*

The worthy father drew a comparison between ourselves and the French in this particular, much to our advantage, but he strongly reprobated the doctrines of Mr. J. Stuart Mill, especially those passages in the "Principles of Political Economy" wherein a legal limitation is advocated in the numbers of the families of the working-classes, and excess in this respect treated as immorality. "Yet such was often called science," he said, "in the present day, instead of a despotism such as the human race had never dreamt of even in the most barbarous periods." However extraordinary such a sermon might sound in English ears polite, we are told that these discourses excite the most lively interest and attract enormous crowds to Notre-Dame. Teachers of Medical science, with the exception, perhaps we ought to say, of Dr. C. Drysdale, certainly give no countenance to Mr. Stuart Mill's doctrines. In this respect theology and physiology, as generally received, are in unison with the common sense and common feeling of humanity, and together join issue with ascetics and doctrinaires.

COUNSELS AGAINST COLD.

Now is the time to see that all water-pipes in exposed situations have been protected from frost. Frost causes pipes to burst if water lodge in them, but it is only when the thaw comes that the mischief is revealed. Then, when the "high service" is turned on, perhaps at five in the morning, the sleeping inmates are roused by strange sounds of water, which escapes from some service pipe within the top of the house, and rushes down the staircase, deluging the rooms, and very likely forcing down the ceilings, and, anyhow, leaving the house in a state of wet and discomfort for months. Fancy an elderly lady keeping her room for severe bronchitis, and stepping out of bed in the dark of the morning to find herself up to the ankles in cold water. All this misery may be prevented if housekeepers will but see in time that there is a tap to the pipe which brings water into the house, and that said tap is in good order, and able to stop off the water the minute it is necessary to do so.

AMERICAN SCHOOL CUSTOMS.

There has been a great row in Boston on the subject of flogging girls at the public schools, and Dr. Morrill Wyman has forwarded us a speech he has made recommending the abolition of the practice. It would seem that a girl aged sixteen was soundly whipped for an offence which does not seem so very great after all—viz., whispering in school, and then talking in what seemed to her teacher a somewhat saucy manner. This appears to have roused attention to the subject; but although we are no advocates for whipping girls, we think that, even in Massachussetts, there seems to be good reason for not discontinuing the practice so far as boys are concerned. We read in the *Sunday Gazette* that at Fall River, in that State, the boys at the public schools all smoke, and are so frequently in the habit of getting drunk that the educational head of the State has been compelled to draw attention to the subject in a public letter. We would suggest that the youths be transferred to the care of the whipping matrons.

SMITH'S VISITING LIST FOR 1867.

We have already mentioned the admirable diaries of the Messrs. Letts and their use as a means towards the methodical and business-like conduct of affairs. We must not forget to bestow at least equal commendation on the Visiting List published by Messrs. Smith, of Long-acre, of which a twenty-first edition lies before us. The preface alone, which is reprinted from the first edition, and is the work of a well-known Surgeon in Sloane-street, is well worth the cost of the book.

NEW ENGLAND HOSPITAL FOR WOMEN AND CHILDREN AT BOSTON, MASS.

In the *Medical Times and Gazette* for November 10 will be found an extract from a paper by Professor Storer, of Boston, U.S., announcing his resignation of the office he held in the Women's and Children's Hospital in that city. It is stated that the reason he assigned was the violation by female Physicians of the rules of Medical etiquette, and that he wound up with a strong opinion of the unfitness of the sex for the practice of Medicine. We have received a letter from Doctor Lucy E. Sewall, M.D., Physician to the Hospital, complaining of this statement, and claiming the right to lay the real facts before our readers:—

"In 1862 Dr. Storer received the appointment of Attending Surgeon to the New England Hospital for Women and Children, and filled this position with great apparent satisfaction till the summer of the present year.

"The cause of disagreement between him and the directors arose from his partiality for certain 'heroic' operations, severely censured by the large majority of the Medical Profession in this city, and almost unanimously disapproved by his coadjutors in the Hospital. Three women having died in his wards within a short time—two of them in consequence of operations which the rest of the Medical staff strongly disapproved—and the Consulting Surgeon having resigned his appointment rather than seem to sanction what was done without his consent, the directors, on August 13, 1866, passed the following preamble and resolution:—

"'Whereas the confidence of the public in the management of the Hospital rests not only on the character of the Medical attendants having its immediate charge, but also on the high reputation of its Consulting Physicians and Surgeons; and

"'Whereas we cannot allow them to be responsible for cases over which they have no control; Therefore,

"'Resolved—That in all unusual or difficult cases in Medicine, or where a capital operation in Surgery is proposed, the Attending and Resident Physicians and Surgeons shall hold mutual consultation; and if any one of them shall doubt as to the propriety of the proposed treatment or operation, one or more of the Consulting Physicians and Surgeons shall be invited to examine and decide upon the case.

"'Voted — That a copy of this resolve be sent to all Medical officers connected with this Hospital.'

"I may here mention incidentally that a certain number of the directors and all the Consulting Physicians and Surgeons happened to be gentlemen, and that the consulting staff comprised some of the most eminent names in Boston.

"It may also be well to say that the operation specially in question was that of excision of the uterus, which had already proved fatal in one instance, and which it was proposed to perform in four or five more cases then on the list.

"After the passing of the above resolution Dr. Storer knew very well that his favourite operations were practically forbidden, and therefore at once resigned.

"I need hardly remark on the curious coincidence that it was at this precise moment that he first became convinced of the unfitness of women for the practice of Medicine—he having for some years worked contentedly as member of a staff composed of Physicians of both sexes.

"Whether the resolution of the directors was indeed 'contrary to Medical etiquette,' I am sure, Sir, that no one can decide better than yourself, nor will you fail to appreciate the extreme difficulty in which the board found itself at the time, and the painful position of the other Medical officers of the Hospital.

"I herewith forward you a copy of the last report of the Hospital, which has, I trust, already ceased to be 'an experiment,' and remain, Sir, yours very respectfully,

"Lucy E. Sewall,
"Resident Physician."

We have carefully perused the printed report which accompanies Dr. Lucy E. Sewall's letter. From this it seems that Dr. Samuel Cabot, the Consulting Surgeon, was the real opponent of Dr. Storer's operations. But even if the lady Physicians had been the objectors? Whoever takes a woman as his colleague admits thereby her right to have an opinion which may neutralise or oppose his own. If he complain of the result, we can only say, "*Que diable allait-il faire dans cette galère?*"

FROM ABROAD.—M. RICORD ELECTED VICE-PRESIDENT OF THE ACADÉMIE DE MÉDECINE—PROFESSOR BROWN-SÉQUARD'S INTRODUCTORY LECTURE—SURGICAL INTOXICATIONS.

THE annual elections of officers for 1866-67 at the Académie de Médecine were attended with an unusual incident. M. Tardieu, the eminent Medical legist, having been Vice-President last year, succeeds, as a matter of course, to the Presidency, and the Council of the Academy proposed M. Ricord, without any solicitation on that gentleman's part, as the new Vice-President. Under ordinary circumstances, so recommended, his election would be certain; but a powerful party in the Academy suddenly produced an opposition candidate in the person of M. Denonvilliers, and were within an ace of carrying their point. To those not in the secret this opposition to a man so popular and so estimable as M. Ricord must appear strange; but, in fact, it emanated from the party which is termed the Faculty of Medicine party in the Academy, which possesses great power in that body, having itself the command of some twenty votes, and generally has pretty well its own way, having itself supplied twenty out of the forty-one Presidents of the Academy. The objection entertained by this body to M. Ricord is that he is a specialist, and on that ground it not only had succeeded in keeping one of the most able and popular of teachers from entering the Faculty itself, but determined to endeavour to snatch from him the honour of the presidency of the Academy. How nearly this happened may be seen from the numbers, which, on the first round of the ballot-box, were thirty-one for M. Ricord and thirty-two for M. Denonvilliers. As there were sixty-six voters present, an absolute majority of thirty-four was necessary for the success of either candidate, and on the second round, by which time sixty-nine voters were present, M. Ricord obtained thirty-five suffrages, M. Denonvilliers thirty-three, and M. Béclard one.

It will give pleasure to many of his friends in this country to learn that Dr. Brown-Séquard, who has kept so long in retirement in consequence of a domestic calamity, has again resumed his activity. We learn from a recent number of the *Boston Medical Journal* that he delivered the introductory lecture at the Massachusetts Medical College, Harvard University, where he is Professor of the physiology and pathology of the nervous system. Doubtless a full report of this will reach us, but, judging from the meagre account we have seen, the discourse seems to have been an admirable one, well worthy of its author, who sought to infuse into his auditory some portion of that love of scientific truth and the pursuit of knowledge which so markedly actuates himself. He especially dwelt upon the importance of physiology as opening to the Profession the true way to the only accurate knowledge of disease and its treatment, the time not being far distant when treatment must be specifically based upon an exact knowledge of the physiological action of the organs implicated. He urged upon his hearers the duty of courageous, independent judgment and investigation, cautioning them against the too great readiness to admit as true, statements which are really contradicted by facts, the too ready acceptance of theories incompatible with such facts, the too great submission to the authority of learned societies in support of statements bearing their sanction, and the omission of circumstances greatly influencing the questions at issue. On the students he inculcated the great importance of *active mental effort* while hearing lectures, so that they should not remain the mere passive recipients of the words of others. Without such effort, he declared that the greatest genius in the lecturer could never do much towards the education of the student. He urged the great value of direct physiological experiment on the lower animals of feeble sensibility, and vindicated such studies, for the important object for which they are pursued, from the charge of unnecessary cruelty. Although he disliked to appeal to a motive so low as the hope of Professional success, he felt it was but just to say that the most successful Practitioners in the old world, particularly in Britain, had all been physiologists.

In a memoir on "Surgical Intoxications" read at the Académie des Sciences, M. Maisonneuve observes that, on observing the little place this subject occupies in Surgical treatises, one would suppose that it exerts but little influence as a cause of death; and many will be surprised on learning that of 100 patients succumbing in consequence of Surgical operations at least 95 die poisoned. If, in fact, we subtract the small number that do so in consequence of hæmorrhage, tetanus, cerebral affections, and suffocation, we find almost all the rest succumbing to some of the accidents termed phlebitis, angioleucitis, erysipelas, diffuse phlegmon, gangrene, and the various forms of Surgical fever, such as traumatic, hectic, urethral, peritoneal, puerperal, etc. Now (1) all these various accidents are in reality but intoxications; (2) we are enabled even now to specify the true mechanism of their production; and (3) the Surgeon is in the possession of means by which, in the great majority of cases, he is enabled to prevent their development, either by hindering the production of the poison, by neutralising or evacuating it when present, or by occluding the passages through which it might penetrate. By the theory in question all febrile accidents, consecutive to traumatic lesions, are regarded, then, as the result of poisoning due to the introduction into the circulating torrent of toxical substances produced by the organism itself. The preventive measures at the disposal of the Surgeon are to be found in the suitable combination of the various procedures at his disposal, as, for example, the subcutaneous method, the extemporaneous ligature, cauterisation *en flèches*, tearing away or torsion, elastic or digital compression, injection of closed cavities, and obliterating, evacuant and anti-putrid dressings. All these methods, in fact, possess one or other of the prerogatives either of preventing the putrefaction of exuded liquids, or of effectually closing the orifices through which the putrid elements might penetrate. And in the Hospitals in which these new methods have been fairly adopted traumatic accidents of all sorts have diminished in enormous proportions.

REVIEWS.

The Convolutions of the Human Cerebrum Topographically Considered. By WILLIAM TURNER, M B. Lond., F.R.S.E., Senior Demonstrator of Anatomy in the University of Edinburgh. Edinburgh: Maclachlan and Stewart. 1866. Pp. 28.

THIS small pamphlet contains matter of much interest to the phrenologist, comparative anatomist, and, we may say, to the psychologist. It is the substance of a lecture delivered before the Royal Medical Society of the University of Edinburgh on March 9, 1866. Though the anatomical portion of the subject is not new, that, however, which relates to its pathological bearings is of more recent interest. We refer to those lesions which at present are held to be at the root of that interesting disease "Aphasia," of which more anon.

This lecture is mainly based upon the researches of the late Professor Gratiolet, of Paris, whose "Mémoire sur les Plis cérébraux de l'Homme et des Primates" (Paris, 1854) will long be a text-book and valuable work of reference to the student of the topography of cerebral convolutions. These researches have been well and carefully supplemented in this country by the labours of Professors Huxley, Rolleston, of Oxford, Marshall, and Mr. Flower, the energetic Curator of the Museum of the College of Surgeons, to which labours due recognition is given in the above pamphlet. Men of science—nay, even the public at large—have long been conversant with the hotly contested controversy about the possession or non-possession by certain highly favoured apes—yea, and creatures even lower than apes in the animal scale—of the "hippocampus minor" and the "posterior horn of the lateral ventricle"—a controversy which, distinguished by a display of acrimony well-nigh rivalling the proverbial "odium theologicum"—has resulted in the almost unanimous admission of

the humiliating fact that man, "archencephalous" bimanous man, must be content to share his "posterior cornu" and his "hippocampus minor" with the quadrumanous "gyrencephalous" orang!

Comforting ourselves, however, with the assurance that the "receipt of reason" is not necessarily by such base consanguinity and contact degraded to the uses of a "limbeck only" for the distilment of simious vapours, let us briefly survey the rugged area of this debateable "no-man's-land."

The cerebrum proper, according to the system treated by Dr. Turner in his interesting pamphlet, may be parcelled out by the aid of certain constant fissures into the five following tracts or lobes:—Frontal, parietal, occipital, temporo-sphenoidal, and central. Each of these lobes is made up of certain tolerably distinct and well-marked "primary" convolutions, from which arise "secondary" and "tertiary" offsets.

The frontal lobe is made up of four convolutions on its outer aspect, of which one ("ascending frontal") takes an obliquely vertical direction, lying as it does between the fissure of Rolando and the ascending ramus of that of Sylvius. The other three run in a more or less horizontal course, and, curling round on to the orbital aspect of the lobe, become continuous with the anterior of three small convolutions which lie in front of the island of Reil and on the outer side of the olfactory sulcus.

The parietal lobe extends from the fissure of Rolando (which forms the posterior boundary of the frontal lobe) to a small fissure—"parieto-occipital" ("external perpendicular," Gratiolet)—which separates the lobe from its occipital neighbour. Four convolutions are the factors of this lobe, of which the anterior lies parallel to the ascending frontal gyrus, the fissure of Rolando intervening, while the rest run in an irregular horizontal direction posteriorly. Two of these latter—the "postero-parietal" ("Lobule du deuxième pli ascendant," *Grat.*) and the "angular" gyrus ("Pli courbe")—are connected by means of two bridging—"annectent"—convolutions, the "Pli supérieur de passage" and the "Deuxième pli de passage" respectively, with the occipital lobe.

In certain apes (a)—*e.g.*, the Vervet monkey, *Cercopithecus Lalandi*—these bridging convolutions are not superficially apparent, but, by separating the lips of the "external perpendicular" fissure, may be seen lying at the bottom of the chasm. In man they "crop out" on the surface and break the continuity of the fissure, but by an excess of development they may appear to be absent, being bent into a curve with the concavity upwards, as was the case in the brain of a gardener instanced by Prof. Rolleston in a lecture at the Royal Institution. On the other hand, in the thumbless spider monkey, *Ateles Beelzebuth*, they form a considerable prominence between the neighbouring lobes.

The occipital lobe need not detain us long. We will merely remark that it attains a much greater development in apes, especially the mandrill, *Cynocephalus Mormon*, than in man, its deficiency in the latter case being due to the encroachment of the bridging convolutions.

The temporo-sphenoidal lobe lies below the horizontal ramus of the Sylvian fissure, and consists of three convolutions parallel to the fissure, two of which are sometimes connected by bridging gyri with the occipital lobe. This lobe appears to make a greater angle with the frontal lobe in the Quadrumana than in man, in consequence of the lesser development of the frontal convolutions in the former, since it lies almost horizontally in well-developed human cerebra.

The central lobe, or island of Reil, consisting of about five small radiating convolutions, is in adult human brains completely hidden by the approximation of the lips of the Sylvian fissure, in consequence of the great development of the convolutions forming its margin, especially the inferior frontal, and lower ends of the two ascending gyri; but in the brain of a Bushwoman described by Mr. Marshall, and that of a Scotchwoman examined by Mr. Turner, the insula on each side was visible without dissection, owing to the patency of the fissure.

Let us now briefly consider the internal face of a hemisphere, or "ovoid," as Professor Rolleston prefers to term it. The most important fissure is the internal parieto-occipital ("Internal perpendicular," Grat.), an inward continuation of that which lies between the parietal and occipital lobes. Two bridging convolutions generally interrupt it in the quadrumana, while in man it exists as a clear chasm, a condition exactly the reverse of its continuation externally. Second and last comes the "calcarine" fissure (Huxley), which owes its importance to the fact that it is the external indication of the position of the hippocampus minor in the posterior cornu of the lateral ventricle. It runs from the posterior end of the cerebrum to the "gyrus fornicatus," being met by the preceding fissure in its course. From the above considerations, then, we see that the cerebra of the quadrumana, as regards their convolutions only, owe their inferiority to those of man to—

1. The lesser development of the anterior frontal convolutions; the inferior, especially, being in some much undermined on their orbital aspect.
2. The oblique direction of the temporo-sphenoidal lobe, owing to the above arrest of development.
3. The stunted growth, amounting almost to absence, of the external bridging convolutions; from which results
4. Great development of the occipital lobe.
5. Interruption of continuity of internal perpendicular fissure by bridging convolutions.

The inferior left frontal convolution, and the neighbourhood of the island of Reil on the same side, have lately assumed some importance in consequence of the as yet invariable association with their lesions of "aphasia," or loss of the "cerebral faculty of speech," together with hemiplegia of the right side of the body. For descriptions of this most interesting disease and its pathology, we refer our readers to Professor Trousseau's clinical lectures, and to cases contributed to various Medical periodicals by Dr. Sanders, of Edinburgh, Dr. Hughlings Jackson, and Professor Fayrer, of Calcutta.

Though the pathological phenomena of the above disease may furnish a temporary triumph to the disciple of Gall, let him bear in mind that the lesion is unilateral, while bilaterality is an essential feature of his system; also, that the portion of brain affected is not amenable to manipulation from without; and, lastly, that were the diseased convolution situated more anteriorly, the experiments of the late Sir W. Hamilton, recorded in an appendix to his lectures on Metaphysics, sufficiently show that from the divergence of the two tables of the skull at the frontal sinus, the forehead cannot be affected by any influence exerted upon the internal table at this spot by the diminution or growth of brain substance behind it.

To those on the look-out for affinities between ourselves and the apes, let us, in conclusion, humbly suggest the following consideration:—May not the unintelligible utterances of these latter be the futile product of a congenital aphasia, associated with aborted frontal convolutions; and may not they, after due lapse of time, be at length by "natural selection" developed into *μέροπες ἄνθρωποι*?

(a) Vide diagram illustrating Prof. Rolleston's lecture, reported in the *Medical Times and Gazette*, February 22 and March 15, 1862.

GENERAL CORRESPONDENCE.

CLITORIDECTOMY.

LETTER FROM MR. BAKER BROWN.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your impression of last week there appears a letter from Dr. Greenhalgh, in which more violent animosity is exhibited towards me than any gentleman would think it possible for one Professional man to entertain against a brother Practitioner. The only explanation for such an exhibition is this—Dr. Greenhalgh was once my friend, and, as such, always received the most courteous attention at my hands in his numerous visits to the London Surgical Home. Dr. Greenhalgh's memory, however, is either sadly treacherous, or his rashness has overpowered his discretion. But believing, as I do, that "stupidity is seldom honest," I always take care to preserve my correspondence, and the wisdom of this precaution now appears evident. I therefore trust you will allow me to show that my enemy, in his zeal to damage me, has only inflicted the greatest possible injury to his own reputation as a truthful and honourable man. I promise to be brief, and to confine myself strictly to facts.

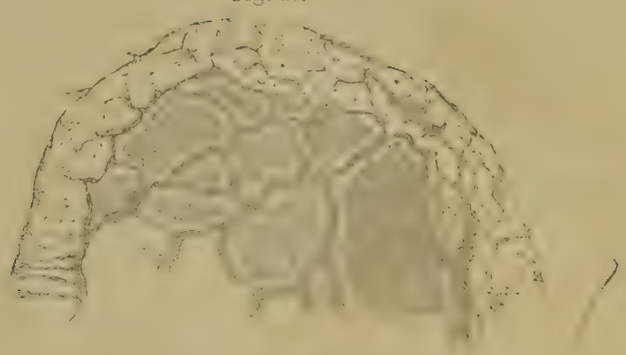
1. In reference to a case sent to me for operation by Dr. Greenhalgh, he says:—"We know, on the best and most unquestionable authority, that Dr. West never has advised, and never would advise, clitoridectomy for the object specified, and we are asked to believe that he made an exception to this rule in favour of a patient whose case he had not personally

CHOLERA.

ALTERATIONS IN THE INTESTINAL VILLI.

Fig. 19.

Fig. 20.



Shrunken and altered vessels from the summit of a villus. Jejunum. Case 5. × 700. Apparent thickening of 'basement membrane.'

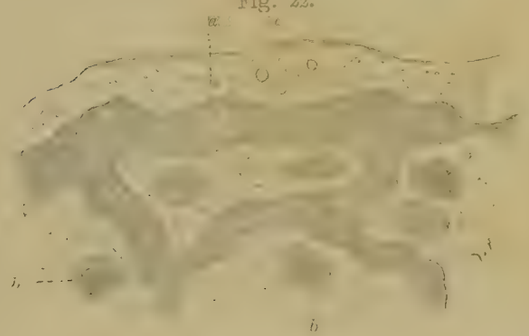
Fig. 21.

Summit of a villus from the jejunum. Case 4. Nearly healthy. *a*, lacteal? × 700.

Fig. 26.

A very small portion of one of the contracted and altered capillaries from the summit of a villus. × 2500. *a* is a small particle which somewhat resembled a sporule of a fungus. *b b*, minute particles of very smooth material (growing germinal matter?) Oil globules are also seen in considerable numbers.

Fig. 22.



Altered capillaries, from the summit of a villus. Case 1. × 700. *a* represents a large mass of germinal matter in the vessel probably an altered white blood corpuscle. *b*, some cells apparently in the tissue of the villus, perhaps in the lacteal; one of these is represented more highly magnified in Fig. 27. *c*, oil globules.

Fig. 23.

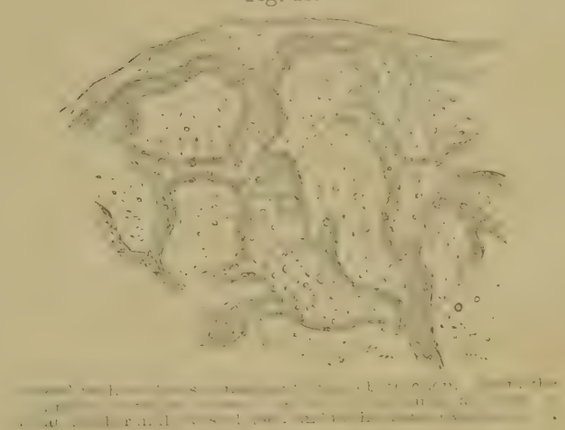
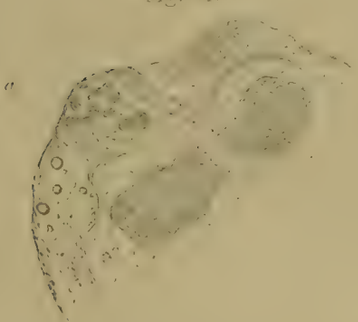


Fig. 24.



Capillary vessels, from the summit of a villus. Containing a large mass with dark pigment granules and oil globules in its interior. × 1800.

Fig. 27.

Cell-like mass represented at *b*, Fig. 22. ×

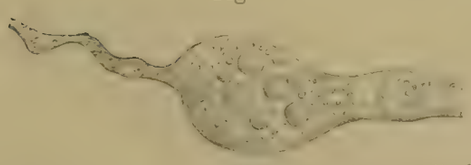
Fig. 28.

Vessel from the summit of a villus. Case 3. Containing numerous oil globules.

Fig. 30.

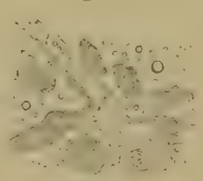
Part of the summit of a villus. Case 6. *a*, crystals of hæmatoidin. The vessel was pervious up to the point marked *b*, beyond which mere lines were discernible. The tissue of the villus had completely disappeared, and numerous oil globules were disseminated through it.

Fig. 25.



Obstructed vessel, with bulgings, from the summit of a villus. Case 3. In the interior were bacteria, oil globules, blood corpuscles, and the sporules of fungi. × 700.

Fig. 29.



Capillaries and bodies external to the vessel. Case 3. ×

ST. MARY'S HOSPITAL
RADFORD LIBRARY
MANCHESTER.

diagnosed and whom he had never seen. . . . I deny that I ever recommended removal of the clitoris for self-abuse. The patient just referred to stated that she could not and would not discontinue the habit to which she was addicted. . . . Mr. Brown urged the excision, and promised it would effect a cure. Mr. Brown must know as well as I do that when I was appealed to I declined to express an opinion, stating that I had no experience, and could have no faith in the result thus confidently promised."

These are Dr. Greenhalgh's own words, on December 26, 1866. Nothing material is omitted from the sentence, as your readers will see by referring to your last number. My reply is fortunately very simple. Here is Dr. Greenhalgh's own letter on this very case, written in May, 1865, and, of course, sent to me before I ever saw the patient:—

"76, Grosvenor-street, Grosvenor-square,
"May 24, 1865.

"My dear Brown,—I am ashamed at this tardy reply to your kind and satisfactory note, which is all I can wish, and, believe me, removes any and every unfavourable impression I entertained concerning your transactions with me.(a) I hope to bring you a case for removal of the clitoris in a few days. The subject is a single lady about 44 years of age, who has been under Simpson, A. Farre, and, I think, Dr. West, for many months, without any permanent and but very slight temporary relief from pruritus, from which she has suffered about eight years. Simpson, some time ago, divided the nerves of the clitoris on one side without the slightest benefit. I have exhausted every remedy, I think I may say, ever suggested for the cure of pruritus; so there is no other course open but removal, which you perform with such great dexterity. I enclose her niece's letter.

"Believe me sincerely yours,
"R. Greenhalgh.

"P.S.—Please return the niece's letter, which is sent confidentially."

Comment upon such a transaction as this is surely unnecessary. But I must add that the patient was first seen by me at Dr. Greenhalgh's house, that he was present at the operation, and that he attended the lady day by day with me after the clitoris had been excised at his own expressed wish.

2. Dr. Greenhalgh allows that the copy which he sent to the journals of his speech at the Obstetrical Society was not a correct report; indeed, instead of giving what he did say, he gives what he did not say, and why? "Solely from a desire to be accurate." A more delicious hibernicism has not been perpetrated for many a day. Certainly it is high time that some change took place in the method of reporting the debates at our societies, if men are to play at cross purposes in this wanton fashion.

3. At the London Surgical Home a book is kept in which the visitors are expected to sign their names before visiting the wards or operating theatre. I say "expected to sign," because gentlemen do not always follow this useful rule, and it was not unfrequently neglected by Dr. Greenhalgh himself. This is certain, for Dr. Greenhalgh's name only appears in our register on one of the days when he says he visited the Home. But, Sir, it does appear—his own actual signature—on many occasions when, according to Dr. Greenhalgh, he was not there. Thus this gentleman says—"Mr. Isaac B. Brown refers to my visits to the Surgical Home. They were paid on the following occasions:—March 24, April 14, May 19, June 2, December 1, 1864, and March 6, 1865." But, on referring to our register, which is open to the inspection of any gentleman, it is found that Dr. Greenhalgh has signed his name on the following days:—November 14 and 22, December 5 and 19, 1861; May, 15, 1862; October 15 and 22, November 19, and December 10, 1863; March 17, April 21, May 19, November 24, 1864; March 9, 1865. So that, instead of Dr. Greenhalgh having only paid six visits, as he asserts, we have his own evidence as to five unrecorded attendances, and we have the evidence of our own book as to fourteen recorded visits.

4. Dr. Greenhalgh seems to think he is nothing if not truthful and moral. How he possesses both these excellent attributes the Profession can now judge. But I will give one more example. He says, "Truth compels me to add I saw there" (alluding to these visits to the Home) "scenes, and heard details, which I will not further characterise than by saying that I henceforth advised my class never again to visit that Institution, and came to a like resolution as regards myself." Now it must be remembered that this virtuous resolution was come to after Dr. Greenhalgh had paid nineteen visits that we know of, and that these visits were made on various days between November 14, 1861, and March 9, 1865. Hence no one can accuse this Physician of being rash on this point, or of not waiting for sufficient evidence. It took him exactly three years and a half to find anything against me or the Home. But, Sir, Dr. Greenhalgh's tongue sometimes wags, as it were, unconsciously; and I assert that this individual told me and another officer of the Home (not to mention a third person usually present at our operations) that his reason for discontinuing his attendances was this:—"That if he were seen at my operations again it would prevent his election to the Fellowship at the Royal College of Physicians."

In my promise to be brief, I have nearly done. But before concluding allow me to make two observations. First, let your readers peruse Dr. Greenhalgh's letter in the number of your journal for December 29, and let them say whether one of its chief objects is not clearly to prove me untruthful. Now, where the untruthfulness is I leave your impartial readers to judge. Secondly, at the next meeting of the Obstetrical Society I shall move for the appointment of a committee to investigate the results of clitoridectomy in some twenty or thirty cases. Until that committee presents a report I shall desist from performing this much-abused operation without consultation with some independent Practitioner. If the investigation should prove that my views have a false foundation, and that the operation is useless, I will give it up altogether. On the other hand, if the evidence be in my favour, as I believe it will be, I shall continue to practise it in proper cases, whatever the malignity of little men may prompt them to attempt against me.

I am, etc.
I. Baker Brown.

136, Harley-street, January 1.

(a) This was in reference to a disagreement between Dr. Greenhalgh and myself, in which he had imputed to me a breach of Professional etiquette.

Letter from Dr. Wm. Cooke.

[To the Editor of the Medical Times and Gazette.]

Sir,—When Surgeons and Doctors are contending on points of theory or practice, on which they may have had to act as well as to think, the quiet lookers-on, who take an interest in the Profession, may, I think, without presumption express their opinion on the merits of the subject.

If this is allowable for any one on the ground of long and active service in the Profession, I may claim the privilege. Exclusive of the seven years of study and associated occupation, nearly sixty years have been spent in Medical and Surgical practice, very largely among the female sex. It will readily be supposed that I have seen much of hysteria in its Protean forms, and not a very little of epilepsy. Mental disorders, in their modifications, have in rather larger proportions than ordinary been submitted to my investigation and treatment, and a few of those cases in which it is now proposed to mutilate the female person have come under my care.

It must be allowed that considerable difficulty has sometimes been experienced in correcting habits ignorantly contracted and long indulged; and yet generally, by appropriate remedies and kind counsel, evils undermining the energy of mind and body have been greatly lessened or wholly removed. It has always seemed desirable to secure the confidence of the patient, and by the most kind and delicate communication directly to her, or through the medium of the mother or other judicious female relative, to lead her plainly to be acquainted with the evil to body and mind which may be feared from perverted excitements aggravated by repetition. The case may be put hypothetically without demanding confession. A kind appeal to the patient's good sense has been far better than censure or reproach. In hope of leading to diversion of thought and feeling, patients have been urged to vigorous efforts in work and study; and these means, with appropriate recreation and cheerful society, have usually conduced to a restoration of vigour of mind, chasteness of thought, and renovated health of body.

To no case within my sixty years of practice can I recur with a feeling of regret that the operation in question was then unthought of. On the proper functions and well-regulated influence of the organ condemned to removal some of the finest emotions of life—intellectual, philanthropic, social, and religious—are to some extent dependent.

When the operation was first enunciated, I could only

think of it as one demoralising to those who suffer it, and derogatory to the high honour of the Profession; and I have only thought of it since with increased repugnance. I was greatly relieved by the sentiments expressed against it in the discussion at the Obstetrical Society, and feel that the Profession and the community are under great obligation to your excellent journal for the reports and the editorial articles on the somewhat disgusting subject. I am, etc.

WM. COOKE.

39, Trinity-square, E.C., Dec. 27.

DR. PUSEY ON THE BESETTING TRIAL OF OUR BOYS.

LETTER FROM DR. MEADOWS.

[To the Editor of the Medical Times and Gazette.]

SIR,—May I be allowed to make a few remarks in reference to the letter of Dr. Beale which appeared in your issue of the 22nd ult.?

I quite agree with him that it is very desirable the attention of the Medical Profession should be directed to the "delicate subject" alluded to by Dr. Pusey in his recent letters to the *Times*, but I am sorry to say that my experience in the treatment of the diseases of the young has led me to form a widely different opinion from that entertained by your correspondent as regards the frequency of the habit in question. Early in my Professional career my attention was drawn to this subject by one or two very painful cases which came under my notice, and the sad consequences which resulted led me to make some inquiries on the matter. I then found, to my surprise and regret, that the evil was of much more frequent occurrence than I had supposed. If Dr. Beale will take the trouble to inquire—and I hope he will excuse my saying that I think his opinion will be far more valuable after such inquiry than now—he will, I fear, be forced to confess that he, and not Dr. Pusey, "has been greatly misinformed." From conversations which I have had on this subject with other men of large experience, I know that my opinion is by no means exceptional, and I therefore join issue with Dr. Beale in his statement that Dr. Pusey has "exaggerated the evil most extravagantly." Whether or not he also "has been led to take an absurdly gloomy view of the whole matter," as Dr. Beale asserts, is a point which perhaps the experiences of each can alone determine; but I much fear that Dr. Pusey has stronger grounds for his "view" than Dr. Beale for his.

Your correspondent asks, "If it be true that the sin referred to is 'the besetting trial of our boys,' whose fault is it?" and he answers the question, apparently to his own satisfaction, by heaping the blame upon "the clergymen who govern our public schools," because, forsooth, they are not "a little better informed upon physiology and hygiene." But, Sir, I would ask, is the Medical Profession perfectly free from blame on this matter? Ought not we to be the best informed on the subject in question? And if so, was it not our duty, if the fact be as is alleged, to investigate it, and to move public opinion, or at least public teachers, to adopt what we consider the proper remedy? It is notorious that the Profession shuts its eyes to the question, and hence the impositions of those quacks and rogues who have chosen to make it and allied subjects their speciality, practising a mischievous system of secret terrorism with the object of extorting money. It is all very well to talk about "occupying the boy's mind and endeavouring to make him feel an interest in his work and play." This, no doubt, is good as far as it goes; but those who have had any experience of this evil will, I think, agree with me that something more is required, and they will feel that Dr. Beale has not in any way touched its cause when he attributes it, in part at least, to "the dull routine invented by dismal dyspeptics."

I quite allow with him that "the workshop, the lathe, and the laboratory," or the study of plants and animals in the field, are very valuable adjuncts in the training of boys, but I must question their value as remedies for the evil he was discussing, and I do so simply because I have witnessed their failure. Dr. Beale is perhaps not aware of the very early age at which this habit often begins. I have known of it in several cases as early as two years, and a friend a few days ago told me of one case in which the practice was commenced at the age of twenty months.

I believe that in the great majority of these cases the habit originates in some local physical irritation, and then of course there is no sin. In the case just mentioned it appeared to be caused by a badly-fitting truss; but unfortunately, when once begun, it is most frequently maintained on other grounds.

As to the plan of treatment proposed by "S. G. O.," and approved by Dr. Beale—that of ignoring the existence of the evil so as "to leave it thus stamped with its own brand (whatever that phrase may mean) and leave that brand to be its best punishment"—I disbelieve entirely in the efficacy of such a scheme; for how, I ask, can the child be conscious of any such "brand" if the subject is never mentioned to him? I do not, of course, advocate any forced allusion to the matter where there is no reason whatever to suspect its necessity, but I contend that in most cases the practised eye or the skilled inquirer can tell where the evil exists, and surely if we would not treat the case of theft or lying by ignoring the existence of the sin, so neither ought we to deal thus tenderly with a yet greater sin—because, forsooth, it is more subtle, and for some reasons is thought to be more "delicate." Depend upon it, no evil can be eradicated by being ignored; straightforward dealing is best in this as in other matters, and I hope the discussion of the question, if undertaken at all, will be conducted on such principles. In such a case, looking to its vast importance as it affects school and home discipline, I venture to think that the public will be inclined rather to thank than to blame, as Dr. Beale has done, the boldness of Dr. Pusey "in alluding to this subject at all in the columns of the *Times*." I am, &c. ALFRED MEADOWS, M.D.

27, George-street, Hanover-square.

A LATE VISIT TO THE CITY OF AMIENS.

LETTER FROM DR. BALLARD.

[To the Editor of the Medical Times and Gazette.

SIR,—Passing through the city of Amiens about a fortnight ago, I thought I should like to see something for myself of the sanitary arrangements of a place which has suffered so severely from cholera during the year, and I was especially moved to do so by the very graphic account of the outbreak, and of the city itself, which you published in your journal last July. I can confirm in nearly every particular the observations which you recorded. On visiting the Cathedral, I was struck by the juvenile appearance of the officials; the person who showed me the carvings in the choir could not have been much above 20 years of age, and the Suisse was nearly as young. I was informed that out of sixteen servants of the Cathedral only about five remained, the majority having died during the epidemic from cholera. Most of these resided in the *basse-ville*, the district of the town adjoining the divided streams of the Somme as it flows through the city. It was in this, the oldest portion of the city, that cholera principally raged, carrying off whole families when once it entered a habitation. The more elevated part of the city, where the more wealthy of the population reside, was but lightly visited. The alarm of the epidemic occasioned an emigration said to have extended to about a third of the population. Nevertheless, the mortality from the commencement of the outbreak towards the end of May to the beginning of December, amounted to between two and three thousand, the entire population being about 65,000 persons. With the ordinary fluctuations, the mortality of the city, which was 9 on June 1, had increased to as many as 40 per diem on June 13, after which it rather declined. On the 28th, it again increased to 49, of which 43 deaths were choleraic. By July 2 it reached the high daily number of 71, of which 65 deaths were due to cholera. On July 4 the mortality is said to have reached 84. From this time it gradually but slowly lessened, a second recrudescence only taking place about the 17th or 18th of July, when from 12 deaths daily the mortality rose to 41 and 46 per diem. At the time of my visit the disease had not quite left the city. I saw three or four cases in the Hôtel-Dieu, but all were progressing towards recovery, and I was informed on inquiry in the *basse-ville* of other recent cases. A large number of the orphan children have been taken charge of by the managers of the Hospice St. Charles, and distributed in various places in the country. The city still rings with the praises of Mme. Cornuau, the wife of the Préfet, whose devotion to the sufferers was most exemplary. A man who told me the story of her exertions, spoke of them with tears in his eyes. One fact of value in the experience of the Hôtel-Dieu is the small mortality which occurred amongst the soldiers received with cholera into the Hospital, when compared with that amongst the persons admitted from the civil population. The age of the former may have had some-

thing to do with this, but perhaps the most important element in the success of their treatment consisted in their being sent to the Hospital on the appearance of the earliest symptoms of the malady.

While wandering about the *basse-ville*, I made inquiries of the residents about the use of the water of the divided streams of the Somme as it flows through it. Certainly the water is most conveniently situated for employment for domestic purposes. In most places, the small houses, the backs of which are washed by the streams, have doors and passages opening upon them, where the people may be seen washing baskets or rinsing linen, etc., or ladling up water to carry indoors. Where these doors are wanting, there is certain to be seen a pulley rigged out from the back of the house for the purpose of drawing up the water. That the water is used for some domestic purposes even now there is no question whatever, and that it is fouled most abundantly by the reception of sewage matters is equally plain. Still the streams are tolerably rapid, and the water not so foul-looking as the reception of such matters would lead one to anticipate. I could perceive no bad odour anywhere but at the very end of the town, where the streams had again united, and where the water was agitated by the water-wheels of some small factories, and there it was offensive enough. Wherever I inquired, the people assured me that they did not use the water for drinking purposes—it was *trop sale*, they said—but admitted that it was impossible to prevent the children from drinking it sometimes. I have no doubt myself that prior to the outbreak of cholera this water was used, to a certain extent, by the inhabitants of the houses abutting upon it. One intelligent *octroi* officer that I conversed with assured me that often and often he had himself seen people drink it; but this was prior to the outbreak. Since cholera has prevailed, the use of the water for drinking purposes has been prohibited, and its dangerous and poisonous quality very generally made known. He added, "There is no fear of the people drinking it now." At the same time the temptation to do so is not removed to the extent that is desirable. As you have yourself pointed out, there is a public supply of excellent water provided from a reservoir above the town, and carried to a number of pillar fountains scattered about in various situations. These fountains, however, appeared to me to be far too few in the *basse-ville;* and, although it is possible that this deficiency may be unavoidable at present, it seems to me to involve an amount of labour in fetching water which I can easily understand may put an obstacle in the way of its employment at all times. I am conscious that these notes are very rough and imperfect; but such as they are I send them to you on the chance of your considering that they may interest some of the readers of your journal. I am, &c.

December. EDWARD BALLARD.

TOXICOLOGICAL DISCREPANCIES.

LETTER FROM DR. ALFRED S. TAYLOR.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have addressed the enclosed letter to Mr. Southern in reference to a communication lately made to your journal by Mr. Rodgers, headed "Toxicological Discrepancies," and I shall feel obliged by the insertion of my letter in the next number of the *Medical Times and Gazette*.

I invite your attention to the case quoted in my letter to Mr. Southern from your journal for October 28, 1865, page 472. In that case the presence of veratria in the urine (!) as well as in the body of the deceased was sworn to by Mr. Rodgers. It was clear from the Medical evidence, as you observed at the time, that the lady died from puerperal convulsions and Bright's disease of the kidney, with effusion of blood on the brain. There were no symptoms of poisoning by veratria, and there was no evidence of the possession or administration of this poison by any one about the deceased. As no one had an opportunity of examining the urine or the stomach and intestines of this lady except Mr. Rodgers, there was no "toxicological discrepancy," and the chemical evidence had the effect, I believe most unjustly, of raising a suspicion against the husband of the lady (a Veterinary Surgeon) that he had deliberately poisoned his wife. During the last five or six years I have in several cases obtained from the extracts of the stomach and duodenum, in examining suspected cases of poisoning, residues which gave the colours with sulphuric acid and chloride of tin relied upon by Mr. Rodgers as positive evidence of the presence of veratria. All the facts of these cases were adverse to the theory that veratria could by any possibility be present. I find that an organic principle which may occasionally be found in the stomach and bowels produces, with sulphuric acid and chloride of tin, the same colours as those observed with veratria. Like veratria, too, this principle is not soluble in water, but is soluble in alcohol and ether. It might easily be mistaken for veratria when the mind is preoccupied with a suspicion of poisoning with that alkaloid, of the effects of which, as a poison to human beings, so little is known.

In their recent valuable work on poisons, MM. Tardieu and Roussin(a) have the following observations on the Medico-legal research for veratria:—

"Cet alcaloide ne présente malheureusement aucun caractère chimique bien tranché. Après qu'on l'aura isolé au moyen des méthodes générales que nous indiquerons plus loin aux articles *Morphine* et *Strychnine*, le meilleur moyen à employer pour constater sa présence et son individualité consisterait à entreprendre sur divers animaux une série de recherches et d'expérimentations physiologiques."—P. 302.

I commend this result of the latest experience of two skilled toxicologists to the notice of Mr. Rodgers and your Medical readers. I am, &c.

ALFRED S. TAYLOR, M.D., F.R.S.

15, St. James's-terrace, Regent's-park, December 24.

(COPY.)

15, St. James's-terrace, Regent's-park,
December 16, 1866.

Sir,—I am obliged to you for sending me a copy of the *Halstead Gazette* of the 13th inst., containing a letter from Mr. Rodgers, headed "Toxicological Discrepancies."

As you may not have seen my report to the Secretary of State on the cases of your two children, I subjoin an extract from it which may throw a light upon the alleged discrepancies:—

"The sediment in the bottle (of medicine) and a teaspoonful of the medicine, making together nearly half a grain of solid matter, were given to a young rabbit. They produced no symptom of poisoning, and after the second day (the rabbit having run about and taken its food as usual) half a grain of real veratria was given to the animal. In an hour or two there were symptoms of paralysis, but no convulsions, and the animal died during the night, in about eight hours after taking the poison."

Veratria, I may tell you, is a solid and not very soluble poison, except in acid liquids; while the medicine prescribed for the children was alkaline, owing to the presence of some sal-volatile (carbonate of ammonia). The sediment in the bottle was chiefly carbonate of lime, or chalk, a little discoloured by organic matter. It had been produced by the admixture of hard spring water with the solution of sal-volatile, or carbonate of ammonia. One teaspoonful of this medicine contained only one-tenth part of a grain of solid matter; and as the younger child took four teaspoonfuls in two doses, it could not have taken more than four-tenths, or less than half a grain of solid matter, whether we assume it to be veratria or carbonate of ammonia, or a mixture of the two. Hence the experiment was performed as above mentioned, and I think it may be fairly assumed that if a young rabbit was not affected by half a grain of the solids of the medicine, applied in a concentrated form in one dose, it is not probable that your child could have been killed by a similar quantity of the medicine given in two doses.

I would observe further that the experiments made with the medicine by Mr. Rodgers are good, as far as they go; but in dealing with so serious a case as this—involving as it does a charge of murder, if Mr. Rodgers' inference is correct—they do not appear to me to go far enough. The bottle originally contained six ounces of the medicine. About one-fourth of it (one ounce and a half) was used for the two children. After the death of the children, it appears to have passed into the hands of a Halstead Physician, and thence into the hands of Mr. Rodgers. These two gentlemen therefore had at their disposal three-fourths, or four ounces and a half of the medicine. When the bottle was delivered to me on October 13, it contained only one ounce and a half of the medicine. Hence three ounces, or one-half of the contents of the bottle, had been in some way disposed of.

Mr. Rodgers states in his letter that "small doses of the medicine" produced "effects" upon the "Halstead Physician,"

(a) "Etude Médico-légal et Clinique sur l'Empoisonnement." Par Ambroise Tardieu et Z. Roussin. 1867. Paris: Baillière. Pp. 1072.

and "the little dog" belonging to him. This very vague statement should at least have guided him to the proper course of testing the poisonous nature of the medicine—namely, by administering to an animal the supposed alkaloid in such a dose as had been taken by either of your children. But with some ounces of this alleged highly poisonous medicine in his possession, containing, according to his analysis, enough veratria to kill eight children, he restricted his analysis to producing yellow, red, and mauve colours by adding acids to the solid residue of the medicine, of the effects of which neither you nor the public can properly judge. Mr. Rodgers has either given some of his medicine to an animal, or he has not. If he has given it he has not ventured to publish the results, and if he has not given it he has omitted one of the most important sources of proof in poisoning by veratria, and the toxicological discrepancy is at once explained.

If Mr. Rodgers is correct in his conclusion, the veratria must have been deliberately put into the bottle of medicine, either by Mr. Taylor at the time that he made it up or by the Halstead Physician to whose care you afterwards entrusted it. When fatal mistakes are made accidentally in compounding medicines, we always find that a noxious powder or a noxious liquid has been used for some innocent powder or liquid prescribed. There is something missing from the medicine, and this is replaced by something which ought not to be there. The medicines prescribed for your children consisted entirely of liquids: wine of ipecacuanha, solution of carbonate of ammonia, and common water. No powder was prescribed for which veratria might or could have been mistaken: hence, as veratria is always a solid, and, if kept at all in a country shop, it is kept in powder and not in solution, it is obvious that no accident could explain the presence of this alkaloid in the medicine. The prescriber must have deliberately taken the veratria bottle and added the poison to the medicine, at the same time taking care that there were all the ingredients of his prescription in their proper proportions. In making this addition he must also have taken care that he did not add more than the tenth part of a grain to each teaspoonful of the medicine—the proportion of solid matter actually present. Indeed, as there was solid carbonate of ammonia in the medicine, the veratria supposed to be added must, if added at all, have been in a much smaller fractional part of a grain! Any Medical man so acting could of course have had no other design than that of killing his patients by secretly mixing a formidable poison with an innocent medicine. I know nothing of the Messrs. Taylor, and have had no communication with them, but since my analysis was made I have been informed, on good authority, that at the time this medicine was prepared there was no veratria on their premises, and thus such an addition could not possibly have been made in compounding the medicine. Hence, if Mr. Rodgers' theory is correct, the veratria, if present in the medicine, must have been added to the contents of the bottle while it was in the custody of the Halstead Physician, and after the death of your children. But there is this insuperable difficulty in the admission of either theory. The quantitative analysis which I made of the medicine showed that the solid contents corresponded with the ammonia salt prescribed, and that if any veratria or other foreign matter was put into the bottle it had added nothing to the weight of the contents. What motive a respectable Medical Practitioner could have had in deliberately poisoning two infants attacked with cholera, by giving to them veratria—or the Halstead Physician could have had in trying to make it appear to yourself and others that a brother Practitioner had been guilty of an act of motiveless murder by poison, I leave for others to decide. Looking at all the Medical, chemical, and scientific facts of the case, I prefer believing that Mr. Rodgers is mistaken in his opinion rather than admit that any members of the Medical Profession should be guilty of such diabolical acts without any assignable motive.

In the *Medical Times and Gazette* for October 28, 1865, page 472, you will find the report of the case of a lady who clearly died of puerperal convulsions and natural disease, in whose body, however, Mr. Rodgers professed to have discovered this poison—veratria. The editor of the journal called for an explanation of the analysis, but, so far as I know, none was given.

With respect to the cases of your two children, the symptoms described in the depositions, which were forwarded to me by the coroner, and the appearances which I saw, as well as the absence of poison in the stomach or bowels, are not consistent with the theory that they died from the effects of veratria or any other poison; but they are consistent with the finding of the coroner's jury—namely, that they died from a sudden attack of cholera, or choleraic diarrhœa. I state this after thirty-five years' experience in cases of poisoning, whether real or suspected, and I hope these remarks may have some effect in consoling you for your sad loss, and in preventing you from still holding the suspicion that they have been destroyed by poison. I am, &c.

Alfred S. Taylor,
Professor of Chemistry and Medical Jurisprudence at Guy's Hospital.

To Mr. Southern.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, December 11, 1866.

Dr. James Alderson, F.R.S., President.

A paper, by Mr. Christopher Heath, was read, on

A CASE OF ANEURISM OF THE ARTERIA INNOMINATA, SUCCESSFULLY TREATED BY THE SIMULTANEOUS DELIGATION OF THE SUBCLAVIAN AND CAROTID ARTERIES.

The author prefaced the report of his case with some remarks on the distal operation for aneurism, showing that a distinction should be drawn between Brasdor's and Wardrop's operations, since in the latter branches intervened between the ligature and the aneurism, which was not the case in Brasdor's. He considered that Wardrop's operation was more likely to induce the deposit of laminated fibrine, on account of this partial flow of blood through the sac, than Brasdor's, which tended to stagnation of the blood in the sac, and the consequent formation of soft or passive clot, which was apt to suppurate and break down, as had happened in several recorded cases of distal ligature of the carotid. Obstruction of one main trunk, whether by disease or ligature, had never been sufficient to arrest and cure an innominate aneurism; and even when the subclavian and its branches were occluded by disease, the aneurism made progress, as in a case under Dr. Herbert Davies, a drawing of which was exhibited. Mr. Heath agreed with Mr. Erichsen that the simultaneous arrest of the circulation through the two main trunks, by cutting off two-thirds of the supply of blood, offered the best chance of success; and this was illustrated by an unpublished case communicated to the author by M. Paul Broca, in which that Surgeon had tied the subclavian artery for innominate aneurism, in a patient whose carotid was already obstructed, and in whom the aneurism was filled with laminated fibrine, a small canal being left for the blood; and thus a cure was effected. Mr. Fearn's well-known case of double ligature in 1836 and 1838 was referred to, and the preparation which had been lent to Mr. Heath by Mr Fearn before presenting it to the Hunterian Museum was shown. Here also a cure was effected, the sac being filled with fibrine, and the patient dying nearly four months after the second operation of pleurisy, caused by an accident. Mr. Heath showed that it was a mistake to suppose, as had been done by a recent author, that it had been proposed to tie the first part of the subclavian and the common carotid arteries. Wardrop, Fearn, and Wickham, all tied the third part, and Malgaigne the axillary, after having previously tied the carotid. Rossi alone tied the first part of the subclavian and the carotid simultaneously, and death ensued from softening of the brain, owing to the right vertebral being cut off by the ligature, and the left carotid being closed by disease. Mr. Heath's patient was a woman aged 30, who had had symptoms of innominate aneurism for four months, for which she had been in St. Mary's Hospital, under Dr. Sibson, when Mr. Lane had proposed to tie the carotid artery, but the patient had refused it. She was taken to the Lambeth Infirmary towards the end of October, 1865, spitting blood; and, being found to be the subject of innominate aneurism, was transferred to the Westminster Hospital, under Mr. Heath, on November 14, 1865. On admission there was a pulsating tumour at the inner end of the right clavicle, thrusting the bone forward and filling up the inter-clavicular notch. The pulsation extended above the clavicle and slightly towards the sterno-mastoid, and a faint bruit existed at the lower part. The patient was unable to assume the horizontal position without distress and dyspnœa, and there was some difficulty in

swallowing. The right radial pulse was smaller than the left. The disease was considered to be an innominate aneurism, and Mr. Heath tied the third part of the right subclavian artery (beyond the scalenus), and the right common carotid artery above the omo-hyoid, on November 21, 1865. Pulsation returned in the right temporal and facial arteries the same day, and the temperature of the arm was maintained. No head symptoms manifested themselves. On the third day slight pulsation was detected in the brachial artery, and the patient was able to lie down with perfect comfort. On the fourth day the right radial pulse was detected, the pulsation in the tumour was less distinct, and no bruit was to be heard. The tumour gradually diminished in size, and its pulsations decreased. The two ligatures came away on the eighteenth day without hæmorrhage, and the wounds soon closed. As the swelling about the tumour disappeared it became evident that there was a perforation in the upper part of the sternum, through which the aneurism projected, and here was its most prominent point. The acetate of lead was administered so as to fully affect the system, but without any result; and the application of an ice-bag over the aneurism seemed to excite some inflammation in the surrounding tissues. The patient remained in Hospital perfectly comfortable until March 6, when she was discharged at her own request, with pulsation still present in the tumour, but to a much less degree than before, and the tumour much diminished in size. She was taken to St. Bartholomew's Hospital on April 8 by the police in a partially insensible condition, resulting from drink, and remained there a short time. On May 15 she was taken under similar circumstances to the Royal Free Hospital, and she remained there under Dr. Cockle's care until August, during which time the tumour once or twice suddenly increased in size, with considerable constitutional disturbance and dyspnœa. It subsided again, however, under perfect rest and sedative treatment, and when she left the Hospital the tumour was much the same as when she entered it. Towards the end of August she was taken to St. George's Hospital in a semi-conscious state, with great difficulty of breathing, but only remained there two days. Nothing more was heard of her until November 8, when, being arrested for intoxication, she was sent to the Westminster Hospital. It was then found that the tumour had decidedly diminished since she left that institution in March. The pulsation was less marked, and the tumour altogether flatter, as was readily seen on making comparison with a cast taken before the operation. There was no bruit to be detected, nor any abnormal sound in connexion with the heart. The patient was able to lie down, to take her food well, and to walk about without any distress. There is no doubt that when drunk and excited she has attacks of dyspnœa, and this accounts for her visits to various Hospitals; when sober she is quite comfortable. The patient was introduced at the Society. In illustration of the case, several enlarged diagrams of the characters of the pulse, as shown by the sphygmograph, and taken by Dr. Anstie, were exhibited. In an appendix the author gave the details of M. P. Broca's unpublished case of ligature of the subclavian artery for innominate aneurism, and also a table of the various cases of distal ligature for aneurism of the root of the neck which have been recorded.

Mr. Holmes said that he was glad to have the opportunity of bearing his testimony to the very gratifying success obtained in this case, which he thought Mr. Heath had accurately described as unique in the annals of Surgery. He wished to defend the accuracy of the views in his article on aneurism in the "System of Surgery" from the imputations which Mr. Heath appeared to cast upon them. In fact, however, Mr. Heath, while saying that he "was somewhat in the dark" as to the proposals made for operation in these cases of supposed innominate aneurism, had himself, in his subsequent remarks, completely vindicated the accuracy of the statement in the "System of Surgery." The operations proposed were really as there stated. First, the simultaneous ligature of the common carotid and first part of the subclavian, as necessitated by a logical following of the proposal known by Brasdor's name, and as shown by Mr. Heath to have been practised in Rossi's operation. This operation Mr. Holmes had spoken of as too dangerous to be justifiable, and Rossi's case so far bore out that view. Secondly, the ligature of the carotid alone, which does not seem to hold out sufficient hope of success to justify the risk to which it exposes the patient; and thirdly, the ligature of the carotid and third part of the subclavian. Before Mr. Heath's case this double ligature had only been practised at a considerable interval of time between the two operations, and Mr. Fearn's was the only case in which success was claimed; but his account was obscurely worded, and led Mr. Holmes to doubt the reality of the cure. Mr. Fearn's preparation now before the Society showed, however, that as far as the disease in the innominate artery went it had been arrested, and probably soundly cured, and the pressure upon the trachea and threatened bursting into that tube obviated, so that the life of the patient was saved for the time. But the preparation also showed, as it seemed to him, that the aorta partook largely in the disease, and that, therefore, though life had for the time been saved, the disease could not be said in strictness to be cured. So in Mr. Heath's case also. His account of the consultations prior to operation showed how great a doubt there was as to whether the aorta was or was not the seat of disease in this woman, and his perfectly accurate and frank description of her present condition showed also that the disease is far indeed from being cured, though its progress towards the trachea and towards the nervous cords forming the plexus has been arrested. But it is well known that these tubular aneurisms or aneurismal dilatations involving the aorta, innominate, and perhaps also subclavian arteries, will go on sometimes for an indefinite period without material alteration, and that the sacciform dilatations or buds projecting out from them (like that in Mr. Fearn's case) will sometimes, and perhaps not very infrequently, undergo spontaneous cure. Instances of these events were quoted from the recent practice of St. George's Hospital. Considering, therefore, the great difficulty of diagnosis, the risk of finding the arteries diseased where exposed for operation, the great likelihood of serious disease in the aorta or even the heart also, and the possibility of spontaneous cure, or cure by appropriate regimen, it seems prudent not to undertake these operations without the gravest consideration, and in circumstances which can but rarely present themselves. Perhaps the best indication for operation would be the relative amount of pressure on the trachea compared with that of the general symptoms. That is, when the patient is otherwise in moderately good health, but suffers much from dyspnœa, and appears likely to die soon from rupture of the aneurism in this direction, the question of arresting it by ligature of the arteries of the right side might be considered, but in any case it must be regarded rather as palliative than as curative. Mr. Holmes concluded by congratulating Mr. Heath on the success of an operation of such difficulty and magnitude, and which really appeared to have saved, or at least prolonged, the patient's life.

Mr. Savory referred to a remark in the report of the case which was to the effect that the left radial pulse was 102 and the right 96. He could not understand how, the heart being the prime cause of the circulation, the pulse-rate could be different on the two sides. He asked if the observation of the two pulses had been made at the same time.

Mr. Barwell thought the heart was not the sole cause of the pulse, and alluded to a case in which he had found the pulse-rate different on the two sides. Referring to Mr. Heath's patient, he said that, as the arm had been paralysed, the aneurism must have passed as low as the pectoralis minor.

Dr. Pavy wished to call attention to a point that suggested itself from his physiological experience, which seemed to have a bearing in connexion with the termination that had been mentioned to have occurred in Mr. Fearn's case. He had found, from the experiments he had conducted on the sympathetic with reference to diabetes, that division of the filaments ascending from the superior thoracic ganglion by the side of the vertebral artery invariably led to the occurrence of pleurisy upon the side on which the division had been effected. He had satisfied himself that the pleurisy had resulted from the nervous lesion, and not from the contiguity of the seat of operation to the pleura; for when the steps of the operation had been performed without the division of the sympathetic filaments, no pleurisy had resulted. The inflammation, it was interesting to note, was confined to the *pleura costalis*, and that portion of it which passed up by the side of the pericardium was affected, as well as that lining the parietes of the chest. The membrane was found after death —and death seemed an inevitable sequence—intensely injected, and in the pleural cavity there existed a quantity of an opaque plum-coloured liquid. Experimental physiology had shown how the sympathetic system presided over the motor element of—and so the state of the blood-vessels. Dr. Pavy considered that, in the result he had referred to, it might be concluded that the muscular element of the bloodvessels belong-

ing to a certain part was paralysed, and that thereby the altered condition constituting inflammation was produced. Now it seemed that pleurisy sometimes occurred in cases of aneurism at the root of the neck, which could not be satisfactorily accounted for by a direct lesion of the pleura, and Dr. Pavy suggested to the Surgeons present whether pressure upon and injury of the sympathetic might not, as in his experiments, be sometimes at the bottom of the occurrence.

Mr. Heath, after thanking Mr. Holmes for the very handsome way in which he had spoken of his case and the treatment pursued, remarked that Mr. Wardrop had only treated one case of innominate aneurism by the distal ligature, the other two cases being diagnosed quite correctly from the first as aneurisms of the lower part of the carotid. Only one of these latter cases, however, was usually included in the list of operations, because in the other the carotid was found still pervious after death. He had not entered into the details of other cases of innominate aneurism in his paper for fear of making it too lengthy; but there was no question that, in all the cases at least in which two vessels had been tied, the diagnosis had been correctly established. Mr. Heath quite allowed that cases of innominate aneurism might go on for months under careful treatment, but it unfortunately happened that in most cases the disease made rapid progress and burst into the trachea or elsewhere. He alluded to the progress of Dr. Davies' case and to two specimens which he had exhibited at the Pathological Society, in one of which the aneurism burst into the trachea, and in the other into the posterior triangle of the neck. With regard to the question of the pressure of the blood upon the sac after a distal ligature, Mr. Heath believed it to be impossible to give a decided answer. In the majority of cases the tumour immediately diminished (and notably so in Wardrop's cases); but occasionally it increased. He was content to quote Broca's own words, which are :—"I confess that I know no theory capable of explaining why Brasdor's operation has the immediate effect of sometimes increasing and at others diminishing the size of the aneurism." With regard to the inequality of the pulses, Mr. Heath said he had no explanation to offer, but believed it to have been the fact, and the same difference was noticed when the pulse on the right side became perceptible after the operation. Mr. Fearn's case hardly illustrated Dr. Pavy's theory of pleurisy, which was no doubt a correct one, for the pleurisy in that case resulted from a direct injury to the ribs.

Mr. Solly adverted to the age of the patient and to the traumatic origin of the aneurism—the patient had fallen out of a window. This would be a guide to the propriety of operations in future cases of aneurism.

METROPOLITAN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

Saturday, December 15, 1866.

Dr. Druitt, President, in the Chair.

The following paper on Diseased and Unwholesome Meat was read by Dr. Letheby :—

Although the daily supply of butchers' meat to the 3,067,536 inhabitants of this metropolis is not an easy matter, and would be altogether beyond the control of any special commissariat, yet it so regulates itself as rarely to fail. The most remarkable feature indeed of it is that nobody does it; but this same freedom of action, and almost entire absence of interference which secures to us our daily supplies, give large opportunities for the disposal of unwholesome food.

I can scarcely tell you what is the quantity of meat daily brought to the markets of London, but it cannot be less than 600 tons. In Paris, where the daily consumption of meat has been for years past accurately returned, it is known that each individual of the city consumes daily about 6½ ounces of butchers' meat, including fat and bone. The consumption in London cannot be less than this; it is probably greater, and if so, as much as 600 tons must be supplied daily. In the three City markets, which are the principal markets of London for the sale of dead meat, there are about 400 tons sold daily. It is brought there not only from the neighbouring slaughter-houses, but also from the most distant parts of England, Scotland, and Ireland, as well as from Belgium, Holland, and France.

Amidst the confusion which prevails in the overcrowded markets during the active hours of business, it is hardly possible to prevent the sale of unsound and unwholesome food; and if it were not that the salesmen of the City markets gave great assistance to the inspectors appointed by the Commissioners, the supervision of the meat sold in the markets would be a practical impossibility. As it is, indeed, the proportion of condemned meat to that which is sold is remarkably small. It looks large in the aggregate, for we yearly condemn about 100 tons of meat, but it only amounts to one ton in 748.

I will describe hereafter the machinery that is used for the supervision of the City markets, but here I may state that, during the six years which have elapsed since I put this machinery into operation, there have been condemned 1,333,291 lbs., or nearly 600 tons, of meat as unfit for human food. 1,014,888 lbs. were condemned in Newgate market, 210,221 lbs. in Leadenhall market, 98,254 in Aldgate, and 7928 in other parts of the City. 592,486 lbs. of it were diseased, 557,432 lbs. were putrid, and 81,373 lbs. were from animals that had died from accident or disease. It consisted of 5576 sheep and lambs, 914 calves, 1893 pigs, 8303 quarters of beef, and 18,141 joints of meat. The particulars of the yearly condemnations are given in a tabular form in Table No. 1. Large, however, as this quantity is, it affords no indication of the amount of diseased meat which passes observation, for beyond the boundaries of the City there is practically no supervision of the meat sold for human food, and to my knowledge there has been a systematic trade in diseased animals. At the time of the cattle plague it was a public scandal, and even now the readiness with which diseased meat is disposed of in the confines of the City affords encouragement for its delivery from all parts of England. Very recently the Commissioners of Sewers have drawn the attention of the Custom-house authorities to the fact that dead, diseased, and rotten sheep, dressed for human food, are being largely imported from Belgium and Holland—mostly from Rotterdam; and it would seem that the Custom-house officers have little or no power to check it.

The practice adopted in the City for the supervision of the markets is as follows :—The City is divided into two districts, an eastern and a western, and an inspector of meat and markets is appointed for each district. The eastern district contains the two smaller markets of Aldgate and Leadenhall; and the western district contains Newgate-market, which comprises the market proper as well as Tyler's-market, and the adjoining shambles in Warwick-lane.

The inspectors have been butchers, and are therefore practically acquainted with the quality of meat. Elsewhere in the metropolis, the inspectors have no particular knowledge of the quality of such food, and their duties are associated with the other duties of inspecting houses, pavements, and drains. Not so, however, in the City, for it is the duty of the inspectors of meat markets and slaughter-houses to devote the whole of their time and attention to this particular work, and to be present in the markets during the whole time of business, from the earliest hour of the morning. Their duties are detailed in the regulations which I append to this report; and the various descriptions of meat I have instructed them to seize are the following :—

1. The carcases or joints of all animals that have died from accident or disease—that is, of all animals that have not been slaughtered.
2. The meat of animals exhibiting signs of acute inflammatory disease, and of recent plastic exudation—as in the pleuro-pneumonia of sheep and cattle.
3. The meat of animals that have been slaughtered while in parturition.
4. All meat affected with parasitic disease, as measles in pork, the distoma or fluke in the livers of sheep.
5. The meat of animals tainted with physic.
6. The meat of animals wasted by lingering disease, and showing the usual characters of being serous, wet, pale, and flabby.
7. All meat in a high state of putrefaction.

In every case of dispute, as well as in all cases where circumstances appear to justify further inquiry with a view to legal proceedings, the meat is submitted to me for examination, and I order it to be taken before a justice for his inspection and condemnation.

As soon as the meat is seized it is removed to a shed where it is drenched with crude carbolic acid (the crude acids of coal tar), and this so taints it with the odour of tar that it cannot be used as human food.

The meat so seized becomes the property of the Commissioners, and as about two tons of it are condemned every week a contract is entered into with a person who undertakes to remove it from the markets daily at appointed times and to destroy it. It is of some value because of the fat in it, and the lean parts are suitable for manure. At one time as much as 2d. a stone of 8 lbs. was paid for it, but now it is given to the contractor as a set-off against the expenses which he incurs in removing it. I am not at all satisfied with the way in which he disposes of it, and it will be necessary to adopt better means for its destruction.

In the case of putrid meat which has been sent to the markets in good faith, and which has become tainted on its road, it is not entirely confiscated, but permission is given to the salesman to remove all the fat from it for his own profit, provided he cannot dispose of it for its value to the contractor.

At the time of the condemnation of meat a certificate is given to the salesman by the inspector in the form which I annex, describing the meat, and so exonerating the salesman from all blame with his client.

A tabular return is also furnished to me by each of the inspectors every Saturday of the meat condemned during the week. It describes the meat, specifies its weight, states why and where it was seized, and by whom it was sent for sale. These returns enable me to advise the Commissioners when it is necessary to take legal proceedings; and as in former prosecutions I found it difficult to obtain convictions under the 27th and 28th sections of the City of London Sewers Act of 1851, or the 26th section of the Nuisances Removal Act, because of the absence of proof that it was exposed for sale or was sent to the market for sale as human food, I obtained the amendment of the Act in 1863, and now the proof to the contrary rests with the accused, and the penalty has been increased from £10 to £20, or, at the discretion of the Justice, imprisonment in the common gaol or House of Correction for three months. This has had a very salutary effect, and has done away with the necessity which before existed of prosecuting such cases at the Central Criminal Court.

In the course of the last six years we have convicted ninety-seven persons of this offence, and the penalties have ranged from a fine of ten shillings to twelve months' imprisonment with an additional fine of £50. Eleven of them were prosecuted at the Old Bailey.

The signs and appearances of diseased meat are the following:—Good meat is neither of a pale pinkish colour nor of a deep purple tint. The former is indicative of disease, and the latter is a sign that the animal has died from natural causes, or has been affected with acute fever.

Good meat has also a marbled appearance from the ramifications of little veins of intercellular fat; and the fat, especially of the internal organs, is hard and suety, and is never wet; whereas that of diseased meat is soft and watery—often like jelly or sodden parchment. Again, the feel of healthy meat is firm and somewhat elastic, and it hardly moistens the fingers; whereas that of diseased meat is soft and wet—in fact, it is often so wet, especially after keeping it for a day or so, that much serum runs from it, and then it is technically called "wet."

Good meat has but little odour, and this is not disagreeable, whereas diseased meat smells faint and cadaverous, and often it has the odour of medicine, especially when it is fresh cut, and when it is minced and treated with hot water. In this manner the smell of physic may generally be distinguished from that of the rape cake or turnips which have been taken as food, and have given a peculiar odour to the meat.

Good meat bears cooking without shrinking much, or without losing much weight, but bad meat shrivels up, or even boils to pieces. All these effects are due to the presence of an undue proportion of serum in the meat, and to the relatively large amount of gelatinous or intercellular tissue; for the fat and true muscular substance are more or less deficient.

I have drawn up a table from the investigations of Mr. Lawes and Dr. Gilbert, on the percentage amounts of mineral matter, dry fleshy matter, fat and water in the carcase and offal of healthy animals in their store and fat condition; and I may state that in my own experiments I find that if 100 grains of the lean or muscular part of good meat are cut up, and dried at a temperature of boiling solution of salt and water (224° Fahr.), they lose only from 69 to 74 grains of water; but if diseased meat is thus treated, it loses from 75 to 80 per cent. of its weight. The average loss of weight with sound and good beef is 73·3 per cent., and of mutton 71·5 per cent.; whereas the average loss of diseased beef is 76·1 per cent., and of diseased mutton 78·2 per cent. Even if it be dried at a higher temperature, as at 266° of Fahrenheit, when all the moisture is expelled, and when good meat loses from 74 to 80 per cent. of weight, the proportion of loss in bad meat is equally great.

Other characters of a more refined nature will also serve to distinguish good meat from bad. The juice or serosity of sound flesh is always slightly acid, and it contains an excess of potash salts, chiefly phosphate; whereas diseased meat, from its being infiltrated with the serum of blood, is often alkaline, and the salts of soda, especially chloride and phosphate, abound in it.

And again, when good meat is examined under the microscope, the fibre is clean and well-defined, and free from infusorial animalcules, while that of diseased meat is sodden or tumid, as if it had been soaked in water, and the transverse striæ are indistinct and widely apart, and minute organisms, such as vibriones, abound in it.

Lastly, the proportion of offal to the carcase is greater in diseased animals than in healthy. In lean animals, such as store sheep or bullocks, the offal parts amount to 45 per cent. of the animal, and in store pigs to about 19 per cent. (see Table No. 2), whereas in diseased animals it constitutes more than 50 per cent. of the entire weight.

The signs of parasitic disease are not always so well marked, although the measles or *cysticercus* of the pig, and the *distoma* or fluke of the liver of the sheep, are easily discovered. On the other hand, the measle-like *cysticerci* of calves and oxen, and the *trichina* of ham and pork, are not so readily detected.

I propose, however, to show you to-night the microscopic appearances of these entozoa in their natural habitats.

And here I may be permitted to offer a few remarks on the observed effects of diseased meat.

Some of my colleagues have expressed a doubt of the injurious quality of the meat of animals suffering from pleuro-pneumonia and the rinderpest, and it would seem that in many cases the flesh of such animals has been eaten with impunity. There is a story told on the authority of Dr. Brücke, the Professor of Physiology at Vienna, that some years ago, when the steppe-murrain was prevalent in Bohemia and the infected animals were killed and buried by order of the Government, the poor people dug up the carcases of the dead cattle, and cooked them and ate them without injury Nearly the same thing is said of pleuro-pneumonia, but I have had so many opportunities of seeing the ill effects of such meat that I have no doubt of its injurious quality. In the month of November of 1860 a quantity of cow-beef was bought in Newgate-market by a sausage-maker at Kingsland, and it was immediately converted into sausages. Of sixty-six persons who partook of the sausages, sixty-four were attacked with symptoms of poisoning—as sickness, purging, and great prostration of the vital powers. I had occasion to inquire into the particulars of the matter, and I ascertained that the animal had been slaughtered while suffering from pleuro-pneumonia, and that it had come from one of the cow-houses of London. Nor is this the only way in which it affects the human body. Dr. Livingstone says in his account of Missionary Travels and Researches in South Africa, that "when the flesh of animals that have died of peripneumonia is eaten, it causes a malignant carbuncle. The effects of the poison have been experienced by missionaries who had partaken of the food not visibly affected by the disease, and many of the Bakwains who persisted in devouring the flesh of animals which had perished of the disease died in consequence." The virus, he says, is neither destroyed by boiling nor roasting, and of this fact he had innumerable instances. I will ask you to compare this observation with another of nearly equal importance. Pleuro-pneumonia was imported into England from Holland in the year 1842. In the five years preceding this, the mortality in England from carbuncle was scarcely 1 in every 10,000 deaths; there is no record of deaths from this disease from 1842 to 1846, but from 1846 to 1851 the mortality rose to 2·6 per 10,000, and in the next 5 years it was 6·2, and a still larger increase was observed in the deaths from phlegmon. On they rose, from an average of 2·5 per 10,000 deaths in the five years preceding 1842, to 81 per 10,000 in the 10 years from 1847 to 1856. The Registrar-General of Scotland has particularly referred to this, and it accords with the experience of every Medical Practitioner.

It is, however, as you know, very difficult to trace the immediate relation of unsound food with disease, there being

at all times so many circumstances to weaken the connecting chain; in fact, nothing short of a direct experimental inquiry, as has already been made in the case of certain parasitic affections, will bring the question to rest. Nevertheless, the facts which I have mentioned afford very strong evidence that the flesh of animals affected with pleuro-pneumonia is capable of producing disease; and we can hardly resist the conviction that other acute inflammatory affections, pervading the whole system of the animal, must render its flesh unwholesome. I have again and again perceived this in the case of rinderpest, and I believe it to be so in most febrile disorders.

I place before you a specimen of pork covered with small-pox pustules. It was seized in the City on its way to a sausage-maker, and without doubt would have been sold in the form of sausages.

In the year 1862, when small-pox was epidemic among sheep in several districts of England, it was a common practice to send the bodies of the diseased animals to London for sale as food. Later still, in 1863, there was an epidemic of what seemed to be scarlet-fever among the pigs of this metropolis. They were suddenly seized with an affection of the throat, the surface of their bodies assumed a scarlet appearance, and they generally died comatose in ten or twelve hours. The disease was very infectious, spreading rapidly through the piggery where it showed itself; and from its known fatal character, the pigs were killed directly they showed confirmed symptoms of the disease, and the carcases were sent for sale as food. We have condemned scores of them in the City markets, and have always known them by their scarlet appearance and the ulcerated glottis. About two years ago there was a sort of petechial fever, like typhus, among pigs. It manifested itself by loss of appetite, great languor, rapid prostration of the vital powers, the discharge of bloody urine, and death by coma in a few days. As usual, the affected animals were slaughtered and sent to market. I show you a specimen of the meat with the petechial spots on the skin. This, together with the presence of blood in the pelvis of the kidneys, is the distinctive post-mortem sign of the disorder.

I turn now to another class of affections which unquestionably render meat unwholesome—I mean parasitic affections; and foremost of these, on account of its terribly fatal character, is the presence of trichina in meat. Fortunately, it is of very rare occurrence in this country. I have examined hundreds of specimens of pork without discovering it, but it is not so rare on the Continent. Meat affected with this parasite is generally of a darker colour than good meat, especially when the worm has not become encysted. This arises from the irritation of the muscular tissue and its engorgement with blood. When the parasite is encysted, the meat presents a spotted appearance, and with a common lens the spots or cysts containing the trichina are very evident. I show you a specimen of it in fresh human muscle from a subject at St. Bartholomew's Hospital, and I am indebted to Mr. Thomas Smith, the demonstrator, for it.

On examining the muscular tissue of an infected animal with a power of from 50 to 100 linear, the creature will be seen coiled up among the muscular fibrillæ. I place before you specimens of ham crowded with the entozoon; and in some cases the creature has been set free from the tissue, so that you can observe its form. It is a thread-like worm, generally coiled up in two or two and a half spirals, hence its specific name; and when unrolled, it measures about the $\frac{1}{30}$th of an inch in length. When it has become encysted, it is still seen coiled up within the oatlike-looking cyst. These cysts are always in the direction of the muscular fibres, and they are embedded in the cellular tissue. You will have an opportunity of seeing specimens of it under the microscope.

The worm has been long known to pathologists; for it was noticed by Mr. Hilton as far back as the year 1832, and it was described by Professor Owen in 1835; but it is only within the last six years that the real nature of it has been determined, for it was generally thought to be a harmless visitor. In 1860 Dr. Zenker found it in the muscles of a girl who died at Dresden with very peculiar symptoms, and he discovered that the parasite was the cause of her illness and death. Since then numerous observations have confirmed the opinion of Zenker that the parasite, instead of being a harmless creature, is one of the most dangerous of human entozoa. The effects of it, coming like an epidemic, have been witnessed in several parts of Germany, and always with the same serious results. In the spring of 1862, thirty cases of the disease were observed at Plauen, in Saxony, and nearly half of them were fatal. The nature of the disease was at once recognised by the Physicians, and it was confirmed by taking out small pieces of muscle from the living subject, and examining it for the trichina. In the year following, another epidemic of the disease occurred at Hettstadt, near Eisleben, and of 158 persons attacked, twenty-eight died. Last year, also, there was an outbreak of the malady at Hedersleben, near Magdeburg, in Prussian Saxony, and there were at least ninety deaths from it. It is therefore a formidable disease, and deserves our attention.

The pathology of it has been well studied by Zenker, Virchow, Leuckart, Colberg, Claus, and others; and from experiments it is known that when the flesh of any animal infected with trichina is given to other animals, the cyst containing the parasite is almost immediately dissolved by the gastric juice, and the parasite thus set free finds the conditions which are necessary for its active growth and development. It at once uncoils itself, and becomes a straight thread-like worm. In about three days it has grown to three or four times its former length, and is visible to the naked eye, for it has increased from the one-thirtieth of an inch in length to the tenth. The generative organs are then seen to undergo rapid development, for the male worms are soon full of spermatic filaments, and the ovaries of the female gorged with ova, each female producing from 300 to 500 ova. These soon become impregnated, and the young are discharged from the mother in a living condition. This happens in about a week or ten days after the worm has been swallowed, and the little progeny, each but the 500th part of an inch in length, at once migrate from the alimentary canal to the voluntary muscles of the body. There they lodge and grow upon the intercellular fluids, producing enormous irritation. In one week they have grown to forty or fifty times their original size, and in two months they become encysted. In three months or so the cyst is calcareous, and now they are permanently lodged in their cases, which are not unlike egg-shells, and they bide their time for full development, when, by being eaten, they reach the alimentary canal of another animal.

The parents produce only one brood of young, and the male, being of less importance than the female, soon perishes, for it is not found in the intestines a fortnight after it has been eaten, and the female also dies in a few weeks after it has produced its young.

The symptoms produced by this unwelcome intruder vary to some extent. Occasionally there is almost immediate disturbance of the digestive functions; but commonly no particular symptom is observed for a day or two, until the parasite begins to grow, and then there is a feeling of prostration, loss of appetite, giddiness and pain in the head, and pain in the back and epigastrium. There are also slight febrile symptoms, beginning with rigors. Then follows more disturbance of the alimentary canal, as vomiting and purging. This lasts for several days, and by the end of the first week fever has set in. This may be called the first stage of the disorder.

The second stage is marked by acute fever, by an œdematous condition of the face and eyelids. The bowels are still relaxed; the abdomen is tender to the touch; and the muscles, which have now become the tenements of the young worms, are in an inflamed condition, and cause great pain when they are put in motion. The muscles of the neck and back are stiff and swollen; and in some cases the muscular pain and irritation are so great that the patient lies motionless on his back. This condition of things lasts until the worm is encysted—that is, until the seventh or eighth week; but most commonly, if the case is severe, the patient dies at the end of the third or fourth week.

Children suffer less than adults, and appear to sleep the disease off, for they are rarely awake.

It is not my purpose to discuss fully the pathology of this disease, but merely to give you an outline of its course, and describe the general symptoms by which it is known; and I may remark that nearly the same symptoms, but with varying severity, are produced in nearly all animals that eat the trichina. The pig, perhaps, suffers least, and man most; but dogs, foxes, hedgehogs, marmots, badgers, sheep, moles, mice, rats, frogs, and most carnivorous birds are subject to it, and have been dissected with the worm encysted in their flesh.

And now come the practical questions—How are we to know it in flesh, and how prevent mischief? I have already said that except the worm is encysted you cannot discover it with the unassisted eye, but must examine the muscle with a power of from 50 to 100 linear, and you will see the creature coiled up in its spiral form. Of all muscles, those of the eye are the most certain to show the parasite. In Germany so serious has been the disease that the better class of sausage-

makers have all their pork examined before it is used for food, and thus the public are to some extent protected.

When the creature is encysted it is easily discovered, and then the best way of showing the worm is to touch the cysts with a little acetic acid, to dissolve the calcareous shell, and then examine them under the microscope. In the specimen from the human muscle which I show you, the shells have been made transparent by drying them on a slip of glass, and then mounting them with Canada balsam.

The protection to their action is good cooking, for they cannot bear the temperature of boiling water. They will bear the heat to which hams are subjected when they are smoked, and they resist the action of the creosote and other empyreumatic matter of smoking. They are also unaffected for many weeks by salt, and they may be dried for a long time without killing them. So also the meat may get into the last state of putrefaction without injury to the life of the creature. Nothing but thorough cooking will destroy them.

I must be brief with the other forms of parasitic diseases of meat, but there is one which, next to the trichina, is of great importance to us. I allude to the cysticercus, or measles of pork, and its adult product the tapeworm.

Fortunately, this parasite is easily discovered in the flesh of the pig, but a like parasite is not so easily seen in the flesh of other mammiferous animals, as in that of the ox, goat, etc.

You will perceive in the specimens before you that it occurs as a little vesicle about the size of a hemp seed in the cellular tissue between the muscular fibres. When examined by the microscope, as you will presently see, it consists of a short eliptical vesicle with a short neck, more or less divided transversely, and terminated by a sort of head, which is crowned with a double row of hooks, thirty-two in number, and having four globular bodies like mouths, and the body is generally full of little granules.

When this creature is eaten, its sac or vesicle is quickly digested, but its head becomes fixed to the mucous membrane of the intestines by the hooks, and the neck speedily begins to produce joint after joint, each segment rapidly becoming an adult creature, and soon we have the long riband-like conjugated creature which we know as the *tænia solium*. These segments have an independent existence, for each of them has its own system of reproductive organs, and forms within it multitudes of ova. These ova are self-impregnated, and they produce an embryo or vesicle with no suckers, but with six hooks, and they wait for their development in another animal, for being swallowed and finding the proper conditions of growth, they make their way by means of their hooks through the walls of the intestines and into the tissues, where they become the little hydatid, which waits its turn for development in the intestines of another animal. All this has been put to the proof of experiment, for Küchenmeister has given measly pork to various animals, and has watched the growth of the vesicles into perfect tape-worms. He has even done this with the human subject, for he was permitted to feed two condemned criminals with the cysticercus of the pig. In one case he gave the measly pork three days before the man's execution, and after death he found ten young tapeworms only a few lines in length in the intestines. In the other case he gave twenty measles on two separate occasions at considerable intervals, and after death he found nineteen tapeworms in the bowels, eleven of which had arrived at maturity. Other experiments of a like nature have set this question at rest.

It is probably by the same sort of growth that other tapeworms which infest the bowels of men are produced, as the *bothriocephalus latus*, the *tænia mediocanellata*, etc.; and it is a fact worthy of notice, that those nations which use meat in a raw, or nearly raw, condition are most subject to these cestoid parasites. The tapeworm is common among the Abyssinians, who eat uncooked flesh. It is common among children who are nourished, as is the practice in Russia, by giving them raw meat to suck; and statistics have shown that with us cooks are most subject to the disease.

In like manner the *tænia echinococcus* of the dog is the cause of hydatid in man and other animals. This is well observed in Iceland, where one-sixth of the annual deaths are caused by the hydatid of echinococcus. In its adult condition the little tapeworm, which produces a huge hydatid, is not more than the sixth part of an inch in length. It has only four joints, attached to a head which has four suckers and a double crown of hooks. Each joint is a perfect, or rather an independent, animal; for it produces its own ova, which are discharged from the intestines of the dog, and dropping upon the pastures are eaten by herbivorous animals. As in the case of cysticercus of the pig, the ova pierce the walls of the intestines, and find a convenient nidus for their growth in some parenchymatous organ. The liver is the most usual habitat, then the lungs, spleen, kidneys, and even the brain. Here it grows, and produces by gemmation vesicle after vesicle, with an inner germinal membrane that developes, from little cords or placentæ, minute creatures, called *echinococci*, which are to become the future tapeworm. These echinococci are only just discoverable by the naked eye, but when they are magnified they are found to be little vesicles, partially divided in the middle, and having a sort of head with four suckers and a circle of hooks. These creatures are constantly being developed in the hydatid, and after floating about in the serous-looking contents they die, and leave their hooks. But if they are eaten by a carnivorous animal, as the dog, they rapidly grow into tapeworms; and thus the round is kept up. Hydatid in man and herbivora — then echinococci, then a tapeworm in the dog—then ova, and then again the hydatid.

I show you specimens of the parasite in two of its states of growth.

There is another class of parasites—the trematodes or flukes, which infest man and herbivora, especially sheep, and are found in the gall-ducts, intestines, and portal veins. The most important of them is the distomum hepaticum, or liver fluke. It is very commonly found in the liver of sheep in wet seasons, and now and then it is found in man. The history of it is well known. The ova of the mature animal are discharged from the gall-bladder through the intestines of the sheep. These let loose a ciliated embryo, which swims about and developes itself by means of germinal growth into a minute cylindrical sac or hydatid, which attaches itself to some mollusc, and, being eaten by a ruminant, or by man, becomes the fluke. Probably our mode of receiving them is by watercresses or suchlike aquatic plants. In wet weather the molluscs or little snails containing them crawl over the sodden pasturage, and, being eaten by the sheep, are developed into the liver fluke. They exhaust the system of much of the nutriment which passes by the portal system, and cause a wasting of the body, called watery cachexia or rot.

I have brought for your inspection a liver of a sheep infested with this parasite, and I show you also specimens of the entozoon removed therefrom.

And now, in bringing my paper to a conclusion, I would direct your attention to the table of the varieties of entozoa found in the human body. None of these are of spontaneous origin. They must, therefore, have been produced from ova or larvæ contained in food or drink. The especial relation of each of these forms of parasitic life to the food or drink producing them has not been determined, but enough has been discovered to show the necessity for a careful examination of the food sold to the public.

No doubt our drinks, and especially well and river waters, may often be the means of propagating such disease. The ova of lumbrici are expelled with the evacuations in immense numbers. These ova remain in the waters of a marsh, of a river, or of a well, for months, without undergoing change. The embryo then becomes developed, but it is not set at liberty until the ovum enters the human intestines. The practical remedy for all this is a temperature of 212° F.

Table 1.—*Account of Meat, Game, and Poultry condemned in the City Markets during the Six Years* 1861-1866.

Years ending	Dead. lbs.	Diseased. lbs.	Putrid. lbs.	Total. lbs.
1861 . .	33,619	91,098	16,741	141,458
1862 . .	13,944	78,679	17,423	110,046
1863 . .	20,324	114,120	76,061	210,505
1864 . .	43,497	96,779	88,904	229,180
1865 . .	27,393	124,614	95,820	247,827
1866 . .	28,612	185,765	169,970	384,347
Total in 6 yrs.	77,389	691,055	554,919	1,323,363

Kind of Meat condemned.

Years ending	Sheep.	Calves.	Pigs.	Quarters Beef.	Joints.
1861 . .	1089	42	140	897	644
1862 . .	542	34	149	723	766
1863 . .	870	81	279	1148	2943
1864 . .	975	56	446	1290	2713
1865 . .	791	59	426	1988	4066
1866 . .	1287	642	447	2229	6718
Total in 6 yrs.	5554	914	1888	8269	17850

Besides which there were 7928 lbs. of meat seized in shops and slaughter-houses, which consisted of 22 sheep, 5 pigs, 34 quarters of beef, and 291 joints of meat. 1431 lbs. were diseased, 2513 lbs. were putrid, and 3984 lbs. were from animals that had died from natural causes. There were also condemned, on account of putridity, 202 quarters and haunches of venison, 2515 head of game, and 15,184 head of poultry and rabbits.

Table 2.—Percentage Proportion of Carcase and Offal Parts in Healthy Animals.

Description of Animal.	Carcase.	Offal parts.	Loss, etc.
Fat calves . . .	63·13	33·54	3·33
Fat heifers . .	55·58	41·25	3·17
Fat bullocks . .	59·84	38·54	1·62
Store sheep . .	53·42	45·55	1·03
Moderately fat ditto .	58·97	40·52	0·51
Very fat ditto . .	64·05	35·78	0·17
Store pigs . . .	79·26	18·78	1·96
Moderately fat ditto .	83·39	16·07	0·54
Very fat ditto . .	82·57	16·87	0·56

The offal parts consist of head and contents (brain and tongue), the contents of the chest (heart and lungs), the contents of abdomen (liver, spleen, pancreas, stomach, intestines, and generative organs), the diaphragm, feet, tail, and skin. In the pig the skin and head are not offal, but part of the carcase.

Table 3.

The average loss in weight of the lean or muscular part of meat, when dried at 224° F., is—

For good and sound beef . .	72·3 per cent.
„ „ mutton . .	71·5 „ „
diseased beef . . .	76·1 „ „
„ mutton . . .	78·2 „ „

Dr. Cobbold, F.R.S., remarked that the earlier portions of the paper were particularly instructive, and so far as his observations extended he could endorse the accuracy of the author's clear description of the characters of diseased meat of non-parasitic origin. Having, however, been engaged in the study of entozoa for the last fifteen years, and being now occupied professionally in the treatment and cure of parasitic diseases, he (Dr. Cobbold) could not allow some portions of the paper to pass uncriticised. In speaking of trichinæ, Dr. Letheby had remarked their presence in birds and even in cold-blooded animals, such as the frog. "My own experiences," continued Dr. Cobbold, "are entirely at variance with this notion, and the results I have obtained by an extended series of experimental investigations have convinced me that trichinæ cannot be reared in birds, neither are they under any circumstances, normal or otherwise, to be encountered in the flesh of reptiles and fishes. You may reply that they have been over and over again described as occurring in these animals and even in earthworms. I utterly deny the accuracy of the inferences obtained by the facts recorded. In all sorts of animals, it is true, you may find minute nematode worms, but these are not necessarily trichinæ, neither have they any genetic relation with trichinæ. Mr. Bowman found such trichinoid entozoa in the muscles of the eel, and accordingly regarded them as true trichinæ. As for the minute worms found in the frog, they are referable to a totally distinct species of entozoon—namely, the *Myaryctes Weismanni*. I have now reared trichinæ in a considerably variety of mammalia, such as the pig, dog, cat, guinea-pig, and hedgehog, but all my efforts to rear them in birds have utterly failed. At the Zoological Institute of Heidelberg, Professors L. Fuchs and H. A. Pagenstecher obtained precisely similar results, and we have thoroughly satisfied ourselves that the flesh of birds is not liable to harbour the trichina. As regards the question of pork in relation to the prevalence of tapeworm, I have no hesitation in saying that the pork tapeworm as compared with the beef tapeworm is rare. Out of 121 tapeworms, I have found 96 to be derivable from beef. All the tapeworms which I have expelled from my own patients have been derived from beef; but this is partly explained by the circumstance that my patients are from among the wealthier classes. At this moment I have in my pocket the head of a *tænia mediocanellata*, which I only removed from one of my patients just before coming to the present meeting. There are many other points, did time permit, on which I should desire to enlarge; and I would respectfully submit great caution in condemning meats as unwholesome, merely because of the presence of certain parasites. I recently pointed out the fact that the so-called cattle plague entozoa, or, more correctly, psorosperms, were quite as abundant in healthy as in diseased meat, and they are almost always present in the heart and flesh of animals daily slaughtered and eaten as food by all of us. I have purposely eaten infested flesh of this kind, and have never suffered the slightest inconvenience from this sort of experiment.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, November 7, 1866.

Dr. Barnes, President.

Professor Mattie, of Paris; Dr. Belcher, Bristol; Dr. H. J. Bransom, Scarborough; Dr. W. H. Strange, Belsize-park; and Mr. A. B. Steele, Liverpool, were elected Fellows of the Society.

Dr. Murray showed a

NEW TROCAR AND CANULA FOR TAPPING AND WITHDRAWING THE CYST IN OVARIOTOMY.

The instrument was made for him by Messrs. Mayer and Meltzer, of Great Portland-street. It consisted of an ordinary-shaped trocar and canula, the canula having fastened to it at its upper third two self-acting brackets, or pieces of steel, bent up at a right angle, by means of which the cyst wall is secured at the moment of tapping. The trocar passes through a slit in the tubing which is attached to the canula, and on withdrawing the trocar this slit immediately closes. Dr. Murray has several times used this instrument, and he considers it light, simple in construction, and certain in its action.

Dr. Graily Hewitt exhibited a specimen of acephalous monstrosity, with absence of abdominal covering.

Dr. Wynn Williams read a case of hæmorrhage due to retained placenta, supposed to be the placenta of a previous abortion.

Dr. Eastlake gave the particulars of a

CASE IN WHICH THE RIGHT ARM OF THE CHILD WAS EXTRUDED THROUGH THE ANAL ORIFICE DURING LABOUR.

The patient had, previous to her present pregnancy, undergone an operation for laceration of the perineum, and the conclusion drawn by the author was, that primarily the presentation was that of a "hand and head," and that, as labour progressed, the arm descended with the head, and was at length forced through a weak portion of the posterior vaginal wall, and in this manner escaped through the anus. The labour terminated naturally, and a living male was born.

Dr. J. Braxton Hicks read a paper entitled

CONTRIBUTION TO THE PATHOLOGY OF PUERPERAL ECLAMPSIA.

The author first of all traced our knowledge up to the present day, from the period when Dr. Lever showed the fact that albumen in the urine was a very constant accompaniment of puerperal convulsions. He then showed that it was at first, and still is by many, considered that the convulsions depended on uræmia; and that after the advance of Frerichs' theory it was supposed that the decomposition of urea into carbonate of ammonia was the cause of these convulsions. But the author went on to show that, from experiments of late, it might be considered doubtful whether this explanation would hold. Another important fact had been shown by various experiments—namely, that even after the injection of urea into the veins uræmic symptoms did not arise immediately, at least for twenty-four hours. If, then, it could be shown that before the first convulsion there was no abnormal condition of the urine, it was argued that the convulsions could not be the result of uræmia, as generally supposed—at least as the result of the kidney disease. But if it were shown that, although no albumen existed in the urine before the convulsion, nor indeed any evidence whatever of ill-health up to the very moment of attack, yet that shortly after the first fit not only albumen was to be found, but also all the evidences of acute desquamative nephritis were present within twelve hours, then the author considered that we must admit either (1st) that these convulsions produced the nephritis, or (2nd) that some abnormal ingredient in the blood produced simultaneously irritation of the cerebro-spinal system and of the kidney, or (3rd) that the highly congested venous system produced by the spasm of the glottis was able to cause the nephritis. The four cases brought forward by the author showed the development of the acute kidney disease after the first convulsion, being about half of those where he had an opportunity of examining the state of the urine early; and as the

difficulty of obtaining the urine sufficiently early was great, he thought it was better to bring forward these cases in order to obtain the co-operation of the Society to ascertain the frequency of these cases, and to elucidate other facts mentioned in the paper which required further clearing up. He more particularly alluded to the opinion that the urine of pregnant women was very frequently albuminous. The author added 50 to the 50 of Dr. Lever, and in only one of these 100 was albumen found. He also doubted the evidence of the pressure theory. One subject in particular required further research—namely, whether the urine of ordinary male epileptics becomes albuminous after a fit. From those cases he had examined he had not found it so; but those who had charge of these cases might readily clear up this point. The author thought it very probable that those cases where the urine had been found highly charged with albumen when examined after the fits had set in for some time, would have belonged to the class he had brought forward had the urine been examined before; at any rate, if there had been prior disease of the kidney, it is clear that they become acutely affected, and it had yet to be shown why at this particular juncture the acute attack had arisen. Dr. Hicks thought before we could attempt any theory on this subject we must collect more facts; and for this reason he ventured upon no theory himself, but solicited the aid of the Society to increase our knowledge on these subjects. The cases were then read.

Remarks were made by the following gentlemen:—Dr. Graily Hewitt, Mr. Benson Baker, and Dr. Barnes. Dr. Hicks replied, and the meeting adjourned.

NEW BOOKS, WITH SHORT CRITIQUES.

The Indigestions or Diseases of the Digestive Organs Functionally Treated. By T. K. Chambers, Honorary Physician to H R.H. the Prince of Wales, etc. London: J. Churchill and Sons. Pp. 293.

*** The title is somewhat ambiguous, as the word "treated" refers to the plan of discussion adopted rather than to any therapeutical appliance. Very pleasant reading; very instructive at the same time. Still more—likely to be very useful. Beautifully got up. Quite a *livre de luxe*.

Malformations of the Human Heart. By T. B. Peacock, M.D., Physician to St. Thomas's Hospital, etc. Second Edition. London: J. Churchill and Sons. Pp. 204.

*** That the first edition of this work has been so rapidly exhausted is not only praise, but justification of previous praise, and we need not say that such a careful writer as Dr. Peacock would be sure to take every means of improving a second edition. To this one our readers will find that some valuable additions have been made.

On the Action of Medicines. By F. W. Headland, M.D., F.R.C.P., etc. Fourth Edition. London: J. Churchill and Sons. Pp. 449.

*** To recommend a book which has so well recommended itself as to go through three editions in a few years would surely be a work of supererogation. Of this edition the words on the title-page, "revised and enlarged," are sufficient; we need say no more.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, Dec. 27, 1866:—

Joseph Goodall (St. Bartholomew's Hospital), Walworth-road; William James Hunt (Edinburgh), Hoxton.

As an Assistant:—

William John Pook, Mount Pleasant, Gray's-inn-road.

The following gentleman also on the same day passed his First Examination:—

Henry Kerwan King, Guy's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

GRIMES, J., M.B., has been appointed Resident Medical Officer to the Bloomsbury Dispensary.

MACROBIN, A., M.B., M.C., has been appointed Resident Medical Officer to the Dover Hospital and Dispensary.

SHAW, Mr. HENRY S., M.R.C.S., has been appointed Resident Obstetric Assistant to the Middlesex Hospital.

BIRTHS.

CORBETT.—On December 30, at The Grange, Southgate, N., the wife of R. Corbett, Esq., M.R.C.S., of a daughter.

GERVIS.—On December 29, at 12, St. Thomas's-street, Southwark, the wife of H. Gervis, M.D., of a daughter.

GORDON.—On December 19, at Blackheath, the wife of Dr. Gordon, C.B., of a daughter.

HUMPHRIES.—On December 17, at Granite-field, Kingstown, the wife of W. Humphries, M.D., of a daughter.

KESTEVEN.—On December 29, at 2, Lansdowne-place, Holloway, the wife of W. B. Kesteven, Esq., F.R.C.S., of a daughter.

KIDD.—On November 29, at 10, Westbourne-park-terrace, the wife of Charles Kidd, M.D., M.C.S., of Sackville-street, Piccadilly, of a daughter.

MAURICE.—On December 24, at Reading, the wife of O. C. Maurice, M.D., of a son.

WATSON.—On December 26, at 27, Montague-street, Russell-square, the wife of Spencer Watson, F.R.C.S., of a son.

MARRIAGES.

DONELLY—HEMMING.—On December 22, at St. John's, Hackney, A. Donelly, M.D., Kingsland, to Louisa, youngest daughter of the late Samuel Hemming, Esq., Piccadilly. No cards.

FAIRBANK—MEADOWS.—On December 27, at St. Mary's Church, Hulme, Manchester, F. R. Fairbank, M.D., 116, Bloomsbury, Manchester, to Sarah Ellen, second daughter of the late James Meadows, Esq., Greenheys, Manchester. No cards.

HYDE—ROBY.—On December 22, at St. Pancras, W. Hyde, M.R.C.S.E., Her Majesty's Indian Army, to Harriet Selina, youngest daughter of the late Ruben Roby, Esq., Queen-street, London. No cards.

PALANQUE—HUNT.—On January 2, at the Cathedral, Manchester, John A. Palanque, L.R.C.S. Edin., to Mary Jane, third surviving daughter of Samuel Hunt, Esq., of Manchester.

WAHLTUCH—GOLDSCHMIDT.—On December 16, at Frankfort-on-the-Maine, by the Rev. Dr. Geiger, Adolphe Wahltuch, M.D., of Lime-grove, Manchester, to Anna, second daughter of H. S. Goldschmidt, Esq., of Frankfort-on-the-Maine.

DEATHS.

NOEL, V. E., M.R.C.S., at 3, Westbury-terrace, Plymouth, on December 6, aged 23.

ROBERTS, P. N., L.S.A., at the Infirmary, Denbigh, on December 28.

RUSSELL, J. RUTHERFURD, M.D. Edin., at Forres, N.B., on December 22, aged 50.

VACANCIES.

BIRMINGHAM LYING-IN HOSPITAL.—Resident Surgeons.

BOLTON INFIRMARY AND DISPENSARY.—House-Surgeon.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST, MARGARET-STREET.—Visiting Physician.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATION.

Derby Union.—Mr. John Lindley has resigned the Workhouse; salary £50 per annum.

APPOINTMENTS.

Droxford Union.—James Thompson, M.B. Dub., L.R.C.S. Ire., L. K. and Q. Coll. Phys. Ire., L.M., to the Droxford District, and the Workhouse.

Staines Union.—Albert J. Southey, M.R.C.S.E., L.S.A., for Stanwell and Harmondsworth Districts.

IT is stated by the *Court Journal* that the Queen caught a cold during her visit to the mausoleum on the anniversary of Prince Albert's death, and that it resulted in a severe attack of face-ache, from which her Majesty is still suffering.

IT is stated that Professor Fawcett, M.P., is about to marry Miss Garrett, sister of the "Doctress," Miss Garrett, of Upper Berkeley-street.—*Guardian.*

ROYAL COLLEGE OF SURGEONS.—At a special meeting of the Council of this institution, held on Thursday last to elect a member of the Court of Examiners, in the vacancy occasioned by the resignation of Mr. Cæsar Hawkins, the choice of the Council fell on Mr. Edward Cock, Surgeon to Guy's Hospital, who was elected a member of the Council in 1856. Mr. Hawkins is still connected with the College as its able representative at the General Council of Medical Education and Registration.

NAVAL MEDICAL PRIZES.—The medals biennially awarded to Naval Medical Officers for the best kept journals, a notice of which appeared in the *Medical Times and Gazette* of December 1, 1866, have just been forwarded by the Council of the Royal College of Surgeons to the Director-General of the Medical Department of the Royal Navy, for distribution to the officers named. The medals, which are of gold and of the value of ten guineas each, are very handsome, having on the obverse an admirable likeness of the donor, with the inscription "Gilbert Blane, Baronettus Archiatrus, æt. LXXXI.;" on the reverse a spirited representation of Britannia, looking mournfully on a wounded sailor who has fallen into the arms of a comrade, and on the legend are engraved the names of the fortunate recipient and the ship to which he is attached.

Medical Charities.—Sir John Pollard Willoughby, Bart, of Westbourne-terrace, lately deceased, has bequeathed £100 each to the Cancer and St. Mary's Hospital, Paddington, and to the Grant Medical College, Bombay, 2000 rupees, besides sums to other institutions not Medical.

The Water Theory of Cholera.—The *Pall-Mall Gazette* suggests as a cause of the prevalence of cholera amongst persons who do not knowingly drink much water that beer and milk are largely adulterated with unboiled water.

St. Mary's Hospital.—At the last meeting of the Governors of this Institution, a deputation from the various lodges of Foresters were in attendance, and presented a cheque for £327 19s. 9½d. to the Chairman, and in doing so reminded that gentleman that the Foresters of the district in which St. Mary's Hospital is situated had altogether contributed £1500 to the charity, and in conclusion expressed a hope that they might next year be able to hand in another large Christmas-box.

The London Hospital.—On January 2 a special general court of governors of the London Hospital was held for the purpose of electing an Assistant-Physician in the room of Dr. Ramskill, who has been appointed Physician. There were four candidates for the appointment—namely, Dr. Hermann Beigel, Dr. Samuel Fenwick, Dr. Abbott Smith, and Dr. Henry G. Sutton. A fifth candidate, Dr. Christian Baumler, who was still engaged in the examination which precedes membership in the Royal College of Physicians, was not qualified in accordance with the requirements of the by-laws. It was announced that Dr. Smith, Dr. Beigel, and Dr. Fenwick had retired from the contest, and Dr. Henry G. Sutton was declared duly elected. The Hospital has sustained a severe loss in the death of Mr. William Cotton, who was connected with it for upwards of sixty-five years, and had held the office of treasurer and chairman of the House Committee.

Western Medical and Surgical Society.—At a late meeting of this Society, Dr. Marcet, Vice-President, in the chair, Dr. Blandford narrated a highly interesting case of rupture of the heart. The subject, an old man of 71, had long been confined in an Asylum. On May 13 he complained of pain at his chest, and there was considerable disturbance of the heart's action. On the 14th he was rather better, but the pulse was very irregular. On the 15th much better in the morning; pulse so irregular as to be uncountable. Seen at 6 o'clock in the evening, he complained of nothing particular, but was found dead soon after. On examination, a small orifice was discovered opening into the right ventricle, near the apex; no other apparent mark of disease. Dr. Godwin then related a case of a boy, aged 5, who had the greater part of his prepuce removed for phymosis. Eight or ten days after he complained of general uneasiness, with pain in abdomen on pressure. Five days after the heart was evidently affected, both internally and externally. He died next morning. By a post-mortem examination it was found that there were well-marked signs of inflammation in the interior of the heart, especially on the right side, as well as in the pericardium and the lungs at their bases. The liver was also enlarged and softened. Was the cause pyæmia?

Royal Institution of Great Britain.—Amongst the probable arrangements for the Friday evening meetings before Easter, to which members and their friends only are admitted, the following are announced:—Friday, Jan. 18: Professor Tyndall. F.R.S., M.R.I., "On Sounding and Sensitive Flames." Jan. 25: Professor Max Müller, "On the Language and Antiquities of Cornwall." Feb. 1: Professor Odling, F.R.S., "On Mr. Graham's Recent Discoveries on the Diffusion of Gases." Feb. 8: Rev. W. Farrar, M.A., "On Public School Education." Feb. 15: C. F. Varley, Esq., M.R.I., "On the Atlantic Telegraph." Feb. 22: M. D. Conway, Esq, "On New England." March 1: Captain V. D. Majendie, R.A., "On Breech-loading small Arms." March 8: Rev. W. Greenwell, M.A., "On the Yorkshire Wold Tumuli." March 15: E. B. Tylor, Esq., "On Traces of the Early Mental Condition of Man." March 22: Dr. James Bell Pettigrew, "On the various Modes of Flight in relation to Aeronautics." March 29: Professor Frankland, F.R.S. April 5: William Pengelly, Esq., F.R.S., "On the Insulation of St. Michael's Mount, Cornwall." April 12: Balfour Stewart, Esq., F.R.S., "On the Sun as a variable Star." Among the Friday evenings after Easter there will probably be discourses by Professor Blackie, Professor A. Bain, Sir James Lacaita, and Alexander Herschel, Esq.

The Quekett Microscopical Society held a conversazione at University College on Friday, January 4.

Nitrous Oxide as an Anæsthetic.—At the meeting of the French Academy of Sciences, on December 24, M. Cloquet, in the name of M. Préterre, communicated the results obtained by him in the employment of nitrous oxide (protoxide of nitrogen, or laughing-gas) as an anæsthetic agent. One or two minutes, it was said, sufficed to produce a sleep which permitted the performance of a short operation, such as the extraction of a tooth. The awaking was not followed by the nausea and depression incident to the use of chloroform or ether. On this M. Chevreul remarks that MM. Proust and Vauquelin had suffered dyspnœa in consequence of inhaling the gas, and M. Dumas expressed his opinion that the innocuity of nitrous oxide greatly depended on its purity, since it is often contaminated by the presence of the dangerous binoxide of nitrogen. Moreover, liquids such as chloroform and ether can be prepared in a proper condition, and on a large scale, much more readily than nitrous oxide.—*Comptes Rendus*, tome lxiii. p. 1135.

The Cattle Plague Returns.—Statistical Office of the Veterinary Department, Privy Council Office, December 20, 1866.—This return shows a further decline in the prevalence of cattle plague in Great Britain. During the week ending December 15, six attacks are reported to have occurred, being a decrease of eight on the previous week. One fresh outbreak of the disease took place, the number in the week preceding being two. Eleven healthy cattle were slaughtered during the week from having been in contact with infected animals. The attacks reported are for the following Petty Sessional Division—viz., (Yorkshire, East Riding) South Holderness, three cows and three calves. The number of animals attacked since the commencement is 253,791, and 52,496 healthy cattle have been slaughtered to prevent the spread of the disease.——Statistical Office of the Veterinary Department, Privy Council Office, December 27, 1866.—During the week ending December 22, six attacks of cattle plague are reported to have occurred in Great Britain, being the same number as in the previous week. Three fresh outbreaks of the disease took place, the number in the week preceding being one. Thirty-two healthy cattle were slaughtered from having been in contact with infected animals. The attacks reported are for the following four Petty Sessional Divisions, viz.:—(Suffolk) Stowmarket, one bullock; (Staffordshire) Pirehill, one bullock; (Lancashire) Warrington, one cow; and (Yorkshire, East Riding) South Holderness, one steer, one cow, and one calf. The number of animals attacked since the commencement is 253,797, and 52,528 healthy cattle have been slaughtered to prevent the spread of the disease.

Poisoning by Mistletoe Berries.—A child a year and three months old has died at the East-end from being poisoned by mistletoe berries. The baby, which had been left in the care of a sister six years old, was found nearly comatose, and after some time the sister confessed that she had given it a quantity of berries "that looked like white currants," because she found them too bitter to eat them herself. A Doctor was sent for, and on an emetic being administered, the child vomited a great quantity of mistletoe berries, but it died shortly after.

The Forbes Mackenzie Act.—The druggists of Glasgow are charged with supplying the wants of the thirsty souls who are refused admission on the Sunday at the public-houses. Their attempts to reconcile the national respect for Sunday dues with the national love for mountain dews is ingenious, if not so moral as might be expected from a respectable trade in so pious a nation. The Glasgow paper states that "whisky, scented with camphor and tinted with burnt sugar, has long been a popular dose; and lately, we are told, 'a liquid known as "finish," a compound of methylated spirits and French-polish extensively used by furniture polishers, has, from its superior cheapness and strength, come into vogue, and its effects upon its victims are so dangerously maddening that the police have taken the matter in hand with the view of suppressing the traffic.' It has also been observed that there is a large and regular demand for 'cholera mixture,' in which spirits form a strong element, on Sundays." It is only fair, however, to add that the use of compounds, the basis of which is methylated spirit, is, we believe, very common in our own "black country."

FERGUSON, THE GLASGOW MILLIONNAIRE.—He and his half-brother, Dr. Ferguson, were not on the best terms for some time. Ferguson sent for him a year before his death, and said he wished to let bygones be bygones, and handed him a few American bonds as a present. When the doctor went home he found them to be worth £30,000. In short, with all his faults, he had some very good points about him. —*Glasgow Herald.*

MEDICINE IN JAMAICA.—The *Star* is informed that actions for damages have been instituted by Dr. Robert G. Bruce, of Vere, Jamaica, against Mr. Eyre and General Nelson, for illegal apprehension and cruel treatment during the Jamaica disturbances:—Dr. Bruce, a Scotch Physician, upwards of 70 years of age, resided nearly one hundred miles from the scene of the disturbances and from the martial law district, but was carried to Morant Bay, and fortunately escaped execution by the termination of martial law.

ANHYDROUS LEATHER.—We may call attention to a notice in another column of a species of sole leather rendered impervious to wet by a process discovered and patented by a Physician, and likely to be very widely useful in such weather as this.

ARTIFICIAL LIMBS IN THE UNITED STATES' ARMY.—Up to May 11, 1866, the Medical department of the United States' army has furnished to disabled soldiers the following artificial limbs:—Arms, 2134; legs, 3784; hands, 144; feet, 9; other apparatus, 104; total cost, $357,728.

HASCHISCH CANDY.—From a notice in a recent number of the *Boston Medical and Surgical Journal*, it seems that *cannabis indica* is used to a considerable extent for the purpose of producing pleasurable intoxication, and that recently a sweetmeat has been largely manufactured and advertised in the newspapers under the name of haschisch candy. Instances of alarming symptoms of poisoning from an overdose of this substance have been several times met with.

THE CAUSE OF EXPLOSIONS IN LAMPS.—In an article on the subject in the *Pharmaceutical Journal* for January, Dr. Attfield, Director of the Laboratory of the Pharmaceutical Society, states that nearly all the American oil now burnt in paraffin lamps gives off inflammable vapour at 80° to 90°, and that this vapour forms with the air in the interior of the lamp an explosive mixture, which may become ignited on turning down the wick or blowing down the chimney. A small aperture provided in all lamps for the necessary admission of air to counteract external atmospheric pressure on the wick, forms the touch-hole whence fire is conveyed down from the flame to the explosive mixture within; and were it not that while a lamp is burning there is always a strong current of air in the opposite direction, lamp explosions would be the rule rather than the exception. As it is, there is good reason to believe that explosions frequently occur, but do not become public because unattended by fire or loss of life. It appears that the bulk of oil in the reservoir of a lamp seldom becomes heated high enough to give off inflammable vapour, but that every drop which supplies the flame passes through the heated metal channel that supports the wick, the gateway of which, the part of the brasswork facing the interior of the lamp, is always at a temperature of from 100° to 110°. Dr. Attfield obtains explosions at will with oils emitting inflammable vapour below 100°; and states that oil which only gives the vapour above that temperature is practically safe, and might be supplied by the refiner as easily as unsafe oil. At present it is the custom of the trade to supply oil which cannot be ignited below 100°; this is insufficient, 100° should be the temperature below which the oil should give off no inflammable vapour.

WE always knew that the site of "Moorfields" was once a "moor;" but we were scarcely prepared to hear the announcement of a contemporary that Colonel Lane Fox, of the Grenadier Guards, has found in or near Finsbury-circus the remains of an extensive lake habitation.—*Guardian.*

THE DANGER OF USING CHEMICAL POWDERS IN COOKING.—A very narrow escape from poisoning a whole family occurred at Wilmington, on Saturday. As Mrs. J. Davis was making a hard pudding for dinner, she went to a shelf to get a pinch of baking-powder, as she thought, to mix with it, but in mixing, she fancied it did not feel just like baking-powder, and in taking up the packet and looking at it, she saw poison labelled on the packet, and which was found to contain oxalic acid, which had been left there unknown to her, for cleaning boot tops; she was much frightened, and at once threw it all away.—*Brighton Examiner.*

COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN DECEMBER, 1866.—The following are the returns of the Metropolitan Association of Medical Officers of Health:

	Total Solid Matter per Gallon.	Loss by Ignition.(a)	Oxidisable Organic Matter.(b)	Hardness.	
				Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction	20·17	1·00	0·82	14·5	6·0
West Middlesex	21·00	0·90	0·64	15·0	8·0
Southwark and Vauxhall.	21·08	1·98	1·82	14·5	6·0
Chelsea	19·94	1·25	0·82	14·0	6·0
Lambeth	19·83	1·49	1·34	13·5	5·5
Other Companies.					
Kent	27·38	1·10	0·00	17·0	8·5
New River	21·58	0·90	0·80	14·5	5·0
East London	23·49	1·50	1·16	15·0	5·0

(a) The loss by ignition represents a variety of volatile matters as well as organic matter, as ammoniacal salts, moisture, and the volatile constituents of nitrates and nitrites.

(b) The oxidisable organic matter is determined by a standard solution of permanganate of potash, the available oxygen of which is to the organic matter as 1 is to 8; and the results are controlled by the examination of the colour of the water when seen through a glass tube two feet in length and two inches in diameter.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Colchester.—Our respected correspondent's letter is forwarded to the writer whom he criticises.

We are glad to see the spirited way in which the *Western Morning News* exposes the exhibition of tyrannical bigotry by two members of the Plymouth Board of Guardians.

Reading.—There is no *law* to compel the sending for any particular witness. The twelve good men are to return a true verdict of the cause of death; and their enlightenment may enable them to dispense with so trifling a thing as Medical evidence. They may be "satisfied" without it. But as for "ordinary custom," there can be no doubt. If an inquisition is worth holding at all, it is worth doing well; and this would imply the necessity, in a case of suicide, of hearing the evidence of a Surgeon who had attended the deceased, who knew his state of mind, and who was present almost at the death. We fear that it is only to elucidate the cause of death that a witness is summoned, and not as a compliment for attendance during the patient's lifetime, at however great inconvenience.

We are requested by a Medical correspondent to notice the leather prepared by the "Anhydrous or Waterproof Leather Company," whose head-quarters are at Chapel-street, Southsea, and London office, Pinner's-court, 54½, Old Broad-street, E.C. It is thus described:—

"Anhydrous leather is ordinary leather prepared by a process in which the cellular portion is filled up, rendering it peculiarly tough and flexible, and capable of resisting great friction; it is applicable to all purposes for which leather is used; impervious to moisture, not affected by any climate, and hence is more durable and economical than ordinary leather of the best tannages, and, having been thoroughly tested and highly approved by all who have worn it, can be confidently recommended to all classes of the community."

A CAUTION—AN IMPUDENT TRANSATLANTIC "M.D." ADVENTURER.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—A most iniquitous *ruse* has been practised on us unsophisticated and unsuspecting provincials—yes, we Ashfordians have been duped by an adventurer styling himself the celebrated "American Physiologist, Dr. Beaumont," of "Alexis St. Martin" renown. The pretender delivered a lecture here last week, "On the Philosophy of Digestion, with an account of his experiments as performed by him on the perforated stomach of his celebrated patient, Alexis St. Martin." The lecturer advertised himself as the far-famed "American Physiologist," and unless exposed he will doubtless repeat his nefarious imposition in other towns. Hence this caution. If reference be made to Dr. Combe's work, entitled the "Physiology of Digestion," the name of *the* Dr. Beaumont and the case of St. Martin will be found; and it appears from a paragraph at page 88, second edition, that the accident happened to the "celebrated patient" in 1822, at which time the pretended Doctor was nine years of age, he having been born, as stated by himself, in 1813, in Canada; whereas *the* Doctor (if living) must be verging on threescore years and ten. I may add, that the adventurer, when brought to book, reluctantly admitted that he was not the man he represented himself to be, but—*credat Judæus!*—the son of the celebrated American, on whose name and fame he had been, and perhaps still is, trading. Not a very filial act, if true. When here he lived at an hotel, and, to use an Americanism, "skedaddled," without paying for his week's board and lodging. He came here from Brighton, where he delivered a lecture on "temperance." He also lectures on "Fenianism." He is about five feet nine inches in height; his age 53, as he says, though he looks younger; stout, good-looking, very little hair; no whiskers, but he wears a beard and moustache, both grey. He is a man of considerable ability, and he has, doubtless, been brought up to, and possesses a thorough knowledge of, the Medical Profession, but he is not *the* Dr. Beaumont. I am, &c.

Ashford, December 29. F. R.

the iridectomy, and that the iris is to be excised after the removal of the lens. The downward iridectomy is not only unsightly, but it causes considerable dazzling and confusion of vision on account of the circles of diffusion on the retina, more especially when cataract glasses are used, and this proves of great inconvenience to the patient, particularly in walking, crossing a street, etc. The excision of the iris after the removal of the lens is not only difficult, but even attended by some risk of losing vitreous humour in attempting to seize and draw out the iris, more especially if the eye has to be fixed with a pair of forceps. Moreover, there is no reason why, if the iridectomy is to be made at all, it should not be done before the extraction of the lens, which is much easier and attended by far less risk.

I have mentioned that Professor Jacobson places the patient thoroughly under the influence of chloroform. Most operators (amongst whom I must include myself) have hitherto been afraid of giving chloroform in flap extraction, on account of the danger of vomiting or retching during or after the operation. The wound is so large (embracing nearly half the cornea) that a fit of vomiting or severe retching may cause a great loss of vitreous humour, and may even force out the retina and choroid. Professor Jacobson states, however, that there is no danger of vomiting if the patient be thoroughly narcotised, and Mr. Windsor, of Manchester, has lately published(b) a series of twenty cases of flap extraction successfully performed under chloroform. He says:—"The result has been, I think, sufficiently satisfactory; in no case did the chloroform appear to have any injurious influence. Seventeen operations were unattended by any accident; in three a little vitreous was lost. Vomiting occurred within a few hours in four cases, but appeared to have no pernicious effect." If chloroform is given in eye operations, the patient should be placed thoroughly under its influence; otherwise it is better to abstain altogether from its use. These operations, more especially those upon the iris and for cataract, are of so delicate a nature that a sudden start of the patient's head, or a fit of vomiting or retching, may not only endanger the result of the operation, but even the safety of the eye. When the patient is so deeply narcotised, the sudden inhalation of a strong dose of chloroform may prove very dangerous; and it is therefere of great importance to know exactly what percentage of chloroform the patient is breathing. For this reason I greatly prefer Clover's apparatus for administering chloroform. It is not only the safest method, but by no other have I uniformly seen such perfect tranquillity and unconsciousness produced without there being any cause for fear. There is little or no struggling or straining; the patient breathes calmly and quietly; and when he is thoroughly under its influence the most difficult and delicate ophthalmic operations may be performed without fear or risk. In order that there may be no vomiting or retching, strict orders should be given that the patient does not take any food or drink for three or four hours prior to the operation.

(To be continued.)

Glasgow Lying-in Hospital.—At a meeting of the directors of this Hospital held on the 3rd inst., the following Medical appointments were made:—*Consulting Physician:* Dr. Andrew Anderson. *Consulting Surgeon:* Dr. George Buchanan. *Physicians-Accoucheur:* Dr. J. G. Milson and Dr. R. D. Tannahill. *Assistant-Physicians and Dispensary Physicians:* Dr. Donald Dewar and Dr. George Yeaman.

The following curious advertisement has appeared regularly for some time past in the *Daily News*:—"*Fat Oxen —Starving People.*—The Fat Oxen are gone from their Glass Palace, and are eaten by the rich; the Starving People remain in their overcrowded fever dens, and are being eaten by disease. *Fat Oxen, Starving People.* It is a painful comment on the condition of parts of London and other large Towns, in the year of Grace 1866-7, and is a matter of national reproach. We earnestly hope that the Government will do something more anent Dwellings for the Poor than the paltry ineffective work of last Session. The Cattle Plague is stayed: the Man Plague increases in our midst. 'Typhus Fever began to be epidemic in London in 1861, and has since prevailed with incessant virulence.' — *See last Report of London Fever Hospital.*"

(b) *Ophthalmic Review*, No. 8.

ORIGINAL COMMUNICATIONS.

THE ETHER-SPRAY PROCESS AS AN AID TO DIAGNOSIS.

By EDWIN HAWARD, M.D.,
Physician to the Westminster General Dispensary.

The therapeutical value of the greatest discovery in Medicine of the present day—viz., the ether spray—needs from me, I am sure, no further corroboration. The entire Profession has long ere this fully admitted the fact, but a case has lately come under my observation which, I think, merits the peculiar attention of Practitioners, inasmuch as it enhances the value of the ether spray as a means of diagnosis. This latter fact not having hitherto been noticed by any writer or Practitioner must be my apology for troubling you with the following communication.

A short time since a married lady, aged 40, came to me for advice for an obscure affection of the right hand and forearm, which, she stated, had lasted several weeks, and for which she had sought relief without obtaining much benefit. The symptoms had been considered to be constitutional, and were treated accordingly. The symptoms presented were those of a neuralgic affection of the ulnar nerve, accompanied by a tingling of the hand and forearm, with contraction of the fingers supplied by that nerve, and a tenderness more or less over the region. On following up more closely the course of the ulnar nerve above the elbow joint, and where it rests on the inner head of the triceps muscle, and before it reaches the groove between the internal condyle of the humerus and the olecranon, a peculiar indefinite swelling was at once perceptible, which when pressed produced pain, accompanied by a numbness of the hand and great tingling of the fingers. Further examination of the case convinced me that the affection was purely local.

I subsequently ascertained that eleven years since the patient had experienced a severe attack of rheumatism, which affected more particularly the same elbow. I therefore inferred that the symptoms were due to direct local pressure upon the nerve, and were a sequela of the rheumatic disease.

The diagnosis of this case being somewhat obscure, and my opinion being opposed to that of her late Medical adviser, I suggested that another consultation should be held, when my friend, Dr. Richardson, kindly gave me his view of the case. He fully coincided with me in regard to the nervous origin of the malady, and suggested the use of the ether spray for the purpose of alleviating the paroxysms of pain, which were continually recurring.

The effect of the spray was instantaneous relief of pain, whilst the contraction of the fingers completely passed away. The patient, who had not slept for many nights in succession, now obtained refreshing sleep, and the following day she came to me, a distance of three miles, looking quite another person. Thus far as to the curative powers of the remedy in alleviating the local pain, but my object is also to show its great value as a means of diagnosis in detecting the nature of this somewhat obscure affection. I should state that as the limb was loaded with fat, as the swelling was very badly definable, as there was great hardness of structure, and as all attempts at manipulation produced great pain, it was difficult to say what was the exact nature of the mischief below. There might be a cyst containing fluid, and rendering the operation of tapping a good practice; there might be a fatty tumour, elongated and flat; or there might be simply exudative matter which had undergone solidification.

Dr. Richardson took the centre of the tumour as the spot where to direct the ether spray, and, after about twenty strokes, rendered insensible a space the size of a crown-piece; he then used the spray like a brush, and made the parts equally insensible in the long axis of the swelling; as the skin became hard, the subjacent tissues shrank quickly to their normal proportions, and, indeed, what had been previously a well-marked enlargement, and noticeable by every one, and conveying almost the idea of a distortion, had entirely disappeared. The insensibility once set up was sustained until the deepest structures were involved in it, including the front of the nerve; then, by placing our warm hands over the skin, we were not only able to examine, with firm pressure, without giving the slightest pain, but, as the skin softened, the whole of the structure came under our fingers, softened, and, if I

may use such a common expression, like kneaded dough; we could thus take up the tissues, inch by inch, between the fingers, and were able to say that there was no cyst and no tumour. The treatment since this examination has consisted in relieving pain by the occasional use of the spray, and in painting freely the surface affected with tincture of iodine and oil. The result, in every sense, is most satisfactory; the deep swelling is almost entirely taken away, the numbness and tingling of the hand and fingers have subsided, and, in a word, the normal conditions are nearly restored.

58, Harley-street, W.

ON THE

DISTINCTIVE CHARACTERS OF SOME KINDS OF NON-LIMITED INFLAMMATIONS (DIFFUSE) AND THE LEADING PRINCIPLES OF TREATMENT DEDUCED THEREFROM.

By J. H. JAMES, F.R.C.S., etc.

(Continued from Vol. II. 1866, page 636.)

THE diseases in the two preceding groups exhibit some of the most important characters of external inflammations resulting from constitutional disorder; those from mechanical or chemical injuries or causes are excluded, it not being my purpose to consider them (although they will more or less take the dispositions of the person sustaining the injury). Again, there are other inflammations, such as those of the eye, testis, joints, etc., which are greatly modified in their course by the physical construction of those organs, and are here also omitted. There remain some others of the non-limited species which require notice, the tendency of which is exclusively to ulcerate or mortify, differing in these respects from those which have been described. Some terminate (speaking of the former groups) in suppuration; others in suppuration and slough, as carbuncular abscesses and carbuncle; the diffuse inflammations in serous effusions and suppuration, sometimes accompanied with sloughing, sometimes not; and now we find that there are others whose tendency is equally strong to ulcerate and slough, as phagedæna; and others, again, as noma, to mortification. And there are many whose tendency is to neither of these, but absolutely and purely to resolve, by metastasis or otherwise—as mumps, gout, rheumatic inflammations, and some varieties of scrofula.

And first let me speak of Hospital phagedæna. This seems to be generated like typhus and other malignant diseases which decimate armies, and not unfrequently presents itself in civil Hospitals. The causes which generate it are too well known to require notice, but there are some singular circumstances which apply to this form of disease in common with the severer forms of erysipelas. Patients may be inoculated by bandages or other media, but infection is often communicated through the air of the ward. As far as I have been able to judge, however, in both diseases the occurrence of some breach of surface seems to give the initiative, and other patients who have no such breach seem not to be influenced by the infectious principle in the air. Certain it is, however, when in military service it falls upon the wounded soldiers, it commits fearful ravages. It is unnecessary to go into details, for those who have seen it can never forget the horrible aspect of these sores, spreading without limit, and eating away, as the name implies, the margins and also the increasing base, as from day to day it presents itself. The destruction seems to arise from the secretions from the sore itself, almost more destructive even than the mineral acids. Assuming that the secretion is the agent, the principles of local treatment are sufficiently simple, but it is to be wished that it were more frequently successful. One is to counteract the poison, the other to destroy the surface which secretes it. The first is to be sought by the very frequent application of such counteragents as charcoal, yeast, the chlorides or permanganates, which may neutralise the poison as soon as it is secreted, to which may be added acid lotions, the juice of carrots, etc. The second is by destroying the surface itself, either by the actual cautery, as practised by our neighbours, or the concentrated mineral acids, as introduced by the late Mr. Wellbank, to the success of which treatment I can heartily bear witness. Sometimes even one application suffices, and there seems great reason to believe that the diseased action can only extend to a very short distance from the edges or bottom of the sore itself, for even after this the slough is frequently thrown off, and healthy granulations present themselves.

The constitutional treatment is well understood, but solid opium in large quantities (not merely to subdue pain) I should particularly mention, and any one who has watched the effect of solid opium even in small doses, given three or four times a day, in some other ulcers, will ever acknowledge its benefits. I do not mention bleeding as a remedy, but I would refer to the works of an eminently practical author,(a) Dr. Hennen, for proof that bleeding in some cases was eminently useful, and I may mention this as also bearing upon change of type, for this, which would have been fatal during the oppression of hot weather, according to his account, was apparently very beneficial when cold set in. And I can myself state that accidental hæmorrhages occurring from such sores have been followed in three or four instances with very decided improvement. It will be understood that in this, as well as in all other varieties of inflammations which I mention, I make no attempt to describe at large the features or treatment of any one, but to call the attention to certain prominent circumstances which belong to them and deserve especial attention.

I am not aware how far animal chemistry has been applied to the analysis of poisons thus generated in the body, as in puerperal peritonitis or in phagedæna. In the latter we know little more than that it is eminently corrosive, being the product of an ulcer—in the former, the product of a serous membrane, and not corrosive.

Syphilitic Phagedæna.—The severe forms, when occurring in the perineum and nates, greatly resemble the Hospital species, but it is worthy of remark that it seldom, if ever, is communicated through the air to other patients in the same ward having sores syphilitic or otherwise—at least such has been my own experience. This observation is confirmed by my esteemed friend Mr. Lydall, who was for more than a year and a half Resident Medical Officer at the Lock Hospital. We cannot but see in this a most beneficent and just provision.

Another species of phagedæna is cancrum oris, on which I have nothing to offer which has not been hitherto known, but as it originates in the constitution that must be an especial object of treatment, and as it often proceeds to attack the jaws, this cannot be well too active, the local remedies being the same as in the last species.

Noma.—It might almost be doubted whether this should be classed with inflammations, but no inconvenience can arise from doing so, and it is almost the only instance, as far as I know, in which mortification is the essential primary condition. We have it in several of the preceding diseases, blending with suppuration or ulceration; here it is the essential condition, and probably originating in the state of the blood itself. In this it has considerable analogy with scurvy. Other mortifications arise from mechanical violence, chemical injury, extreme temperature, venomous bites, and other morbid poisons, or as the results of excessive inflammations, diseased conditions of the vessels, emboli, or impairment of nervous power; but with the exception of the cases produced by ergot, I know of none besides this which arises from the blood, excepting as a consequence of severe typhus or the secondary fever of cholera. It occurs chiefly in children after measles, scarlatina, or other cachectic conditions, and, strangely enough, imparts a high organisation—*i.e.*, in the cheek, or in the pudenda of females, as described by Mr. Kinder Wood.(b) I do not propose to go into any description of it, but may merely state that it depends upon a contaminated blood, as produced by the febrile diseases just stated. I may briefly mention one application which I have seen of much use: it is equal parts of a strong decoction of Peruvian bark and *good port wine*. I say emphatically *good*, because a custom is becoming too prevalent of considering simple alcohol as offering all the qualities required from such an agent, whereas its divers combinations and conditions obtained from age, etc., in the various formulæ we use it in will make all the difference as to its effects. If the surface of the skin or of an ulcer cannot appreciate different qualities so intensely as the stomach, still their sensibilities are far more alive to any difference in the application made to them than could be readily supposed. The lotion I have just mentioned I first used in the case of a man whose thigh I amputated for senile gangrene, and whose stump began to slough. It was frequently repeated, and checked the disease, and he lived some years. I have since frequently employed it in cases of sphacelus.

(a) Hennen's "Military Surgery," Third Edition, page 226.
(b) *Med. Chir. Trans.*, vol. vii.

Here I would again request the consideration of Medical men to the important point which I have adverted to—viz., that each external inflammation appears almost invariably to have a distinct termination of its own; and this ought always to be kept in view with reference to their treatment. It may well be asked what is to be said of the *mille salutis modi* which abound in our Pharmacopœias? The answer is, not that I think lightly of them, for many are most valuable, but it would not be consistent with the plan of such sketches as these to enter into any detailed consideration of them, if, indeed, it were in my power to do so.

In another communication I shall conclude what I have to say on external inflammations by a few remarks on the resolving.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

UNIVERSITY COLLEGE HOSPITAL.

Changes in the Staff—Locomotor Ataxy—Drug Treatment of Diseases—Anasarca—Treatment of Typhoid Fever by the Sesquichloride of Iron—Hemiplegia with Lead-poisoning—Croup and Measles—Bromide of Potassium in Epileptiform Seizures—Case of Lead-poisoning with Spasm of the Face and Delirium Tremens—Mr. Marshall's Plan of Treating Strictures of the Urethra—Bromine for Sloughing Ulcers—Necrosis of the Femur—Treatment of Varicose Veins—Case of Obstruction of the Lymphatics—Opening in the Septum Ventriculorum Cordis—Treatment of Diabetes—Operation for Stricture and Stone (Stone Encysted)—Cases of Lithotrity—Cancer of the Breast with Secondary Cancer—Broadbent's Treatment of Cancer by Injection of Acetic Acid—Notes on Skin Diseases—Cause and Treatment of Prurigo—Treatment of Scabies—Iodine and Tar in Ringworm—Epilation in Favus—Alopecia Areata—Local Treatment of Eczema—Use of Soap in Skin Diseases—Diet in Skin Diseases—Syphilitic Diseases of the Skin.

This Hospital is not very large, but it must not be judged by its size. It has a large school attached, and the clinical teaching is most excellent. There are special Professors of Clinical Medicine and Clinical Surgery, and there are also special departments for ophthalmic and skin diseases. The operating day is Wednesday, and almost always some operation of consequence is to be performed, a notice of which will be found by visitors in the waiting-hall. In the same place will also be found notices of intended post-mortem examinations, with the names of the gentlemen who make these examinations. We mention this, as we have been especially struck with the completeness with which these examinations are made, and the admirable remarks that are given. The chief morbid alterations are pointed out, and, what is just as valuable, the slighter deviations from health are carefully stated.

There have been a good many changes at this Hospital lately. All the Assistant-Physicians are now to be called Physicians. This is a very good change. Recently the Medical staff at St. Mary's, all being appointed together, were called Physicians, although one-half of them performed the duties of Assistant-Physicians. It is a pity that this generous principle was not carried out in the two recent elections. University College has set an excellent example, which we hope to see followed at other Hospitals. By the resignation of Mr. Quain, Mr. Marshall gets an upward step. Mr. Christopher Heath has left the Westminster Hospital, and is now Assistant-Surgeon to, and Teacher of Anatomy at, University College Hospital. Mr. Squarey has taken the place of Dr. Rickards as Resident Medical Officer.

The other day we paid a visit to this Hospital for the purpose of seeing what was going on there, and we propose giving our readers from time to time a general outline of the practice of the staff as exhibited by the cases now or lately in the wards.

Taking the other patients in the order in which we visited them, we shall begin with those under Dr. Russell Reynolds's care. As usual at this season, a pretty large proportion of these cases were of affections of the respiratory organs or of rheumatism, but there were no very interesting illustrations of these forms of disease. One case of Locomotor ataxy (Duchenne's disease) is somewhat curious. The patient is 48 years of age. The symptoms are, as usual, pain in the limbs, especially in the soles, and a staggering or irregular gait; when the eyes are shut the patient cannot stand. Hitherto, the access of this malady has been considered of the worst possible omen, as leading only to death, but in this particular instance the patient has decidedly improved since he came into the Hospital.

There can be little doubt, however, that the word "progressive" is properly applied to this malady, and this particular patient's future will no doubt justify the term. We have recently seen a good many cases of this interesting disease—if we may call it a disease. Three post-mortem examinations on patients thus affected have been made in this country, and in each case the spinal cord has been sent to Lockhart Clarke. This careful observer has found extensive degeneration of the posterior columns in each case. The remedy most in use is nitrate of silver; but we have not ourselves seen much benefit follow its exhibition. Dr. Reynolds has not given his patient any drugs, except temporarily a mixture containing taraxacum for some passing dyspeptic symptoms.

As a general rule, it may be said that at University College they do not believe much in the efficacy of drugs. Most of the Physicians trust rather to the effects of good living, and careful hygienic arrangements for the cure or relief of disease, whether rightly or wrongly we do not pretend to say.

During the cholera epidemic this principle of treatment was well carried out at the Hospital, although towards the end of the epidemic some novel drugs were given. We should like to know if this non-reliance on drugs leads to a small bill at the druggist's. We have observed that many of those Hospital Physicians who declare against drugs order two tablespoonfuls three times a day like their more credulous brethren; and these mixtures are not usually mist. camphoræ or mistura rubra. There is no doubt, however, that those who carefully study the natural course of disease are doing excellent work for therapeutical science. We saw another patient under Dr. Reynolds's care who had been treated without drugs.

A woman, 30 years of age, was brought into the Hospital for anasarca. She was much swollen, she was very anæmic, and altogether much broken down. Her urine was albuminous. By rest and good diet she improved very much, got rid of her dropsy, and in spite of a little relapse when a dose of compound jalap powder was given, and the hot-air bath used, she still is in much better health than when admitted.

We saw, however, under Dr. Reynolds's care, a girl, 11 years of age, who was treated for typhoid fever in a way quite new to us—viz., by the tincture of the sesquichloride of iron in thirty minim doses every six hours. She did well under this treatment. Dr. Reynolds was induced to try this drug from seeing its very beneficial effects in a case of scarlatina recently under his care.

In the male ward under Dr. Reynolds's care, another very curious specimen of disease may be seen. The subject is a young man, a plumber by trade, and he has the blue line of lead-poisoning tolerably distinctly marked along his gums. He is not yet 23, but he has already suffered from three (the first in June, the second in October) distinct attacks of hemiplegia, the left side being invariably affected. From each of the former attacks he has, with the exception of a slight weakness of the side, completely recovered. On the occasion of the last attack—three weeks ago—he was at work, but suddenly became insensible, and when brought into Hospital had, along with insensibility, strongly marked rigidity of the parts affected. He has now almost completely recovered, but the cause of the disorder remains obscure. The heart is sound. Except the paralysis be dependent on, or connected with, the lead poisoning, the origin of the complaint can scarcely be understood. He has been treated with iodide of potassium, but there is no evidence of syphilis.

We also saw a child which had for some short time suffered with the symptoms of true croup, but whilst so affected was attacked with measles. Immediately on the appearance of the eruption the croupy symptoms disappeared, as if by magic, and the child seemed to become almost well.

Another curious case, but of a kind not uncommonly noticed, was also under Dr. Reynolds's care. The patient, a young woman, had for some years been troubled with epileptiform seizures when she applied for relief. Under treatment by bromide of potassium she rapidly improved; but as the original disease disappeared, an acneiform affection of the skin showed itself. The bromide was discontinued, and Fowler's solution of arsenic was given in the usual doses; but as the skin disease

passed away, attacks similar to those she had previously suffered from again came on, and this sort of ringing the changes has been in progress for some time. The girl is a worker in gold lace, and the disease may have some reference o her occupation. What relation there may be, however, cannot clearly be made out. *Apropos* of the bromide in epileptiform seizures, we may add that Dr. Reynolds and his colleagues at the Hospital for Epilepsy and Paralysis prescribe this medicine largely. From what we have ourselves seen, it seems to be most useful in keeping away the fits, but they frequently return when the drug is given up. It is important to give it in large doses, ten to thirty grains. There were several other cases under Dr. Reynolds's care, but they were of less interest.

Dr. Jenner has a rather interesting case just now under his care. The subject, a man, aged 52, was brought into Hospital only partially sensible, and suffering from chronic spasms of the left side of the face. He was evidently suffering from the effects of lead-poisoning, as there was a well-marked blue line along his gums, and he had suffered slightly from colic. He had just lost his wife, had been subjected to a greal deal of worry, and had been drinking rather hard. After being admitted into the Hospital he was attacked by delirium tremens, though of rather a mild type. From both affections he is now, however, recovering. For the lead-poisoning Dr. Jenner prescribed five grain doses of iodide of potassium, following this up in a few days with oxide of zinc and increased quantity of the iodide, and, to procure him sleep while his mind was disturbed, an opiate at night. He has now very much improved, but his right wrist is still dropped and the ball of the right thumb is shrunken. For most of these particulars we are indebted to Mr. Whitwell, Dr. Jenner's resident assistant.

Under the care of Mr. Marshall there are a variety of Surgical cases. To begin, there are some cases of stricture. These Mr. Marshall treats by first of all passing an instrument into the bladder, and thoroughly exploring the urethra. Having succeeded in passing a catheter as large as No. 3, he then introduces an instrument of his own contrivance, with which he divides the stricture, and then he passes a variety of catheters to the size of No. 10. This instrument consists of a tapering sound, having at one part near its bend two projecting edges, giving it, looking at it from above, an appearance somewhat resembling a spear point. These edges are not very sharp, so that they only cut where the resistance is great, dilating every other portion. The bladder should be pretty full when it is introduced. The patient is then left undisturbed for some days, after which Mr. Marshall recommends dilatation with the smallest-sized instrument which can be passed, and continues to dilate from time to time until the urethra has attained its normal dimensions. One case now in the wards shows the success of this plan.

There are some of the usual run of Christmas cases under his care—one of a fracture, almost compound, of the leg, which has not improved. The integuments were so much affected that sloughing was inevitable, and the fracture is now a compound one, the surface of the sore presenting a very ugly appearance. Such cases Mr. Marshall treats by means of McIntyre's splint; but if of a slighter nature he usually makes use of sand bags for a day or two, following these up with starched bandages.

Under the care of the same gentleman is a very bad case of sloughing ulcer of the leg, which, however, is now beginning to assume a more favourable character. The treatment he is adopting in this case is the application of a solution of bromine combined with a generous diet. The bromine is used diluted with an equal quantity of water, and is applied with a camel-hair brush to about a quarter of an inch all round the edge of the ulcer, but not to the adjacent sound skin. The case we have mentioned is the only one that has been thus treated here. The bromine is employed with a view to prevent its spreading. It has now been used for a week. The American Surgeon who suggested it to Mr. Marshall had been in the habit of using it undiluted and over the whole floor of the ulcer. Bromine does not mix readily with water, and the mixture is to be well shaken up before use. Its application is rather painful.

We have to thank Mr. Tempest Anderson for several of these particulars.

In the same ward is a case of some interest. The patient, a woman, some time ago was under the care of Mr. Marshall for necrosis of the femur; when removed, the dead bone was quite infantile in its proportions, insomuch that the conclusion was arrived at that it must have remained within the new layer of bone some six or seven years.

But by far the most interesting case of all is one where there had been obstruction of the lymphatics of the lower extremity—a very rare disease—and which, in this instance, began some years ago. As Mr. Marshall intends publishing the case with his own comments, we shall say nothing more than that the treatment which has been adopted, and followed with the best effects, has been similar to that employed by the same gentleman for the cure of varicose veins. A number of needles were introduced below the integuments all along the inner side of the limb, and constriction applied in the same manner as in cases of harelip; only the needles were very much larger, and were kept much longer in. The patient is now rapidly recovering, but the case is one which many of our readers would be glad to see, and one which Mr. Marshall, we are sure, would be glad to show them.

In treating varicose veins, a case of which is now under his care, Mr. Marshall adopts a similar procedure. The most important points he holds to be introducing the needles well below the vein, and taking care that the clots formed by the arrest of the circulation are not broken up by injudicious handling. These being observed, his practice shows that this scheme may be had recourse to without danger, and with the almost certain prospect of complete success. Drainage tubes are also employed to a large extent by this gentleman, and one case now under his care—viz., one of "housemaid's knee"—shows the benefit of giving free vent to pus whenever it is formed.

We are much indebted to Mr. Langmore and to Mr. Lettis, House-Surgeons, for a portion of these particulars.

Under the care of Dr. Hare there was the other day a very curious case. Unfortunately, we only arrived in time for the post-mortem. A man came in labouring under heart disease of a very bad type—both mitral and aortic valves were diseased, and the aorta itself was dilated. He died before much could be learnt of his history, and when the body was inspected there was found an orifice of considerable size in the septum ventriculorum, at the base of the muscular part of this septum. From the well-marked signs of inflammation which existed on both sides of the heart, particularly on the right, Dr. Hare concludes that this opening had been the result of ulceration, but it is to be regretted that the antecedents of the patient are not better known. We may here take the opportunity of quoting from the recently published second edition of Dr. Peacock's work "Malformations of the Heart." Dr. Peacock writes:—

"It has been contended by some writers, and especially by M. Bouillaud, that the apertures which are found in the septum ventriculorum are not always congenital; and there can be no doubt that perforations of the septum do occasionally, though I believe rarely, take place as the result of disease in after life."

Under the same gentleman there are two cases of diabetes. The plan Dr. Hare adopts with such is to allow the patients, when first admitted, the diet of the Hospital in as great quantities as they desire. After pursuing this plan for a day or two, he changes to the usual restricted diet for diabetic patients, and can thus ascertain for himself the exact difference so produced. The effect is quite amazing. The quantity of urine is diminished, as is the amount of sugar contained in it, and by persevering in this plan of dieting he is able to reduce the specific gravity of the urine to a very low standard. In one case recently under his care it came down to 1007, yet there was a trace of sugar present. Cases have been recorded where sugar was found in urine having a specific gravity of 1015 or 1016, but we believe that this is one of the, if not the very, lowest densities presented by urine containing sugar. Dr. Hare usually combines his dietetic treatment with the exhibition of the tinct. ferri perchloridi and opiates night and morning.

On Monday, the 31st ult., Mr. Erichsen operated on a case of unusual interest. The patient, a highly respectable man, aged about 40, came under his care some twelve months ago suffering from a stricture of the urethra of long standing, and very intractable in character. On this occasion he could not be induced to remain under treatment, but about three weeks ago he again made his appearance with every symptom aggravated. When a passage was effected the metallic instrument was felt to grate against something immediately behind the stricture, which Mr. Erichsen concluded to be a stone. He accordingly resolved to perform perineal section for the simultaneous removal of the stone and the cure of the stricture. The man was put under chloroform, and the operation performed with

great dexterity; but no calculus could be found. On passing a large catheter, however, for the complete dilatation of the stricture, it was felt to grate against some body, and the stone tumbled on the floor. It had been contained in a pouch completely outside the bladder, and lying between the urethra and the pubes. The patient had a tube inserted in the bladder (a point Mr. Erichsen always attends to), and was placed in bed with every prospect of a speedy recovery. The stone thus removed was considerably larger than a pigeon's egg.

Speaking of calculous affections, Mr. Henry Thompson has just dismissed two highly successful cases of lithotrity. One of his patients was a man of 60, who first became aware of something being wrong in 1859. He was subjected to treatment by various Surgeons for some years; but, not improving, he applied for admission to one of our large metropolitan Hospitals, in which he remained for eleven weeks. He underwent the operation of lithotrity three times, and was discharged somewhat better, but far from well. About a year after he returned to the same Hospital; but his bladder suffered so much from irritation that he was discharged after eleven weeks' residence. Again he returned, but again he was forced to leave uncured, and towards the end of October he was received into University College Hospital. Mr. Thompson discovered the stone behind the prostate, crushed it, and the patient left perfectly well a few days ago.

The next is, if possible, a still better illustration of the benefits of judicious lithotrity. The patient, a man, aged 52, began to feel his bladder affected in the spring of 1865, and in August of the same year was admitted into the Royal Infirmary, Edinburgh. A stone was discovered in the patient's bladder, and lithotrity was tried to get rid of it, but failed. He was then cut, and the calculus removed, but not completely, for a few days after, he passed some fragments by the urethra. The wound in the perineum never healed up, and in July last year he consulted Mr. Thompson, who admitted him into University College Hospital in the beginning of October. The stone, although he had been cut so recently, was a very large one; but Mr. Thompson determined on employing the lithotrite. The stone was crushed in sixteen sittings, there being generally one twice a week, and the patient went out two days before Christmas perfectly well.

Some time ago a patient presented herself to Mr. Thompson with cancer of the breast, but owing to the extent it had spread—for ulceration was almost threatening, and the axillary glands were extensively affected—it was thought improper to make any operation. She has, however, since presented herself with the cancer of the breast very much lessened, and with no appearance of ulceration whatever about it; but there are evident marks of recent cancerous deposit about the back part of the orbit, as well as in the neck of the uterus. Altogether, it is one of the most curious cases we have seen for a long time.

Another case of cancer recently came under the care of the same gentleman, on which he resolved to try Dr. Broadbent's very ingenious plan of treatment. Accordingly, two doses of acetic acid (20 minims each) were injected into the tumour close by each other. Violent inflammation was the result, and an abscess formed, which was opened. A few days after it was deemed advisable to remove the breast. This was done, and the wound is now (a month after the operation) almost completely healed. The case was, however, not the most favourable for the injection, as the disease had lasted some six or seven years. We shall report next week cases of cancer treated in this way by Dr. Broadbent and Dr. Randall at the Marylebone Infirmary, and by Mr. C. H. Moore at the Middlesex Hospital. Mr. Bryant has tried Dr. Broadbent's method largely at Guy's, and we hope to be able to give the results of his trials.

About seven years ago a separate department was opened in this Hospital for the treatment of skin diseases, in order to give the students an opportunity of seeing at once a number of cases of these diseases when they were wishing particularly to study them, and to afford materials for clinical instruction. Dr. Jenner was the Physician to the department for two or three years, and on his resignation was succeeded by Dr. Hillier, who now fills the post. Out-patients are seen on Wednesday and Saturday mornings at 9 o'clock. Saturday morning is especially devoted to clinical demonstration, and on alternate Saturdays a clinical lecture is given, illustrated by actual cases, wax models, and drawings. Microscopical demonstrations are given during the session of the vegetable and animal parasites which infest the skin. Baths of different kinds are provided for both in- and out-patients. At present there are only two beds exclusively devoted to skin diseases. There were at first six beds, and it is proposed soon again to raise the number now that the funds of the Hospital have improved.

With the exception of Guy's and St. Thomas's Hospitals, there is, we believe, no other metropolitan Medical School in which cutaneous Medicine is made a separate branch of clinical instruction. It would tend much more to the advancement of the study of these diseases if each Medical School would establish such a department, than that a number of independent special Dispensaries and Hospitals should be opened from time to time. The large Hospitals would best discountenance the special Hospitals by establishing special departments for diseases of the eye, ear, and skin, and this need not lead to making many special Practitioners, as—and this is the case at Guy's and St. Thomas's—the skin department might be held by one or other of the staff. Dr. Hillier is Physician to the Hospital for Sick Children as well as special teacher of skin diseases at University College. The following are notes from his practice.

Notes on Skin Diseases.

The treatment adopted by Dr. Hillier is simple. He combines local and general measures in most diseases, but in some cases trusts almost exclusively to local applications—as, for instance, in scabies, in prurigo of old people dependent on pediculi, and in the impetigo of the occiput, which is commonly due to pediculi. In the two latter diseases, tonics are also given internally. Many very obstinate cases of prurigo of months' duration have been cured in a week by the use of an ointment consisting of half an ounce of olive oil, half an ounce of lard, and two drachms of the powder of Stavesacre; at the same time more frequent change of linen, and care in the washing of it in boiling water, are enjoined. Four-fifths of the cases of prurigo senilis are found to depend on the pediculus corporis, and should be called phthiriasis. It nearly always attacks the shoulders and neck first, and subsequently spreads to the trunk and lower extremities. It is not exclusively confined to old people. Mr. Balmanno Squire has recently insisted on the fact that prurigo is commonly due to the pediculus corporis. It will be found that the older writers were familiar with the fact. Rayer figures the pediculus by the side of his plate of prurigo. It is a great gain to know that so distressing a malady has a local cause, as this knowledge saves the patient from drugs and leads to a more speedy cure. Scabies is believed to be due solely and exclusively to the presence of the acarus scabiei, one or more of which in nine cases of scabies out of ten which have not been submitted to treatment can be discovered at the end of the cuniculus. It is easily extracted on the end of a bent pin. The treatment is directed to the destruction of this parasite. Nothing is found so effectual as macerating the skin with soap and water, and the subsequent free inunction of simple sulphur ointment. If the cuticle is very thick and hard, a little carbonate of potash, one part in twelve of the ointment, is added with advantage. Other means of treating scabies have been tried, such as the solution of sulphuret of calcium used in Belgium; Hebra's ointment of sulphur, soft soap, huile de cade, chalk, and lard; benzole; solution of sulphate of zinc; solution of iodide of potassium, and sulphur baths. None of these remedies are equal, Dr. Hillier believes, to the old-fashioned sulphur ointment.

For the treatment of ringworm (tinea tonsurans), a preparation, composed of two drachms of iodine dissolved in an ounce of colourless oil of tar, is used with great success. It was first introduced by Dr. Coster, of Hanwell Central London Schools. This preparation is painted on the affected parts with a firm brush. It forms a cake, which separates at the end of a week or fortnight. It may require to be repeated once or twice, but not often more frequently. It causes little or no pain; is not liable to cause abscesses or destruction of the hair follicles, such as often result from deep blistering. The oil of tar is obtained by distillation from the common tar, and has a specific gravity of ·853. Good diet and tonics or cod-liver oil promote the cure, but they are not essential.

For the cure of favus, epilation is assiduously resorted to, with the use of sulphurous acid lotion, or an ointment containing sulphur and white precipitate.

For the cure of alopecia areata (tinea decalvans), local stimulation with tincture of cantharides or tincture of iodine is mainly used, whilst arsenic is often given internally. This drug is also used in the treatment of psoriasis, chronic eczema, and pemphigus, and less frequently in lichen and lupus. In

acute eczema and psoriasis, antimony is given in doses proportioned to the strength of the patient and the amount of local inflammation, as a preparation for an arsenical course. In chronic eczema, with much thickening of the cutis, strong solutions of potassa fusa are painted on the affected parts. When there is not much thickening and not much crusting, tar is applied locally, either undiluted or with equal parts of glycerine, as recommended by Hebra.

Some dermatologists forbid the use of soap almost entirely in skin diseases. Dr. Hillier rather encourages its use, except in acute eczema, pityriasis, and herpes.

He does not consider that the same diet is adapted for every case of skin disease. This requires to be regulated according to the constitution of the patient. He does not think that all cases of eczema in children are benefited by an extra quantity of meat in their diet, or that nearly all skin diseases are traceable to debility.

One of the most important things in treating a skin disease is to ascertain whether there is any syphilitic character in it. In this case, small doses of the bichloride of mercury are given with or without an excess of iodide of potassium. In tertiary syphilis, the iodide of potassium is given alone. If the patient is very cachectic, it may be preceded by the iodide of iron. For congenital syphilis, grey powder is usually preferred.

There is at University College Hospital also an eye department. Mr. Wharton Jones and Mr. Streatfeild are the Surgeons, and we hope shortly to give our readers notes from the practice of these gentlemen.

Reports of cases illustrating the use of the sphygmograph are in the printer's hands, and will appear next week.

THE LONDON HOSPITAL.

THE INFLUENCE OF COLD ON HOSPITAL PRACTICE.—CHRISTMAS WEEK.

The influence of the cold on the production of strangulated hernias has not been marked at the London Hospital during the few cold days, for there has not been a single case. The week before this there were several cases in quick succession. Neither has the Christmas week been very heavy in "casualties," there having been only 330 cases, the average per week being 312. In the first week in October, without any special assignable cause, there were 411. Christmas Eve was not so "busy" as most Saturday nights. The week since Christmas has been very unproductive, and during the cold there was next to nothing doing. The House-Surgeon complained he had never so little to do.

The number of fractures treated was under the average, though all that occurred were attributed by the sufferers, not always justly, to the slippery state of the streets. The average number per week for 1865 was 36, admitted and treated as out-patients. During the week ending December 19, 1865, there were 22 cases of fracture admitted of all sorts. During this last week, including the cold days, only twelve fractures were admitted, but most of these were of the leg, and two of them were compound. There were about twelve others treated as out-patients. For the facts we have stated, we are chiefly indebted to Mr. Llewellyn and Mr. Thorp, House-Surgeons to the Hospital.

At the quarterly meeting of the directors of the Naval Medical Compassionate Fund, held on the 8th inst., Sir E. Hilditch, Inspector-General, in the chair, the sum of £60 was distributed among the various claimants.

Royal College of Surgeons.—The annual course of Lectures on Comparative Anatomy will be commenced in the theatre of the College on Monday, February 4, by Professor Huxley, F.R.S, who will deliver twenty-four lectures on the Osteology and Dentition of the *Sauropsida*, or Reptiles and Birds, embracing—the distinctive characters of the *Sauropsida;* the distinctive characters of the classes *Reptilia* and *Aves*, and of their chief subdivisions; the osteology and dentition of the *Lacertilia*, *Ophidia*, and *Ichthyosauria;* the osteology and dentition of the *Crocodilia*, *Suchosauria*, *Plesiosauria*, and *Pterosauria;* the osteology of the *Chelonia;* the osteology of the class *Aves;* and the lectures for the present year will be completed by Professor Hancock, who will deliver six lectures on the Anatomy and Surgery of the Foot, in continuation of his course of last year.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0

Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.

Post-office Orders and Drafts on Army or Navy Agents, should be made in favour of Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d. | A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d. | A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, JANUARY 12, 1867.

THE HARVEIAN SOCIETY AND INFANTICIDE.

The Committee of this Society appointed to inquire into the cause and cure of infanticide have laid their report, the substance of which is elsewhere narrated, before the Society at large, and they have pointed out certain measures which they think likely to diminish the number of such crimes. The report shows that illegitimacy has largely increased of late years, and it points out certain of the causes; but it certainly does not show that these did not exist in former days, nor does it at all sufficiently account for this increase. We do not propose to enter into a discussion as to why the proportion of illegitimate births has become greater and greater every year, but rather to discuss some of the propositions made for the suppression of infanticide. Many of these are sufficiently sound and practical to recommend themselves at once to every reasonable mind, as, for instance, the doing away with the difficulties which lie in the way of establishing the proof of live birth in criminal cases, and, as a corollary to this, a diminution of the punishment which is ordained by law for the crime of infanticide by a mother. Other propositions, we must say, have not this character. Thus, the Committee recommend that pregnant women should be admitted into the Workhouse two months before their confinement, and that they be detained for four months after they have been delivered. When will guardians consent to this? True, they recommend that laundries should be started in Workhouses as one means of reducing the expense; but are all women laundresses? is the washhouse the best place for a pregnant or recently delivered woman, and for how many of these six months would women be able to work? They further advise that the putative father be rendered more directly responsible than he is now; but how many instances are there that the putative father is certainly not the real one, although it is not in his power to refute the charge brought against him? Many women go on the principle of fixing the paternity on the individual best able to pay for it, provided they can adduce the slightest proof in their support, or, it may be, for a handsome consideration reverse the process, and instances of such doings are not uncommon. Would not the proposed change tend to foster a state of things so undesirable? But worse than this is the proposal to double the aliment leviable from the putative father. Now, we shall simply, from another of their recommendations, show the inexpediency of this. They elsewhere advise that all dry nurses be registered, and that none others be entitled to receive children for nursing. To this proposition there is one very strong objection—viz., that in country districts where illegitimacy is common, one of the most usual practices is for the mother's parents to receive the infant and to bring it up, which is generally done with the greatest care. But by this change in the law, not being

registered dry-nurses, they would be liable to punishment for so doing, and could be compelled to hand the child over to professionals, who are very likely, were it only from use and wont, to become members of the class of which Sairey Gamp is the type. But supposing things be arranged as the Committee propose—that is, if such children be given out to nurse at all—it must be to a registered dry-nurse, who is not, except under peculiar circumstances, to receive more than two children at a time. Now, by their own showing, the rate paid for children of this class is at present from half-a-crown to five shillings a week, the largest sum being that which they now propose to levy from the putative father. We will also suppose—which, in truth, is very far from a supposition—that the money received for these nurslings supplies the whole income of the dry-nurse—that is to say, that she and the two nurslings are to subsist each week on ten shillings. We do not say this cannot be done; in some parts of the country it can with ease. But what then? If one can do it, another can. Why not the mother? Further, in certain districts where *prostitution does not prevail*, it is not unusual to meet with unmarried females with a family of four, five, ay, even seven children, for all of whom she would, by the proposed change in the law, be receiving five shillings a week—which is surely putting a premium upon illegitimacy if it is doing away with any inducement to infanticide, and, by the Committee's own showing, this is only too much on the increase already.

We might take up many other of the recommendations of this Committee in the same manner, but we think we have said enough to show that the Harveian Society would do well to reconsider the propositions their Committee have made for putting an end to the crime of infanticide, and to try and devise something practical, not theoretical. Further, we would advise them to think twice before they submit their immature resolutions to Government and to the nation at large.

CONTAGIOUS DISEASES PREVENTION ACT.

No. I.

The difficulties attending legislative interference for the prevention of disease will form an interesting and curious chapter in the history of our time, when it comes to be written. There was, first of all, the religious difficulty—the cry about the protection of vice by legislation, raised not only by the pharisaical, but maintained by really pious and thoughtful people. Then there was the "liberty of the subject." What a host of evils has this bugbear to answer for! "As if," says Dr. Parkes, "the State does not, in numberless ways, and most properly, interfere with the liberty of the subject at every turn. It is quite time that this meaningless phrase should disappear, and that men should see that, in the case of venereal diseases, the State must as much protect its citizens as from the danger of foul water, or the chances of gunpowder explosions, or the risks of any other perilous and unhealthy trades." As we attain a more healthy, a more manly tone, it will become clear that society owes a duty to itself. The education of the masses and the recruiting of our national forces have been sacrificed to this selfsame obstacle. Parents, who from indolence, neglect, or worse feelings, refuse to educate their children, in reality exercise their "liberty" to inflict a great injustice upon their offspring, and a grievous injury to society by breeding criminals for the next generation. It is like water in a thirsty land to find a paper like the *Pall-mall Gazette* grappling with these questions—boldly and vigorously. If we are to occupy in the future the same prominent position we have enjoyed in the history of the past, we shall have to do something more than pass a Reform Bill. We require social reforms of all kinds quite as much as we need political reform. We want to prevent infanticide, to increase the physical and moral vigour of our poor, to diminish the evils arising from diseases well known to be more or less within our control, to provide education for the poorest class of children, and to rear and provide for our friendless boys and girls; and we ought to do this with the feeling that the nation has a perfect right to train them up for its service—the boys for soldiers and sailors, and the girls for nurses and servants—because they have been reared and subsisted at the cost of the nation instead of the parent. We have been led, almost involuntarily, into this train of thought by a recent Act of Parliament on a question of public health—an Act of which Mr. Romaine, we believe, is in a legal sense the father.

We propose to lay before our readers some information regarding the *Contagious Diseases Bill*—its history and effects, the machinery employed in working it, and how it works.

The present Bill "for the better Prevention of Contagious Diseases at certain Naval and Military Stations," commenced its operations on September 30, 1866, at which date the "Contagious Diseases Prevention Act of 1864" ceased to be in force. We have on a previous occasion indicated the defects of the old Act—defects which practically rendered it of very little use. Let us analyse the "Contagious Diseases Act of 1866," as it is called.

I. *The extent* to which it applies is set forth in a schedule. Its field of operation comprises our garrison and naval stations and military camps—Portsmouth, Plymouth, Woolwich, Chatham, Sheerness, Aldershot, Colchester, Shorncliffe, the Curragh, Cork, and Queenstown.

II. The *expenses* incurred in its execution are to be defrayed by the Admiralty and War Office.

III. The *machinery* consists of, 1st, *certified Hospitals*—that is, Hospitals which have been approved of by the Admiralty and Secretary for War as fitted for the reception and treatment of venereal cases, and to which the Government pays an annual sum, according to the number of beds set apart for the purpose. 2. *Medical Inspectors* for the purpose of visiting these Hospitals, performing the administrative duties, and exercising a general surveillance. Provision is made for the appointment of an Assistant Inspector when required. 3. Visiting Surgeons, whose duties are to carry out the Professional part of the Act, in examining prostitutes, for the purpose of detecting those who are diseased, in order to their removal to the nearest certified Hospital for treatment; and lastly, the *magistrates and police*, who are charged with the requisite powers by the Act for carrying out its provisions.

IV. The main *process* by which these contagious diseases are to be detected and their spread prevented is by *periodical Medical examinations*.

The way these are arrived at is this:—On information being laid before a Justice of the Peace, charging a woman, either resident or found within the limits of any of the places named in the schedule, with being a common prostitute, the Justice issues a notice thereof, to be served upon the woman by the police, requiring her to attend personally or by proxy. The investigation is to be conducted privately. Whether the woman attends or not, the Justice may proceed to take sworn evidence of the matter of the information, and if the fact be established to his satisfaction, he can issue a warrant for her periodical Medical examination by a Visiting Surgeon, the order being sufficient warrant for the Visiting Surgeon to conduct it. A copy of this order is to be served on the woman herself. (Provision is made for voluntary submission to such examinations.) Then a notice is served by the police as to the time and place at which she will be required to attend. Supposing the woman be found to be labouring under contagious disease, the Visiting Surgeon gives a certificate to that effect, naming the Hospital in which she is to be placed. The woman is served with one of these certificates, and required to proceed to the Hospital within twelve hours afterwards; if not, the police are empowered to apprehend and convey her there. A patient may be detained in Hospital until cured, when she is discharged by the chief Medical officer of the

Hospital with a certificate signed by him. The Act limits the period of such detention in Hospital to three months, under ordinary circumstances; but in case of the cure being incomplete, provision is made for her further detention up to six months, beyond which time she can be detained only from month to month by her own sanction in writing.

Penalties.—If a woman refuses to be examined, or if she quits the Hospital without being discharged by the Medical Officer, or if she wilfully neglects or refuses to comply with the regulations of the Hospital, she may be taken into custody without warrant by any constable, and, on summary conviction, she will be liable to imprisonment, with or without hard labour, for first offence not exceeding one month, and for subsequent offences not exceeding three.

Any person who shall harbour any prostitute believed to be diseased is rendered liable to a penalty not exceeding £20, or to imprisonment for a period not exceeding six months.

Any woman may, upon her application, be relieved from these examinations upon evidence of her discontinuance of the life of a prostitute to the satisfaction of the magistrate, or if the applicant enters into a recognisance, with or without sureties, for her good behaviour for three months.

Such is the Act. Among the officers appointed under it are Dr. Leonard, R.N., who is the sole inspector of Hospitals; Mr. Parsons, at Portsmouth; Dr. Sloggett, R.N., at Plymouth; Dr. Small, at Sheerness; and the House-Surgeon of St. Bartholomew's Hospital at Chatham.

In a future article we shall speak of the working of the Act, and see whether it is answering the ends for which it was passed; and if not, why not.

INSANITY IN FRANCE.

(Concluded from Vol. II. 1866, page 258)

Our readers will, we trust, have found matter of sufficient interest in our former articles on M. Béhic's report to make a few concluding observations upon branches of the subject hitherto unnoticed, acceptable. If there be any who think that we are bestowing overmuch attention upon matters arising out of our own country, we must answer that insanity is unhappily cosmopolitan, and that its causes and effects are not special in their application to any particular race; but that the record of its progress is kept with various degrees of amplitude in different States, whereof England occupies, it must be confessed, a secondary place in statistical precedence.

Relapses.—About 77 per cent. of the admissions were for the first time, the remaining 23 per cent. being readmissions after relapse, or as transfers from one asylum to another. 47 per cent. of the readmissions after relapse were of cases in their first year of presumed recovery: every subsequent year the chance of relapse diminishes, whilst it is greatest in the first month after supposed cure.

Civil Condition. — The number of unmarried patients received into the asylums exceeded by nearly 50 per cent. those who were married. M. Béhic hesitates to accept the conclusions of some *aliénistes* that celibacy creates a disposition to insanity, but he remarks that the solitude and isolation of many unmarried persons would operate in the direction of placing the celibate *malade* in asylum almost as a necessity, whereas the married sufferers would often find in the bosom of their own family those first cares which help to restore the lost mental equilibrium. Therefore he adds: *Il ne serait donc pas étonnant que, si les aliénés mariés sont moins nombreux dans les établissements spéciaux, ils eussent, au contraire, une supériorité numérique marquée parmi les malades à domicile.*

Occupation.—The influence of occupation on bodily health is known to be considerable; the *mens sana in corpore sano* implies concurrent circumstances of suitable employment, with proper food, clothing, and lodging. M. Béhic classifies his patients according to their profession or calling, and obtains these results:—

Militaires et marins . . .	1	admission	to	every	1,711	inhabitants.
Professions libérales . . .	1	,,	,,	,,	1,911	,,
Rentiers et propriétaires . .	1	,,	,,	,,	3,609	,,
Professions industrielles, commerciales, manuelles .	1	,,	,,	,,	5,487	,,
Professions agricoles . . .	1	,,	,,	,,	18,819	,,

Thus we see that the agricultural class, in proportion to its population, supplies but an inconsiderable contingent to insanity, whilst the profession of the soldier and the sailor is most prolific in mental aberration. But M. Béhic warns us that we should commit a grave error if we inferred from the foregoing that insanity is really more frequent in the Army and Navy than in other classes of society, and attributes the high proportion we have quoted to the vigilance of the administration in forthwith placing under treatment every soldier or sailor who shows signs of the malady. There may be something in this reasoning, but nevertheless it does not seem difficult to believe that the soldier's life and daily associations, with the temptation to drink, are more likely to engender an unhealthy state of the mind than almost any other calling.

As a set-off against the proclivity to insanity on the part of the honourable profession of arms, it is right to point out that of all classes they show by far the largest proportion of cures. The vigilance just adverted to insures their being brought under treatment at the first dawn of the malady, and they are all of an age at which the greatest proportion of cures is found, so that everything is in their favour.

After them the agricultural class offers the next highest proportion of recoveries, and following them come the domestic servants, wages and salaries class (*gens à gages*), the commercial class, and lowest on the list "*individus sans profession.*"

Preserving the same classification, it is found that the two sexes show somewhat different results in their death-rate, for the ratio of deaths to admissions is very much higher amongst males of each of the categories, except in the class of *individus sans profession.* Here the mortality of males is 50 per cent., and of females 55, a difference which is partly explained by the numbers of the sex who live *dans le vagabondage, et particulièrement les filles publiques* included in the class. The lowest percentage of deaths amongst males is found amongst the *rentiers et propriétaires*, then follow the *militaires et marins*, and the highest ratios found are yielded by those *sans profession, professions agricoles, professions manuelles ou mécaniques*, and, highest of all, *gens à gages.* The lowest percentage of deaths of females is given by the *professions libérales* (21 per cent.), and the highest, as we have said, by those *sans profession.*

Causes of Insanity.—In examining the presumed causes of insanity, M. Béhic avows that the results of Medical investigation must be taken approximatively. Many reasons combine to make it exceedingly difficult in some cases to discover, in the diverse influences which destroy the mental balance, the decisive cause of which insanity is the result. There is also the repugnance of many families to disclose the necessary information, and there is a tendency on the part of the majority of Medical men to consider moral causes as quite secondary and accidental, and to refer the disease mainly to physical causes.

In 1000 cases of insanity 607 have been reported as due to physical causes, and 393 to moral causes. The former operate very much more largely than the latter in both sexes, with this difference—that the largest proportion of moral causes belongs to women.

An analysis of the *physical* causes shows very considerable difference in the two sexes. Thus, in 8797 cases of men and 7069 of women, the effect of age (*démence sénile*) was the cause in 8 per cent. of men and in 6 per cent. of women; distress and misery to 5 per cent. of men and 8 per cent. of women; intemperance to 34 per cent. of men and 6 per cent. of women;

and 23 per cent. of the women were brought into insanity by diseases peculiar to their organism, such as diseases of the uterus, suppression of periodical functions, pregnancy, and childbirth.

Of the *moral* causes, those which appear most potent in the subversion of the mental balance are domestic troubles, religious excitement, reverse of fortune, and disappointed ambition. Observed cases of 4919 men and 5438 women yielded the following results:—

	Percentage of Men.	Women.
Domestic griefs and troubles . .	20	29
Love, jealousy, and pride . . .	15	16
Loss of fortune	11	5
Loss of friends	5	11
Religious excitement	7	14
Disappointed ambition. . . .	7	3
Excess of *travail intellectuel*. . .	6	1

The conclusion which the analysis of presumed causes of insanity supplies is, that the most potent and frequent influence is intemperance; then follow in order domestic troubles, age, diseases of different organs, epilepsy, religious excitement, venereal abuses, and privations of all kinds.

With regard to the proportions cured of the two classes, there seems to be a reversal of the previously stated facts, inasmuch as in 1000 admissions it was stated that 607 were due to physical causes and 393 to moral causes; whereas, out of 1000 cures, the diminished proportion of 536 cases originated in physical causes, and the increased ratio of 464 cases were due to moral causes, so that, relatively to the numbers admitted, insanity arising from moral causes appears to have the largest chance of recovery under treatment. And if we compare the death-rate of the two classes we see that of 1000 deaths 694 were of patients whose malady had a physical origin; so that in every way the insane of that category, *qui sont en réalité doublement malades, puisque la folie se complique toujours chez eux d'une autre affection*, have the chances against them. Reducing the proportions of the physical to the moral causes of insanity to a common ratio, it will be seen that in admissions it was as 100 to 65; in cures, as 100 to 86; and in deaths as 100 to 44.

Hereditary Predisposition.—It has been held by many *aliénistes* that hereditary transmission is commonly between individuals of the same sex—that is to say, from father to son, and from mother to daughter. The French statistics are confirmatory of that theory. In 1000 admissions of each sex, 264 males and 266 females had received the germ of their malady at birth; and of the 264 males, 128 inherited from their father, 110 from their mother, and 26 from both parents; of the 266 females, 100 inherited from the paternal, 130 from the maternal side, and 36 from the two combined. Fifteen per cent. of the insane cured were recorded as having had hereditary tendency to the disease.

We have now accomplished the task we proposed to ourselves in connexion with one of the most elaborate works we have ever perused upon a subject of universal interest. As we have before remarked, we look in vain for an equal amount of information from the meagre and unsatisfactory reports of our own Lunacy Commissioners, who are apparently unable to get out of the groove in which they have so many years been running.

Dr. Fielding Blandford, in the admirable lectures on insanity which have appeared in our columns, speaking of the statistical side of the question, said,—"Insane patients are not sufficiently comparable to be reduced to figures and ticketed statistically." Nevertheless, the accumulation of data cannot but be of use in enabling us to generalise on the social bearings of the disease. The purely Medical considerations involved may also often find aids to the elucidation of particular points in the records of facts insignificant and imperfect, if taken singly, but valuable in proportion as the number of observations reduces the margin of error to a minimum.

We therefore press upon the attention of our lunacy authorities the desirability of extending their returns so as to embrace a wider field in the statistics of insanity. We point to M. Béhic's comprehensive report, and we say to Lord Shaftesbury and his colleagues at Whitehall-place, "Go, and do likewise."

THE WEEK.

HOSPITAL REGISTRARS.

We are glad to see that these important offices are now being made at the London Hospitals, and it were well if the provincial Hospitals had like appointments. Gentlemen properly qualified to report Medical, Surgical, and pathological cases are great acquisitions to a school. We do not consider that bare statistics are of very great importance, owing to the obvious imperfections which must arise from such data being collected here and there; but accurate *bonâ fide* records of each individual case or set of cases must certainly be of great value both to the science of Medicine and Surgery and to the Profession at large. It appears to us that a uniform standard method of recording such cases should be adopted if any real good is to be derived from the labours of the Hospital registrars. Hitherto, the various forms of registration which we have examined have differed considerably, and would require much ingenuity in determining the chief points of any case or set of cases from which we might desire to obtain some special information. It seems hardly necessary that in these reports, which afterwards become standard Hospital references, the entire case should be reported at full length, only the chief points, treatment, and result; and for this purpose, of course, gentlemen duly qualified should be appointed. We might suggest that these offices should have—as, indeed, we believe they have in some schools—salaries attached to them, held as they generally are by some of the senior pupils or young men about the Hospital, whose early difficulties would be much lightened—at least, in many instances this is the case—by some little *douceur* for what, though interesting, is excessively laborious work, if done conscientiously. The institution of "Hospital reports" is certainly a step in the right direction. Formerly, Guy's Hospital alone published a yearly volume. What an immense amount of valuable matter has been lost to the Profession at large hitherto! for it can hardly be expected that the cases recorded in the journals can be an adequate representation of what goes on in a large Hospital. We hope shortly to see each Hospital with its own yearly volume, to which every member of its staff should contribute. These publications will form most valuable additions to our literature, besides being books of reference for almost every form and phase of disease that can exist.

THE NOTTINGHAM CORONERSHIP.

Dr. Tindal Robertson has withdrawn his name from the list of candidates for the coronership of Nottinghamshire. His published reason for taking this step is that he does not possess the legal qualification of holding freehold property in the county, and that it is legally doubtful whether the purchase of a county freehold after the late Coroner's death would confer it. Dr. Robertson's decision, although apparently inevitable, must be a subject of regret to the Profession in Nottinghamshire, as not only is he, by position, character, and Medical attainments, eminently fitted for the post, but he has already for a twelvemonth filled the office of Deputy Coroner, and is therefore thoroughly versed in the routine of the Coroner's Court. We are sure that, had circumstances permitted Dr. Robertson to remain a candidate, he would have been largely supported by the Profession. We are sorry to hear that there are

two other Medical candidates in the field, and that therefore Dr. Robertson's retirement does not unite the Medical interest. We would recommend to these gentlemen that their respective claims should be submitted to a meeting of the Medical Profession, and that the candidate who obtains fewest suffrages should retire in favour of the other. We are afraid that in this, as in too many other like contests, it is not merit or fitness by profession and education that will necessarily carry the day. The small county freeholders, we hear, are likely to suffer during the election from an epidemic of *pruritus palmaris*—a form of disease which, unless the Profession bestir itself, may completely resist the efforts of the Medical candidate.

A MEDICAL MAN CENSURED BY A CORONER'S JURY.

As Medical journalists, we are deeply sorry to have to note a neglect of duty on the part of any of our Medical brethren. We are always ready to put the most favourable construction on their acts, and to shield them, as much as in us lies, from wrong imputations and unfounded censure. The general public, as we have often observed, show little charity when the acts of Medical officers are called in question. No quarter, and but scant justice, is the measure generally meted out to them. We therefore, having only seen a newspaper report of the proceedings in the case of Anne Ferry, a woman who died in childbed at Bethnal-green, which terminated in a record of censure by the coroner's jury against Mr. Massingham, the Poor-law Medical officer, pause for his defence before we accept the verdict. As reported, the case seems, we are sorry to say, to support the opinion of the jury. Mr. Massingham, it is alleged, received an order and was applied to more than once, both on the day of her confinement and on the following morning, to go and see the woman, who he was told was dying, but refused to go until his usual time of visiting his pauper patients. In the meanwhile the woman died. The case occurred during the inclement weather of last week, and as Mr. Massingham is said to have been ill at the time of the inquest, it may well be that the state of his health offered an excuse for his non-attendance. It is unfortunate, to say the least, that he did not send some Medical friend, and that the woman was allowed to die without aid. It is to be presumed, however, that the Poor-law Board will order an inquiry into the case, and we must await their decision.

THE HEALTH OF DUBLIN.

From the report of Dr. Mapother, Medical Officer of Health to the Corporation of Dublin, for the four weeks ending December 29, 1866, it would appear that the sanitary condition of the Irish metropolis is now very satisfactory. In the period just mentioned the deaths recorded by the Registrar-General were only 548, or 1 in 465 of the population, against 568 and 532 during the corresponding weeks of 1865 and 1864. During the two preceding months the number of deaths was in each 678 and 720 respectively. Cholera appears to be for the present almost extinguished. The number of deaths from cholera registered last week in Dublin was 2, but neither occurred within the week. Five deaths took place from diarrhœa. Dr. Mapother thus briefly reviews the recent epidemic:—"During the twenty-three weeks it lasted, it destroyed 863 residents of our city, and 52 other persons brought in with the disease died in Dublin Hospitals; if their deaths were registered in their respective localities, the mortality of some suburban districts would be relatively much higher than that of Dublin. In the 1849 epidemic, out of a smaller population, we lost 1664, and in the most fatal month, June, 477 persons. In October, 1866, 268 persons died, and that month afforded the highest mortality." When the recent epidemic had all but ceased, an outbreak suddenly and unexpectedly occurred, on December 23, in the Mountjoy Male Convict Prison, at the north side of the city. The epidemic lasted five days; the total number of cases was 9, the deaths were 4. The prisoners consisted of convicts and of individuals confined under the Habeas Corpus Suspension Act. The great majority of the cases occurred among the convicts; of the untried prisoners, 140 in number, 2 were attacked, 1 of the 2 cases terminating fatally. No reason could be assigned for this unexpected outbreak of the disease, which appeared simultaneously in the several divisions of the prison, though these do not communicate with each other, nor with the same officers. It could not be traced to the diet, which is different in the several divisions of the prison, nor to the water, for the prison for female convicts, which is supplied from the same tank, altogether escaped.

THE TESTIMONIAL TO THE "PALL-MALL GAZETTE."

We have great pleasure in publishing in another column a letter from Mr. Callender, calling attention to the testimonial proposed to be given to the conductors of the *Pall-mall Gazette* for their conduct in the case of Hunter *v.* Sharpe. We also publish a list of subscribers, which contains many names, in addition to our former one. We trust that subscriptions to the testimonial will not be confined to the Medical Profession.

THE HARVEIAN SOCIETY.—CONVERSAZIONE.

The Harveian Society held their annual meeting on Thursday, the 3rd inst. The number present was not great, the weather being very severe. Several gentlemen exhibited articles of interest; thus Mr. Van Abbott, that indefatigable caterer for invalids, had some specimens of nitrogenised cocoa, prepared by separating the greater part of the oil from the original substance, and then mixing it with powdered gluten bread. Bread-and-milk powder was another novelty. Messrs. Moira and Haigh exhibited a great number of photographs of Medical gentlemen, and Mr. Pratt and Mr. Blaise a variety of Surgical instruments.

Dr. Fuller, the Treasurer, reported the funds to be in a satisfactory state, and a long list of valuable papers read during last year was given. The President (Dr. Tyler Smith) read his address, selecting for his subject the inquiries of the Society as to infanticide. He pointed out the close relation of illegitimacy and infanticide, showing the increase of the former, and probably also of the latter. The recommendations of the committee appointed to inquire into the matter were: An alteration of the law whereby the father and the mother would be rendered equally liable for the support of an illegitimate child. That the legal proof of live birth, and consequently of infanticide, should be made simpler. That the punishment of infanticide should be mitigated as recommended by the "Hanging Committee" of the House of Commons. That all births, both live and still, should be registered, as should funerals of stillborn children. That a register should be kept of those willing and properly qualified to undertake the duties of a dry-nurse, and that none except such be entitled to receive children to nurse. That both mother and child should be kept in the workhouse (if confined there) for four months after the birth of a live child. That an inquiry should always be made in any suspicious case of stillbirth. That registering an illegitimate as a legitimate child should be punished. That the woman might have the power of making a declaration as to the putative father should she suspect him of being about to run off. Pregnant women should be received into workhouses at the eighth month of pregnancy on condition that they stop four months after their child is born. That the putative father should be compelled to pay five shillings instead of half-a-crown as weekly aliment for the child; and that the Poor-law authorities should be entitled to proceed for recovering this sum from him, as in cases of legitimate children being abandoned by their fathers. That laundries be established in workhouses to provide for part of

the expense of the women residing there. That there should be a classification of women when in the workhouse, the good being separated from the bad. That the children should be sent out to dry-nurse in colonies. That the dry-nurses be under proper supervision, and be not usually allowed to have more than two children under care; and that no woman should be permitted to act as a wet-nurse who had not properly provided for her own child. That no child be entered in a burial club or have its life insured. That there be no foundling hospitals open to all, and that certain incentives to illegitimacy be stopped.

SIR JAMES Y. SIMPSON, BART.

We are glad to say that Sir James Simpson has almost entirely recovered from his late attack of sciatica, and has resumed his lectures in the University of Edinburgh. Not being able to mount the stairs easily to his own class room, he delivered his lecture, the first of a course on Anæsthesia, in Professor Christison's theatre. During his illness, Sir James's mental activity was manifested by the fact that he actually, for recreation's sake, wrote an archæological work "On Archaic Sculpturings of Circles, etc., in Scotland."

CHRISTMAS IN OUR HOSPITALS.

Pain, sickness, and separation from friends must be especially hard to bear at the time when all Christendom considers it a religious duty to be happy, sociable, and to have a good appetite. We don't know whether there are any statistics to prove it—no doubt they might be as easily got as for other purposes—but we are convinced that many patients in our Hospitals get worse at this season in consequence of the regrets and sad thoughts which Christmas brings. We, therefore, hail all attempts to make something like a real Christmas in Hospital wards as valuable efforts in a remedial point of view. This year the good sisters at University College Hospital have set an example which we hope may be extensively followed. A Christmas-tree was lighted up in one of the large wards, and a number of "presents" distributed to the patients. Light delicacies suitable for sick people were also given, and the entertainment wound up with some music and singing by the lady nurses. We have no doubt that many a pulse beat better the next morning for the kindly entertainment. We are also very glad to notice that the firm of Todd Heatley and Co. have sent a liberal present of champagne to the patients at the Brompton Consumption Hospital. Divinity and Physic both approve such charity.

MUNICIPAL REFORM FOR LONDON.

The recent meeting of the Metropolitan Municipal Reform Association has been followed up by a large and influential deputation to the Home Secretary. Our Profession was represented on the occasion by Dr. Farr. The project of the Association is to abolish all small local jurisdictions, and to form ten large municipalities—seven on the north and three on the south of the Thames, all having as nearly as possible the same amount of population. Instead of forty vestries and about 4000 vestrymen, many of whom are from the class of petty tradespeople, and by no means represent the ability and education of the upper and middle ranks, it is proposed to vest the governing power in 400 aldermen and common councilmen. The dignity of these offices would, it is believed, make them sought for by a higher class than those who constitute the present parish boards. A central council would preside over the main drainage, the management of bridges, gaols, lunatic asylums, and works of public improvement. It is believed that under such a system of government the metropolis would soon be relieved from the tyranny of the great joint-stock companies, and that our public thoroughfares would no longer be in a worse condition than those of many a country market town, although £500,000 a year are spent upon them. Sanitary reform, too, would no longer, as in Bethnal-green or St. George's-in-the-East, be retarded by the poverty of the parish and the cupidity of the landlords, some of whom may be vestrymen or guardians. Altogether, the scheme seems a promising one, although, we fear, it promises too much. The principle involved has been accepted and recommended by several committees of Parliament, and we have no doubt, although it will be opposed by all the influence of vested interests, it will meet with a great many supporters in the House of Commons. The utter collapse of our parochial powers under the late snow-storm, the contamination of the East London water supply, our bad and dear gas, and the overcrowding consequent on the wholesale demolition of human habitations for the purpose of railway companies, are all signs of the times. Municipal reform must come, and we hope that Mr. Walpole and the present Government will carefully consider a scheme which has the support of such an authority on public health as Dr. Farr, and of men of influence from every section of political opinion.

AN EXAMPLE THAT OUGHT TO BE FOLLOWED.

We are glad to hear that the authorities of the London Hospital are about to present to several of their honorary Medical and Surgical staff valuable testimonials in consideration of their services during the cholera epidemic. A few weeks ago we mentioned that the same committee presented honoraria to their chaplain, and to the Resident Medical officers, not forgetting the nurses and porters.

THE NEW NAVAL WARRANT.

The *Army and Navy Gazette* says that the new Warrant for improving the position of Naval Medical Officers has received its final revision at the hands of the Admiralty, and has been sent on to the Treasury, with which it will rest whether this Warrant is to be made public or not. We sincerely hope that no ill-timed and ill-judged dread of additional expense will come in the way of its acceptance, for certainly the state of the Navy, as regards Medical officers, is deplorable. We would further urge upon all young Medical men the propriety of waiting until this Warrant is published, otherwise they may spoil not only their own prospects, but those of the gentlemen who have already entered the service. This very precipitancy has ruined the Army Medical Officers. Men year after year have come forward, and a sufficient number have been got to carry on the service *somehow*, without any additional inducement except vague reports of coming improvements. Not so with the Navy; things are at a dead-lock, and Surgeons are performing Assistant-Surgeons' duties, notwithstanding that promotion there has been going on steadily enough, and men could look forward to their Surgeoncy after eight years' service. But in the Army how is it? Why, some of the men who served in the Crimea are still Assistant-Surgeons; and if any young gentleman be struck with "the scarlet fever," let him look at the list of Assistant-Surgeons, and let him calculate how long a time it will take for these to obtain their promotion at the rate of thirteen or fourteen a year, for all must obtain this upward step before he can. We think the sight will pretty well cure him. No doubt it is pleasant to step at once from a Medical school into a position where a man can live comfortably enough without any very great exertion—far pleasanter than working up a practice. But, on the other hand, look at the closing scene in the picture. Most Medical men, after practising a certain number of years, get into the receipt of a comfortable income, which will most probably go on increasing as long as they can work; whilst the Army Medical Officer, after serving a certain number of years, retires on a meagre allowance which dies with him. The contrast is not

encouraging; still, it may be improved, and, to secure one moiety of this improvement, we advise all our young friends to *wait*.

MEDICAL LITERATURE IN THE PAST YEAR.

THE *Bookseller* announces that there have been 160 Medical works published in 1866, out of the 4204 new books and new editions that have appeared, whilst there have been but 195 works on travel, topography, and geography, 64 on agriculture and horticulture, 196 on English philology and education, 84 on law, 39 on naval and military engineering, and 147 on science and natural history, etc. It will be seen, therefore, that, as compared with other ways of learning, our own shows no lack of frequenters. Medical literature is, we cannot doubt, very interesting. We know, at least, that it is interesting to the writers; we believe it to be interesting to the Profession, to whom it is ostensibly addressed; but there must be a sale for it amongst the outside public, or it would never occupy, numerically, so high a place amongst booksellers' and authors' ventures. There is no doubt about it; people like reading about their complaints and the physic they should take to get rid of them. What effect this flood of Medical light and learning has upon the unprepared nerves of the natural man, whether he becomes mentally wiser and physically better for it, is an open question. But we believe that, ever since the invention of printing, books on Medicine have been multiplied to a far greater extent than those on any other special science, if we exclude theology. Black-letter herbals and "Urynalls of Physicke" are common enough in our old libraries, and there were at least five editions of Celsus de Medicinâ published in Italy before the close of the fifteenth century.

CHOLERA LITERATURE.—DR. COCKLE, DR. JEAFFRESON, DR. CHAPMAN, M. BOENS, M. BORLÉE, M. CROCQ, M. KUBORN, MR. WILKINS.

WE hope we have seen the last of cholera, but books on the subject still continue to appear. First, Dr. Cockle, of the Royal Free Hospital, a little time ago published some "Thoughts on the Present Theories of the Algide Stage of Cholera." He points out that there are two theories in vogue as to the origin of cholera—the one that the poison has entered by the lungs and primarily affected these organs; the other that it makes its way into the alimentary canal, and that the peculiar appearances found in the lungs are merely dependent on the extraordinary drain of fluid from the system. Like a cautious inquirer, Dr. Cockle first sets about ascertaining the exact pathological state of the system in the algide stage, and points out that this varies in different epidemics. He shows that neither the blood nor ejecta of a diseased individual are capable of exciting the disease, and cites that curious case of Schmidt's where a drunken man swallowed the recent vomit of a cholera patient without apparent injury. Supposing that elimination is intended by the tremendous discharges, he shows that it is very unusual for a curative action on the part of Nature to be attended with such extreme danger. In this lung theory Dr. Cockle objects that spasm of the pulmonary capillaries is only a matter of inference, not of observation; further, that the algide stage should precede and diminish with the elimination of the poison. He also asks why the pulmonary capillaries should be in a state of spasm, and those of the intestines be quite the reverse. Again, he says that the immediate effects of saline injections show that the pulmonary capillaries are free, whilst the almost complete absence of dyspnœa proves that the lungs are not the immediate seat of the disease. On the other hand, he points out that affections of the alimentary organs are remarkable for their prostrating effects on the system at large, that great depression may result from the excessive action of purgative medicines alone, and that the post-mortem appearances are identical in kind, if not in degree, with those seen in such allied diseases as English cholera. From these considerations Dr. Cockle deduces the practical inference that astringents, not eliminatives, should be used. Altogether we have not seen an abler or better-reasoned contribution to cholera literature.

In the same strain, *sed post longum intervallum*, Dr. Horace Jeaffreson, late Resident Physician to the cholera wards of the London Fever Hospital, writes against Dr. Johnson's theory, and in favour of a causation of collapse as depending on inflammation of the intestinal tract. His arguments are strengthened by some very well-reported cases.

Dr. Goodwood sends us a little volume on the value of saline venous injections in cholera. In previous epidemics the author had been encouraged in the prosecution of this scheme, originally suggested by Sir William Brooke. Subsequent experience confirmed the good opinion entertained. He further thinks that, followed by the use of the wet sheet, it is the best remedy for cholera; that it, at the very least, can do *no harm*.(?) The solution employed was prepared according to the following prescription:—

"Sodæ muriat. ʒiij.
„ subcarb. ʒij.
To six parts of water," (*sic*)

and was used at a temperature of 100° F.

In late numbers of the Brussels *Bulletin de l'Académie Royale de Médecine*, we find the subject of cholera amply discussed. As to treatment, M. Boens adopts the adage, "For great evils, little remedies." He makes use of warmth to the body, pure cold water at discretion, ice to be sucked, aromatic and cordial beverages, and insists that great care be taken that the water drunk is pure.

M. Borlée treats simple diarrhœa with diet and slight stimulant sudorifics—if required, with a dose of rhubarb. Opiates he proscribes. If vomiting and prostration follow, he prescribes ipecacuan in ten-grain doses every quarter of an hour until the vomit becomes bilious, to be followed by hot cataplasms, or still more stimulant applications to the pit of the stomach, and gentle purgatives. In the cyanosed condition, M. Borlée recommends stimulants, especially to the skin, with warmth. Sometimes he gives ipecacuan to promote the reaction, and small fragments of ice to relieve thirst. Altogether, he is for an evacuant treatment by calomel or rhubarb, and ipecacuan, and opposed to premature suppression of discharges.

M. Crocq has been investigating the contagious nature of cholera, and has arrived at the conclusion that the disease is really contagious, and that the virus is transmitted through the evacuations; but in this, as he is of opinion that these ejecta are poisonous before being expelled from the body, he is not borne out by actual facts. (*Vide supra.*) His observations were made on dogs.

M. Kuborn, embracing the evacuant theory, adheres to sudorifics, as ipecacuan—calomel, sulphate of soda or magnesia, or castor oil, with aromatics, to promote the action of the bowels—and in the algide stage sustains the vital action as far as is possible.

Mr. Wilkins, of Madras, thinks that cholera depends on an altered electrical condition of the atmosphere.

PERIODICALS.

THE quarterlies and monthlies start famously for the new year. The *British and Foreign Medico-Chirurgical Review*—*facile princeps*—contains as usual a variety of articles in its usual exhaustive style. The first is on the Lymphatic System, and the second a capital review of Virchow on Tumours. Leidesdorf on Mental Diseases, a book we have already discussed, is then examined; next follow reviews of Plum on Strangulated Hernia, and Sédillot's Operative Medicine. *Guy's Hospital Reports* for 1865-66 are minutely examined, article by article. A comprehensive review of the recent works on Health-resorts follows; whilst the last and

longest is an article on the recent advance toxicology has made in the domain of inorganic poisons, founded on Dr. Taylor's "Principles and Practice of Medical Jurisprudence," and perfectly bristling with the names of German and French authorities. The original articles are on the Functions of the Eustachian Tube, by Jago; a very valuable paper on Ruptures of Internal Viscera, by Professor Ogston; a communication from Mr. Teevan on the subject of Lithotomy; and a continuation of Dr. Grainger Stewart's valuable researches as to the Pathology of Bright's Disease.

The *Edinburgh Medical Journal* presents on this occasion quite a gay appearance, being extensively illustrated, which further reminds us that the "*Medico-Chi.*" also contains two beautiful plates intended to illustrate the article on Danish Helminthology, which appeared in the last number. In the *Edinburgh* Dr. Scoresby Jackson leads off with a highly interesting case of typhus fever, followed by hemplegia of the right side and complete aphasia both as regards articulation and writing. Henry Veale upholds the doctrine that syphilis, or some similar morbid virus, produces stricture, not gonorrhœa, however long continued. For the treatment of this last disorder he upholds the application of blisters in the line of Poupart's ligament for a few hours, following up their removal by poultices. He has not seen a case of gonorrhœal rheumatism since he ceased to give copaiba and cubebs. Patrick Heron Watson writes on excision of the knee-joint. He shows that the great difficulty lies not in the operation, but in the after treatment, it being almost impossible to keep the thigh at perfect rest. The apparatus he has found best for this is an iron rod from the groin to the toes, bulging out opposite the knee, and having hooks attached for suspending the limb from a Salter's swing; behind he uses a Gooch's moulded splint, hollowed out at the sides where it lies posterior to the knee, and having a hole cut for the heel and tendo Achillis. These are carefully bandaged to the limb, then covered with a thick coat of plaster of Paris, which in turn, when it has properly set, is coated with a layer of paraffin to keep out wet. Matthews Duncan contributes a moiety of what bids fair to be a most valuable paper on Hæmorrhage from Fibrous Tumour of the Uterus.

The *Journal of Mental Science* also begins well. Dr. Lockhart Robertson sends a paper, illustrated by a plan, on the subject of Pavilion Asylums. There is also a capital lecture by Professor Griesinger (whose work on Mental Diseases is about to be published by the Sydenham Society), as introductory to his clinique translated by Dr. Sibbald. Dr. Maudsley reproduces a paper read before the Harveian Society on the Causation of Insanity. Dr. Alexander Robertson writes on the Pathology of Aphasia, whilst Lauder Lindsay and Mackenzie Bacon send clinical cases. Altogether the number is highly creditable to its patrons, the "mad Doctors."

FROM ABROAD.—M. TARDIEU'S ADDRESS AT THE ACADEMY OF MEDICINE—ARTIFICIAL FORCE IN DELIVERY.

In the address delivered by M. Tardieu on taking his seat as President of the Academy of Medicine, there are some passages which may prove of interest to our readers. After congratulating his audience upon the valuable additions made to the ranks of the Academy by the recent elections, and the full recognition by the public authorities in France of the importance of the intervention of Medicine—*i.e.*, the "science of man"—in social and economic questions, he goes on to say:—

"This duty of enlightening the State on all those questions which concern public health is not the only one we have to fulfil. The Academy has also other duties in relation to both science and art. As our honourable secretary has recently reminded us, with that happy power of expression which distinguishes him, academies neither invent nor teach, but, what is not less difficult or useful, they examine, discuss, and sanction. This duty towards science and art becomes more imperious for us every day, and is, allow me to say, an actual and vital indication, for the question of the relations of art and science is even now agitating and impassionating the minds of men. While some are in fear lest science should become sacrificed to art, others are no less so that art may be abandoned by science. In place of a sterile opposition of these forces to each other, which should be as inseparable in Medicine as are intelligence and sensation in man, a nobler and more profitable task will be the endeavour to join them in fertile union. Nothing, with gladness be it said, can arrest the progress of modern science, and he who is imprudent enough to attempt to slacken it will be trodden down and left behind. Neither can anything prevent art, whatever need it has of the light of science, penetrating into things in advance of her by that kind of intuition which experience is constantly developing. And the *savant* who, at the bedside of the patient, would renounce the comprehensive glance and undemonstrable reasons for acting, which every Practitioner worthy of the name ought to possess in some degree, and which, when carried to their highest power, constitute the Physician of genius, such a one would condemn himself to a false, embarrassed, and impossible practice.

"Why, then, this covert yet active struggle between *cliniciens* and *savants*—this opposition of two principles which should neither exclude nor injure each other? Is it not that in our epoch of hasty impatience, of busy precipitation, of external self-expenditure, we experiment and act more than we reflect—far more than we pause to think? Does the *clinicien* think enough at the bedside? Does the *savant* think enough in his laboratory? We must be allowed to doubt it. A little more philosophy—that is, after all, a little more meditation—would unite and confound in the happiest alliance these apparently opposites.

"Happily for us, gentlemen, an academy has no system, leaving this pretension to the schools. In an assembly like our own, from the diversity and contact of opinions there results a mean reason, which is the scientific wisdom of the moment, and the point of departure for renewed progress, science being infinite as Nature herself. Let us rejoice, then, at the mission of scientific justice which has devolved on us. Let us examine, discuss, and, above all, meditate, so as not to allow the entrance into the incessantly renewed current of Medical science and practice of any facts that have not been severely tested, or any ideas but those which are true and matured."

In a paper upon the employment of artificial mechanical force in delivery, read at the Academy of Medicine, January 2, M. Joulin states the following propositions:—1. By the employment of enormous force, which must be prohibited in practice, we can obtain as great a reduction as 5 centimetres in the diameter of the fœtal head. During delivery this reduction cannot be carried beyond 15 millimetres without causing the child to run almost certain chances of death. When the horizontal diameters have undergone reduction, the vertical diameter is proportionally elongated. 2. This reduction of 15 millimetres can be obtained, during labour, by means of the *aide-forceps*, by the employment of a force varying from 35 to 60 kilogrammes. The perforation of the cranium allows of the increase of this reducibility in a notable degree, when this is insufficient to allow the head to pass the narrowed passage. 3. The bi-parietal diameter measures 9 centimetres as a mean, and a traction apparatus may bring forth a living infant, when there is a narrowing of 75 millimetres, by means of the employment of a force of less than 60 kilogrammes. In the manual application of the forceps this result can only be obtained by tractions representing 120 kilogrammes. 4. Muscular effort in manual tractions only exerts quite temporarily its maximum of action, being constituted by a series of rapid efforts, the power of which varies during two minutes from 20 to 60 kilogrammes. Mechanical tractions are slow, progressive, sustained, and regulated by the dynamometer. Their maximum of action is only exhibited at the end of the operation, and after a lesser force has disposed the maternal and fœtal parts to reciprocal adaptation. 5. The danger arises from compression, and the *aide-forceps*, by necessitating far less force to accomplish the same end, diminishes the amount of compression to be exerted, and con-

sequently the amount of danger. 6. In 253 cases of cephalotripsy, representing 506 lives of mothers and infants, the general mortality amounted to 65 per cent. In 37 cases, involving 74 lives, and necessitating the employment of energetic force, either mechanical or manual, the general mortality only amounted to 48·2 per cent., giving a difference of 21·8 per cent. in favour of energetic traction.

MEDICAL EDUCATION IN OXFORD.

A PAPER read by Professor Daubeny before the British Association, at Birmingham, exhibits, in a very lucid and striking way, the fact of the decline of the Faculty of Medicine in Oxford. The standard is quite as high as that of any other school, and the examinations are held regularly once a year, but candidates do not come. When we say that the number of Medical graduates for the past year is two, and that the average has not exceeded two or three for many years, we need scarcely bring forward any more evidence to show that the school is at a vanishing point, and in no small danger of extinction. Believing as we do that a genuine university education is of the greatest value to the student in any profession, we cannot but regret this severance of the links which have in time past connected the Medical Profession with Oxford, and we are sure that any scheme which should succeed in making those connexions firmer and more extensive would confer a great benefit on Medicine.

Probably few will dissent from the proposition that the primary function of a university is to provide the best kind of general education for those who propose to enter on the liberal professions—that a degree in arts, in short, is not to be an appanage of luxury, or an ornamental possession, but a starting-point from which a man may begin most hopefully the real labours of his life. For if this function were taken away it is difficult to believe that the maintenance of universities, though it might still be desirable in the interests of particular classes of people, would continue to be a matter of national importance. As regards special preparation for a particular profession, all that a university can do is to teach in its general course all those sciences a knowledge of which is most useful in the faculties which it recognises, and to take care, so far as it may, that for the practical knowledge which it is not in its power to give, the students shall go to the best schools which the country affords. In the cases of Law and Medicine, these special schools are naturally sought in the great centres of population, and among the scenes in which a man will be hereafter called upon to act. The future clergyman, on the other hand, may learn with a happy facility all that he requires to know, not among the souls whose cure is to be his charge, but amid the varied pursuits of a university, or in the semi-monastic seclusion of a theological college.

It is perhaps unnecessary to insist on the material advantages which the possession of an Oxford or Cambridge degree gives to a member of our Profession. They are sufficiently patent to all. When other things are equal, and even sometimes when they are by no means equal, the degree has weight enough to turn the scale in favour of its possessor; and complaint has recently been made in the pages of this journal against the College of Physicians itself for selecting its Fellows too exclusively from Oxford and Cambridge men. But the question which we have to answer is, whether this preference is in any measure reasonable, or whether it is due merely to popular prejudice. Do these ancient Universities, in short, teach men anything that cannot be learned equally well elsewhere? We believe that they do; and that their degrees are valued precisely for this reason, and for no other. Accurate scholarship, industrious habits—even polite manners—can be acquired elsewhere; but in no other place can a man spend three or four of the most important years of his opening life, among such elevating associations, and breathing such an atmosphere of noble traditions. The world in general does not care a fig for the force of κατά in composition, nor for the kind of knowledge to which that is an index; but it believes, rightly as we think, that the tendency of our university life is to develope those qualities for which a man is really valued by his fellows—to make him honest and brave, straightforward and generous. This is a kind of learning which cannot be got from books, nor taught in class by professors, but which must be acquired for himself, if at all, by each man who possesses the germs of these qualities, from contact with those among whom he lives; for man, like the chameleon, takes his colour from the things around him. And here we desire to state as strongly as possible our conviction that the training by residence is not only the most valuable part of the university course, but that it is the element which gives the degree its high place in the public estimation; and that if the "affiliation scheme" lately proposed for the consideration of the Oxford Convocation should be carried into effect, the prestige of the degrees of that University would be a thing of the past.

If, then, we are right in assuming that there are advantages to be gained by going through the University course which cannot be otherwise attained, we must be equally right in urging the renewal of the claims of Medicine to a share in those advantages. That a large and costly museum of natural science and a staff of Professors should be kept up in Oxford, and that many prizes should be offered for proficiency in the subjects taught, and yet that the yearly number of graduates in Medicine should dwindle to two, argues at least a lamentable waste of force. The opportunities for study are there, but the Medical Profession does not seem able to avail itself of them. And the reason which deters men from making the University the starting-point of their career seems to be a fear of the expenditure, firstly of time, and secondly of money. It may be well, therefore, to state exactly the minimum of time required for the Oxford course by the statutes at present in force. Suppose a youth to leave school at 18; he then comes to Oxford and reads classics for two years, at the end of which time he passes the first public examination, known as Moderations. Now he may leave classics altogether, and devote himself to Natural Science, in which school he may take his B.A. degree after one more year, at the age of 21; being sufficiently advanced in Anatomy, Physiology, Chemistry, Botany, etc., to pass the "primary examinations" of the London licensing bodies. During his residence as an undergraduate, he will have been able to attend as a pupil at the Radcliffe Infirmary, which is a recognised Hospital; and after two years more passed at one of the London Hospitals will be qualified to present himself for examination by the London Colleges, and to obtain their licence to practise, being now 23 years old. If he should desire to become M.B. of Oxford, two years more will be required in London; but, probably, many would be satisfied with the B.A. as an addition to the ordinary qualifications in Medicine and Surgery. As a matter of fact, we do not believe that the majority of students who aim at a high class of practice complete their Medical education before the age of 24 or 25; so that to these, at all events, the University course, such as we have sketched it, would cause no loss of time. And to those who now begin practice before 23, a small additional expenditure of time would be surely a most profitable investment.

The cost of an Oxford degree in money is a separate question, and we fear, to our Profession, the most important one. The difficulties arising on this score, however, are commonly somewhat overrated. It cannot be too strongly stated that the costliness of Oxford life depends, not on the college expenses, but on the wasteful habits which have been allowed to grow up among the young men. These habits are in no way essential to a University life; they are a reproach to the authorities who fail to check them, and the only persons

interested in maintaining them are the tradesmen who make their fortunes thereby. An extravagant man pays no more to his college than a frugal man; it is only among tailors, jewellers, and horsedealers, and in betting or play, that he can throw away his own or his father's money. Therefore, if a society can be established in which frugality is the rule, and whose members are known to have no money to spare, the great cause of expenditure is taken away. Two Halls organised on these principles are now working in Oxford, and working well. If another, devoted chiefly to studies which may be of use in Medicine, could be established, and well supported by the Profession, there is no doubt that a student could be maintained in it for less than £100 a year, exclusively of his tradesmen's bills, but including all charges for tuition, board, and lodging. We cannot do better than quote Professor Daubeny's opinion of the desirability of establishing such a hall, though we regret that we cannot go with him in assenting to the "affiliation scheme" as an interim measure. He says—in a letter to the chairman of a sub-committee appointed to consider that subject—"I am still of opinion that the most effectual expedient for largely recruiting the ranks of the University from a class of society possessed of scantier means than that of which it is at present principally composed, would be that of founding a separate hall or society in which the members, whilst partaking of the common privileges and advantages of an academical training, might at the same time be kept aloof from the temptation of indulging in the expensive habits and amusements prevalent amongst the inmates of the existing colleges, and . . . I cannot see the validity of the objection urged against such an establishment on the ground of its exclusiveness, unless it can be made to appear that those who resorted to it would be more isolated, if collected together within the pale of the University, than they are of necessity at present." Here, in fact, is the real question as regards the proposed Hall. It is not whether the Hall would be better for the student than one of the existing colleges, if he could afford to go to it, but whether he would not do far better by coming to the Hall than by keeping away from the University altogether. It must be remembered, moreover, that residence in Oxford would shorten the time required in London, and enable the student to go there at an age and in a state of preparation which would protect him from the grosser temptations of Medical student life.

In conclusion, we are able to state that such a Hall will be started in Oxford if the Profession shows itself willing to give it sufficient support. We shall be glad to receive communications from those interested in the subject, as we desire to ascertain the amount of demand existing for such an institution.

FEVER AT WARRINGTON.

It is said that fever has been for some time very prevalent in the town of Warrington in Lancashire, and has been the subject of much consideration on the part of the sanitary authorities of the place.

It would appear that the epidemic is principally in the north end of the town, and that it is of a malignant type. The number of cases, so far as we could learn, has been about 200 in the last four months, and the number of deaths about 25 or 30, and this in a population of about 28,000. One of the causes of the fever is undoubtedly the confined and unwholesome condition of the dwellings inhabited by the people of the district, who are for the most part engaged in the manufacture of cotton goods, glass, and hardwares. The town is described as having three or four main streets, which, in a sanitary point of view, appear to be pretty well cared for; but the minor streets, which are generally narrow, are but indifferently drained, and therefore favourable to the development of fever.

The Town Council, which is the Nuisance Authority for the place, seems to be alive to the importance of taking measures to prevent the extension of the disease, but it also seems to have much doubt as to how far its authority extends for dealing with the causative conditions of the present epidemic, and for instituting measures which would have the effect of arresting its progress—such, for instance, as the provision of Hospital accommodation, which the Council has been urged to undertake, and which, it says, it is the province of the Guardians to see to. Overcrowded and ill-ventilated dwellings seem to be rather abundant in the town, and these are matters which certainly come within the jurisdiction of the Nuisance Authority.

The Guardians, as well as the Town Council, have taken action in the matter, and have expressed their willingness to devote, if they have not already devoted, either a portion, or the whole, of the Cholera Hospital, which is not required now for cholera patients, to the use of fever patients as a place for the convalescents; this has been done on the recommendation of their Medical officer, and will undoubtedly help to a great extent to get rid of the present visitation.

But there are other duties to be performed, and by the Town Council, as the Nuisance Authority for the place. For though, undoubtedly (as the Mayor has been reported in a local paper to have stated), the Town Council could not "undertake the care of persons who inhabited confined dwellings by removing them from under the control of their friends and relations, or of sick societies, without incurring very great responsibility," it can put into execution the powers which it possesses under the Nuisances Removal and Sanitary Acts to deal with many conditions which cause zymotic disease.

We would draw the attention of the Town Council to the following statement which appears in the same paper as that from which the above-mentioned extract is taken. It was made by a member of the Street-improvement and Lighting Committee of the Town:—

"In visiting Bakehouse-yard, Latchford, . . . he was perfectly shocked. He was shocked that within the borough of Warrington there should be such a place. Being below the level of the street, during the late flood the whole of the houses there were filled with water. The yard contained a number of cellar dwellings. All the families living in them were apparently of the worst description, and really, whilst the members of the sub-committee felt in going into that yard that it was absolutely necessary to put up a lamp, if they had had the power they would have voted unanimously that the whole of that property should be swept away, because it seemed only to breed fevers and produce evils of all sorts to the inhabitants."

The Town Council, we should think, would be able to deal with the conditions of a place which one of the Council has said "should be swept away," and which he has stigmatised as breeding fevers and producing evils of all sorts.

The powers given by sections 19, 36, and 42 of the Sanitary Act, 1866, would, we should think, enable the Town Council to procure the removal of some of the nuisances which such a statement would seem to indicate. And as the principal bar to the action of the authorities appears to be their uncertainty as to what they can do, we do not doubt that, on the advice of a person competent to give it, all necessary steps will be taken by them to purge their town of the fever which seems to have obtained such a hold upon it.

We understand that Dr. Buchanan has been down to Warrington to advise the authorities on this matter, and has pointed out to the Town Council and the Guardians the best way of ridding the town of the fever which is now so prevalent in it.

The cattle plague is making serious ravages in Holland. More than 6000 cases have occurred in a fortnight. Since the outbreak to December 15 more than 500,000 beasts have died, of which 21,500 were killed.

FURTHER NOTES ON WINE.

By the Author of the "Report on Cheap Wine."

WINE REALLY CHEAP—WINE ENOUGH IN THE WORLD FOR US ALL—PRICE AND MANAGEMENT OF WINE—CHEAPEST KINDS.

There is no room for doubting the fact that a great progress has been made in the use of pure light wine during the two years that have passed since I ventured to call the attention of my Professional brethren to the subject in the pages of the *Medical Times and Gazette*. The immense mass of letters and inquiries which have reached me from Medical friends in all parts of England is a sufficient proof of the interest which they take in the matter, and must be my excuse for appealing to them again. Much has been done, but more remains to do. We must get wine much more largely and freely into use; it must be used more as a beverage for the indoor classes, as a medicine for the sick, and as a substitute for spirits as a means of promoting conviviality. All this good work on behalf of health, morals, and refinement can be done by Medical Practitioners chiefly. In the course of these further notes I may be permitted also, perhaps, to lay before your readers the results of some late researches on wine, which are of enormous importance from the light they throw upon the causes of unwholesomeness in wine, and on the conditions which render fortification necessary, as well as the nature of zymotic disease. All science is one; and an exposition of the last researches into the chemistry of wine is needful just now to the Physician no less than to the Chancellor of the Exchequer.

I say, to the Chancellor of the Exchequer, because it seems very certain that an appreciation of the recent labours of chemists on the properties of wine would furnish a ready answer to Mr. Shaw and the other persons who, with great perseverance, are urging a uniform shilling duty on all wines, whether they be really pure wines or fortified with spirits. I may be permitted also to make some remarks on the causes of intemperance, whether affecting society or individuals, and on the remedies.

That the use of pure wine is on the increase is manifest from the fact that the Commissioners of Customs, in their Report for 1864, declare that the strengthened wines of Spain, Portugal, and the Cape command four-fifths of the whole consumption of the country; whereas, in 1866, they affirm that they form three-fourths only—*i.e.*, nine out of the twelve millions which represent in round numbers the total consumption.

The total quantity of wine—about, say, twelve millions of gallons—forms a very shabby provision for the thirty millions of people in the United Kingdom. Light wines—*i.e.*, under 26° of alcoholic strength—were entered for home consumption in quantity of 1,270,514 gallons in 1863, and 1,777,283 in 1865, without reckoning the increase in the quantity of wine imported in bottles, most or all of which is Champagne or fine light wine. Reckoning six bottles to the gallon, 5,675,394 bottles were imported and entered for home consumption in 1864, and 6,463,932 in 1865. During the present year the importation of French wine is said to have increased 12 per cent. We cannot turn to a newspaper without seeing indications of the change in public taste.

One eminent wine merchant advertises "superb 1860-Vintage Port Wine," and affirms in recommendation of it that it has been "exported without the usual addition of 10 per cent. of aguardiente or raw spirit, and entirely free from the liqueur called *geropiga*, of a slendid ruby colour, soft, and ripe for immediate drinking." Very consolatory this to the people who had previously bought wine in the faith that port is not port without spirit and geropiga. We see new names appearing as purveyors of wine specially for Medical purposes, as the Messrs. Piot Frères, whose Burgundy is advertised as a remedy for nervous debility. The Messrs. Van Abbott, to whom we look for special articles of diet suited to the invalid, have now included in their list a careful selection of nutritive wines. M. du Lac offers us his Gauphine, of which many readers of the *Medical Times and Gazette* have availed themselves; and M. Sasse, a City merchant, offers red wine from the South of France on almost equally cheap terms. All the light wine people seem to be thriving. M. Diosy has been compelled to remove to larger premises; Mr. Max Greger has been decorated by the Emperor of Austria. The importations of Hungarian wines have been raised from 3000 gallons in 1861, to 170,000 in 1866. M. Schlumberger's Vöslau wines continue to increase in popularity, and, as a sure sign of an increasing business, new names appear as importers of Hungarian wine—as Messrs. Homberg and Haas, who offer a "Poganyvar," some samples of which are fit to rank with M. Diosy's Visonta, and M. Greger's Ofner. I ought not to pass over without acknowledgment numerous wine merchants in all parts of England who have favoured me with communications savouring not of the mere spirit of trade, but of a professional or true artistic feeling, which prompts them to use every effort to procure and supply wine on the cheapest possible terms. Denman, aided by my most intelligent friend M. Karakanaki, has distributed enormous quantities of Greek wines, of which a Patras, equal to a full-bodied *hock*, will stand exposure to the air for days without turning sour, and the Red Keffesia developes a flavour identical with that of good Burgundy. Messrs. Trapp, Messrs. Fearon, Messrs. Polhill and Green, Mr. Hall, Mr. Hickling, of Leicester, and Mr. Collier, of Plymouth, all are public benefactors for supplying admirable Bordeaux wines, of 1864, at the lowest possible rate of profit. I may, perhaps, mention some specimens of wine I have met with, which it may be of advantage to Medical Practitioners to be acquainted with. Let us suppose a patient nervous, ill-nourished, fidgety, wanting a stimulant, and more especially something that shall give the nerves of taste, and the ganglia that preside over the heart and stomach, an agreeable fillip, and yet one that shall not cost much money. I often have such patients—genteelly poor, over-sensitive, solitary, living in lodgings, puritanical or quakerish in their diet, believers in the "wholesomeness" of mutton chops boiled sole rice-pudding and other insipid meats, afraid to eat a cucumber or an apple, lest the cholera or "flatulence" should follow; takers of carbonate of soda after meals, and having, perhaps, on the dressing-table, three pill-boxes of various strengths for the relief of "habitual constipation." To such patients have I often said, "You will derive great benefit, sir, or madam, from a course of medicine, but you need to be prepared for it by a peculiar diet. Go to the end of Coventry-street, then turn up Princes'-street, Leicester-square, and drop in at the French *charcutier's* and provide yourself with some savoury *plat* for your dinner or supper; then go on to Dean-street, to Goldberger's, the French wine merchant, and ask for a few bottles of *Mercurey blanc*, at eighteen-pence a bottle. Mind, it's eighteen-pence, which is the price of a black draught at a first-rate chemist's." "Ah, I see," says the patient, "a preparation of mercury—'Hydrarg.' in another shape?" "Not a bit of it, madam, but a delicious white Burgundy, which comforts the brains at night, and moves the bowels in the morning." Bowels that shut themselves up before aloes and scammony melt before such a *régime* as this. In similar cases, suppose a clerk or man of business dyspeptic and constipated. Ask him how he breakfasts. On tea, bread and butter, and egg. Order him, for breakfast, a mutton cutlet, a plate of mashed turnips, and a glass of cold water reddened with claret, and he will be a different man in one day.

(To be continued.)

Mr. Jonathan Hutchinson proposes to deliver a course of lectures on Diseases of the Skin, Syphilis, etc., at the Hospital for Diseases of the Skin in Blackfriars. They are to be delivered on Mondays and Tuesdays, beginning January 28.

REVIEWS.

Idiocy and its Treatment by the Physiological Method. By Edward Seguin, M.D. New York: Wood and Co. 1866. Pp. 457.

"*Idiocy is a specific infirmity of the cerebro-spinal axis, produced by deficiency of nutrition in utero and in neo-nati.* It incapacitates mostly the functions which give rise to the reflex, instinctive, and conscious phenomena of life; consequently the idiot moves, feels, understands, wills, but imperfectly; does nothing, thinks of nothing, cares for nothing (extreme cases). He is a minor legally irresponsible, isolated without associations, a soul shut up in imperfect organs, an innocent." It is thus that Dr. Seguin defines the condition of a class of human beings which of late years has attracted a large amount of philanthropic attention, and whose amelioration is now made the business of men of high professional status and noble resolve. The circumstances which favour the production of this condition, Dr. Seguin divides into endemic, hereditary, parental, and accidental. The endemic are only connected with some forms of cretinism. Dr. Seguin warns us against confounding the harmless idiot with imbeciles, insane persons, epileptics, etc. The mind of the idiot "is extremely limited, but not deranged, and with no special tendency to final insanity. He has been hurt often, but he never assailed anybody; he loves quiet places and arrangements, repeated monotonous sounds or stillness, and, above all, plain and familiar faces; he has a look not of envy at things and persons, but of abstraction." Still, "practically and legally the idiot has been assimilated to unfortunate beings whose rights upon society are different from his, and he has suffered deeply by the mistake." The classes of persons referred to are simply backward children, demented persons, the young insane, and imbeciles. The last-mentioned, who are very generally mistaken for idiots, are thus painted by our author:—"He is rarely affected with muscular or sensorial disorders, unless from accessory causes, such as chorea, or hemiplegia, or made worse by self-abuse; his affection is more referable to the condition of the nervous centres, and is of an intellectual cast bearing on attention, memory, reason, etc. He has arrived at that condition of mental degeneration by any of the circumstances which produce deficiency of nutrition, and cause idiocy in early life and imbecility in subsequent years. The imbecile, having previously to the arrest of his development acquired experience of things and persons, and gathered consequently instinctive and social feelings, the same cause which leaves at the outset of life the idiot incapable, ignorant, and innocent, leaves later the imbecile self-confident, half-witted, and ready to receive immoral impressions satisfactory to his intense egotism. Hence we see him coming forward with an ungainly aspect, making show of his trinkets and offering them for trade. He can read more or less, speaks confusedly, and recites verses with pouting emphasis and sprinkling of saliva. He might do some kind of work which may be accomplished by the repetition of simple movements, if his mind could be steadied to any employment. He delights in the company of street boys, who joke, cheat, and abuse him. These tastes and habits educate him to boasting, lying, cruelty, artifice, jealousy, and even to plotting robbery and arson, with a strong dose of hatred for those who advise him to take a better course. Later, these moral depravities make a lodgment in his brain in the shape of false reminiscences or spurious images of impossible facts; he mistakes his best friend for his foe; does not feel safe; has seen eyes following him in the night, or a suspicious light cross his room; he heard threats behind him; he knows the fellow, and will break his neck. The next we hear of him he will be in a prison or insane asylum, or involved by a sharper in a law suit; to-day he is an imbecile, to-morrow he may be a criminal." (P. 69.) Against confounding idiots with such as these Dr. Seguin properly protests.

The greater part of Dr. Seguin's book is devoted to the subject of the physiological education and moral treatment of idiots. "Our method," he says, "to be really physiological must adapt itself in principles as well as in its means and instruments to the healthy development and usages of the functions, particularly of those of the life of relation: the apposition, to be true, must leave no gap, suffer no discrepancy. Man, being a unit, is artificially analysed, for study's sake, into his three prominent vital expressions, activity, intelligence, and will. We consider the idiot as a man infirm in the expression of his trinity, and we understand the method of training idiots or mankind, as the philosophical agency by which the unity of manhood can be reached, as far as practicable in our day, through the trinary analysis. According to this trinitarian hypothesis, we shall have to educate the activity, the intelligence, the will—three functions of the unit man, not three entities antagonistic one to the other. We shall have to educate them not with a serial object in view (favourite theory of A. Comte), but with a sense of their unity as one being." (P. 83.) The education of the muscular system is effected by a series of appropriate exercises, the first of which consists rather in efforts to restrain than to perform voluntary acts. As long as automatic, mechanical, or spasmodic motions "exist with or without negative immobility of the rest of the body, we cannot expect to see the child improved in willed action nor in active immobility; therefore, it is our duty to try and overcome it all at once when we can, or as soon as possible." When voluntary quietude is attained, voluntary effort is next sought, commencing with the teaching of prehension. Next the idiot must be made to work. As the education proceeds advantage is taken of personal imitation by grouping children together in their exercises. The senses are to be educated also, that of touch being one of the first and most important to receive attention. In the training of the sense of hearing, Dr. Seguin speaks highly of the efficacy of music, the character of which must be varied according to the object immediately to be gained. The teaching of speech consists in the execution of mimicry, and partly in the modulation borrowed from music for the training of the voice. In these, and in all other similar matters, the author enters fully into the details of management.

Next as to moral discipline. "The moral treatment," he says, "is the systematic action of a will upon another, in view of its improvement; in view, for an idiot, of his socialisation. It takes possession of him from his entrance in to his exit from the institution; from his opening to his shutting his eyes; from his acts of animal life to the exercise of his intellectual faculties. It gives a social meaning, a moral bearing to everything about him." Moral treatment is thus blended with physiological training. "The discipline or moral government of idiots, without differing absolutely from that of other children, has its peculiarities. A good many idiots cannot understand nor follow a private discipline expressed by orders, who will follow the general discipline of a school by a sort of intuition as if knowingly; they seem to comprehend it through contact with other children." Small groups are found more effective than large ones. Dr. Seguin has some good observations upon rewards and punishments as applicable to idiots. After all, however, he says, "Moral education is nothing else than a revelation; as such, its teaching to children by books, or even by common language, would be a complete failure; whereas it is accomplished quite easily through moral agencies whose simultaneity is the *chef d'œuvre* of the art of human training. Though these moral influences proceed mostly from the ruling will of the master, we must distinguish those which emanate immediately from his own self from those which are the result of intermediate agencies prepared by him or not. These agencies (time, place, and surroundings) will first attract our attention as putting the child in the best external conditions to become spontaneous or willed afterwards." (P. 216.) As with physiological training, so with moral, it is generally easier at first "to repress than to produce actions, and the idiot may sooner be refrained in his instinctive manifestations than forced to produce some intelligent ones; this is our line." The work performed by an idiot is a prominent occasion for moral treatment. "Idiots must be made to work for a result. That result or product must be sensible and comprehensible in proportion to their perception and intellect; must be at first of personal and immediate use, such as to draw water to quench actual thirst, or to pull up from the garden vegetables to eat presently, etc. The next and complementary step leads them to do the same or similar work for the satisfaction of others. Soon again they must be made to work in co-operation; several to help one or one to help several; one helped for his own good, or helping for the advantage of others; all manner of solidarity, either in the work or in its result; working as a social element, as a moral status." (P. 239.) Throughout the treatment, variety of occupation and exercises must be carefully studied, so as to avoid fatigue and so to alternate as that the daily routine of an institution shall be a source of pleasure and not of pain to the inmates.

The Fourth Part of Dr. Seguin's book is devoted to the

arrangements, structural, domestic, social, and governmental, of schools and institutions for idiots. Into this we cannot enter here, but shall merely say that in this, as in the former chapters, there are exhibited by the author a command of his subject and an amount of good common sense which induce us to regard him as a guide who may be followed with confidence.

In an appendix we have given us a record of fifty-seven observations of cases of idiocy—selected, of course—which show what may be done with even the worst imaginable idiots. The three last cases are those of persons brought up in idiot institutions, and who subsequently entered, the one the navy of the United States, and who is now mate of a merchant ship; the others, the army, all three having done honourable and devoted service to their country during the late war. The book altogether is an admirable one.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

PARIS, January 7, 1867.

THE Medical world, in this city, has been for the last six or seven weeks in a state of great agitation. Not that any new invasion of cholera is apprehended for the present year, nor that any less formidable epidemic has made its appearance amongst us; but a subject of the highest importance—a subject closely connected with the progress of science and the interests of the Profession in this country—has all at once been prominently brought before the public. I allude to the state of the Faculty and the actual conditions of Medical education in this great centre of learning.

The competitive system, by means of which in former times the Professors both of Law and of Medicine were exclusively appointed, was abolished at the commencement of the present reign. A period of unusual turbulence was then succeeded by a period of unusual quiet. Silence became the order of the day, and, that perfect harmony might be established throughout all the branches of the administration, the system which allowed any man to come forward and claim a seat in virtue of his capacities was laid aside as subversive; at least, it was retained only for the subordinate ranks of scientific promotion. Assistant-Professors, Hospital Physicians and Surgeons, still continue to be appointed according to the old rules; but the nomination of Professors is now entrusted to the Faculty itself, which has become, in point of fact, a self-elected body. Whenever a vacancy occurs, a list of three candidates is drawn up by the surviving Professors, and the Minister, although legally entitled to reverse the decision, invariably confirms it, by selecting the name which stands at the head of the list.

The proceedings which take place on such occasions have sometimes been compared to the election of a Pope by the Sacred College; and as the cardinals are supposed by sceptical minds not to be at all times swayed by the interests of religion, so also this venerable Faculty has been suspected, by cross-grained critics, of having occasionally neglected the interests of science. Far be it from us to countenance so injurious a supposition. No doubt, the choice of the illustrious electors is dictated by the purest of human motives; but it must be confessed that the men who in former times made science what it is, are in general little disposed to patronise the men who in our own day are engaged in making science what it will be. In other words, little favour is shown to the promoters of newfangled opinions, while praise, honour, and profit are showered upon the defenders of the ancient faith.

On the other hand, it must be confessed that age has dimmed the lustre of some of the brightest intellects which the annals of French Medicine and Surgery can boast of. The highest veneration is due to the veterans of science, and their names ought never to be mentioned without a feeling of deep and sincere admiration. But there is a time for action and a time for rest. The hero who fought the battles of his country forty years ago, is, for that very reason, unfit to take the command of an army now; and if the Iron Duke had been alive at the opening of the Crimean campaign, it would have been obviously unwise to have placed him at the head of the allied forces. If such is the rule in military affairs, may not the same be said of intellectual pursuits? In the field of science, as well as on the field of battle, active leaders are indispensable, and in the bustle and turmoil of the present day we cannot suffer our chieftains to stand aloof, and, waving a withered hand, to urge on their troops with a feeble cheer. Our captains must be found fighting in the foremost ranks, and leading us into action, instead of lingering in the rear.

The deficiencies of the present system become, on certain occasions, painfully evident. One of the most eminent scientific men of France, after reaching the extreme limits of old age, still retained his chair, and made his appearance at examinations. But his faculties were so far impaired that he actually forgot the questions he had been making, and repeated the same queries five or six times in succession—a proceeding well calculated to dishearten even the most laborious of students, if it had not been the Professor's constant practice to go to sleep while the candidate was answering, and suddenly waking up from his slumbers, when the responding murmur ceased, to express, with a benevolent smile, his entire approbation. The eccentricities of another well-known Physician had of late years arrived at such a degree that when he filled the chair his astonished hearers could scarcely trust their own senses; so extraordinary were the propositions which he laid down, with all the dogmatism of official authority.

For a long time the decline of this celebrated school was not apparent to superficial observers; struck with the principal figures, they did not inquire how the canvas was filled up. But of late the rapid progress of science in Germany has opened the eyes even of Frenchmen. No doubt this country possesses some of the most illustrious Medical philosophers of the present age; but the labours of Claude Bernard and Robin cannot always counterbalance all the discoveries made abroad. The Prussian microscope has been fully as successful as the Prussian needle-gun; and it is high time to promote the men of a younger generation, who are able and willing to uphold the scientific rights of the tricolor flag—unless, indeed, France is prepared to submit at once to German ascendency.

Such was the state of public opinion on the subject, while on Mount Olympus the immortal gods were enjoying that blissful repose which, according to the Roman poet, is chiefly the result of their serene indifference to all human affairs. But the resignation of Professors Andral and Trousseau, the painful disease of Professor Jobert, and the lamentable event which struck down Professor Grisolle in the midst of his career, at once deprived the Faculty of four of its most valuable members. The Minister of Public Instruction was informed that seven chairs out of twenty-seven were filled by Assistant-Professors, and then the long-expected crisis came. Six seats were simultaneously declared vacant, and a hard struggle immediately began between the representatives of the old school and the promoters of modern views. Three nominations have already taken place; and, in spite of strong opposition, the enlightened party has prevailed. The pressure of public opinion and the personal influence of the Dean (Professor Wurtz) have mainly contributed to so desirable a result. The names of Drs. Sée, Lasègue, and Vulpian are full of promise for the future. Dr. Sée, who is promoted to the chair of Therapeutics, is principally known for his very interesting lectures on experimental pathology, in which he endeavours to elucidate the laws of disease by the recent discoveries of physiology. Dr. Lasègue is one of the most eloquent men in France: his lectures on mental diseases were attended with the greatest success, and his deep knowledge of Medical literature marks him out as an excellent teacher of general pathology. Dr. Vulpian, who has been appointed Professor of Morbid Anatomy, is equally distinguished as a naturalist, a physiologist, and a micrographer; for three years in succession he has filled the chair of Comparative Physiology at the Jardin des Plantes, and his recent work on the nervous centres is one of the most instructive and interesting publications which have appeared of late years in this country.

Three seats remain to be provided for, and there is every reason to hope that an equally enlightened spirit will again direct the votes of the Faculty. May the infusion of young blood into its old veins revive its former ardour! The only regret which an impartial and disinterested observer can express is that the liberal and enterprising Minister who presides over the department of Public Instruction in France has not seized so favourable an opportunity for restoring the long-abolished competitive system—a mode of proceeding which, while it affords a splendid field for talents of every kind,

effectually silences the clamours of the vanquished, and leaves them no room to complain of injustice when they are defeated in a fair and open struggle.

The preceding remarks derive additional force from the singularly improper tone which a part of the French Medical press has adopted towards some of the newly elected candidates. Of course, the friends of the less fortunate competitors may well be allowed to express their regrets, and to deplore that a long and laborious career has not ended in a crowning victory. But should they be permitted to brand them with atheism, and place them in the same category with the hot-headed students who, fourteen months ago, assembled at Liège for the express purpose of uttering nonsense? The accusation of materialism has always been directed against the men who have successfully investigated the physical conditions of life; but if the intolerance of past ages is to be revived in our own times, it ought surely to meet with no supporters among the members of the Medical Profession. The liberal training which we have all received should teach us that no man of science ought to be called to account for his extra-scientific opinions; and that liberty of conscience is the primary and indispensable requisite to the advancement of knowledge and the improvement of the human mind.

LIVERPOOL.

On December 19 a large meeting was held under the presidency of the Mayor, J. G. Morris, Esq., to consider the advisability of making a public appeal for funds to erect a new Southern Hospital. For this purpose £40,000 will be required, and at the close of the meeting it was announced that upwards of £21,000 had been promised. Many of the donations were a thousand and five hundred pounds each. A few facts will show how much need there is for this step. The present building was erected in 1842 to accommodate 50 patients. This was soon found to be inadequate to the growing wants of the neighbourhood, and two private individuals munificently enlarged it at their own expense. Still the accommodation was too limited, and it was again enlarged through private munificence to its present size. Now, at the most, it has 106 beds; but, with such a number, a very insufficient amount of space is afforded to each patient. The increase of patients is nearly 1000 yearly, the average weekly accidents being from 130 to 150. The population of Toxteth-park, in which district the Hospital is situated, has increased from 40,000 in 1842 to 80,000 at present, and this is not the sole district to which it affords relief. The present site cannot be made available for the new building, as it abuts on three sides on public ways, and on the fourth on a church. A very advantageous locality near has therefore been purchased as the situation for it.

Though, from the last report of the Medical Officer of Health, typhus has declined, there is yet cause for anxiety. Dr. Trench, as the result of careful and extended observation, considers want to be the most fruitful of all sources of this disease. This being so, our prospects for the winter are certainly not cheering, for there is a greater number of men unemployed than has been the case for years past. Mr. Heath, Secretary to the Central Relief Association, says that at present there are 1000 shipwrights and nearly 2000 iron ship-builders, boiler-makers, etc., without work, and that during the last nine months, when they had employment, their wages averaged only from 10s. to 12s. per week. Besides these, there are 1100 ship-joiners and about 5000 unskilled labourers in the same unfortunate condition; thus making nearly 10,000 men, many—perhaps the majority—of whom have wives and families depending on them, without any other means than those afforded them by charity.

Poisoning by Arsenic.—John Grief and Susan Grief, man and wife, and their two daughters, Mary Grief and Sarah Grief, have been arrested at Shernborne, near Docking, Norfolk, on suspicion of poisoning three illegitimate children of the daughters. Of these one died in 1860, one in April last, and one, aged five years, in November last. The bodies of the two last-named, Alfred and Ann Grief, have been exhumed, and arsenic found in them. The male prisoner is a "sheep-dresser," and uses arsenic in his trade. All the prisoners are remanded for the present. Sarah Grief, one of the daughters, has a child living, and is expecting shortly to give birth to another.

GENERAL CORRESPONDENCE.

CLITORIDECTOMY.

Letter from Dr. Greenhalgh.

[To the Editor of the Medical Times and Gazette.]

Sir,—The inaccuracies, to use a mild expression, of Mr. I. B. Brown's statements having been so incontestably proved, and all participation in Mr. Brown's theories and practices having been so strongly disclaimed, little now remains for me but to narrate the circumstances under which my private note was penned, and to which Mr. Brown has thought fit to give publicity in the last number of your journal.

The note which he says I wrote to him on May 24, 1865, I may have written; but I have so total a want of any recollection of having done so, that I can look upon it as the letter of a total stranger, and doing so, I and any of your readers can, and must, see at a glance that it is the letter of a man who, having received an apology, alluded to in the first sentence, writes with the overstrained courtesy which any one naturally does on accepting an apology. Mr. Brown may not understand this, but to your readers it needs no comment.

Mr. Isaac B. Brown appears to urge this note upon the attention of your readers as confirmatory of the reckless assertions contained in his communication of December 22 last: First, and in his own words, "That in a case brought to me by an eminent Physician in London, Dr. West had given his opinion to the effect that the case was a suitable one for my operation . . . that the Physician was Dr. Greenhalgh." Secondly, that I had recommended excision of the clitoris for self-abuse. The only allusion in that note to Dr. West is, that "I think" the patient "has been under" his care; there is not one word referring to clitoridectomy, as far as that Physician is concerned. But to the facts of the case. The lady to whom the note refers had suffered between seven and eight years from pruritus, for which she had been treated by more than one eminent Practitioner. Finding little and no permanent benefit from the numerous remedies prescribed, she applied to me for advice, and was under my care for many months, during which time she was once (June 13, 1864) seen by Dr. A. Farre in consultation with me. Shortly after this interview, she called upon me in the greatest distress, to inquire if anything further could be done, as all the means hitherto recommended had only given her temporary relief, and had failed to cure her distressing affection. I then informed her that Mr. Isaac B. Brown had advocated and practised the removal of the irritable parts in such cases, as he had affirmed, with the best results, but of the effects of which operation I had no personal experience. From October, 1864, to the following May I saw nothing of my patient, when she called at my house, and expressed her firm determination to have the part cut out, at the same time requesting me to arrange a consultation with Mr. Brown. At that consultation Mr. Brown not only strongly advised the operation, but promised it would effect a cure. On being appealed to by the patient for my opinion, I again repeated, and in the presence of Mr. Brown, that I could not express an opinion, as I had no experience of its effects. Three days after this interview clitoridectomy was performed by Mr. Brown, and proved a lamentable failure; the poor sufferer herself stating in a note written to me (January 6, 1866) that the irritation "has returned with its wonted force all over up the front and back passage," and that "her general health was not so good," which was probably due to the large loss of blood she sustained at the time of the operation.

After this truthful detail of facts, I still maintain that it cannot be said by any impartial judge that I recommended the removal of the clitoris for self-abuse. Thus Mr. Isaac B. Brown is caught in the crafty wiliness which he has imagined. The Profession, I may here observe in passing, will do well to take note that Mr. Isaac B. Brown is in the habit of pigeon-holing letters he receives, to be used as occasion may require against the writer.

It is not my intention to follow Mr. Isaac B. Brown step by step through the rest of his violent diatribe against me. Mr. Brown must be blind indeed when he persists in dwelling so forcibly on my visits to the "Home," as he only obtrudes on the public my peculiar competency to form the opinion I have felt it my duty to record on its merits. But let that pass: it may be very convenient for Mr. Isaac B. Brown to ride off from the general issues of the question on particular details

about myself from facing the censures of an indignant Profession and the verdict of an outraged public. I am bold to assert, however, that he will one day find that neither the public nor the Profession will be deluded by such arts as these into a forgetfulness of the real ground of the debate. Whether "the eminent Physician" of the 17th of December be "moral" or "truthful," "stupid" or "honest," "little" or "malignant," must be a matter of the smallest importance to any one but himself; to his own conscience must he stand or fall. I trust, however, that the day has not yet dawned when it shall be thought a thing equally insignificant that our wives and daughters are unjustly taxed with filthy habits, and wantonly exposed to worse than futile operations. If the operation with which Mr. Isaac B. Brown is so anxious to associate his name were capable of working the good which its champion so assiduously parades —if "insanity, epilepsy, catalepsy, and hysteria in females," and other evils to which humanity is heir, could be made to yield to the knife he wields with a dexterity I am forward to admit—Mr. Isaac B. Brown would have no warmer supporter than myself. My contention, however, is that Mr. Isaac B. Brown's practices are founded upon theories as false as they are filthy; and while in no case that I am aware of have they effected a cure, in some they have produced the very mischief they pretend to remove or avert. My contention also is, that women have *unwittingly* been made the victims of operations of the nature of which they were wholly ignorant, and that the Profession at large are bound to repudiate as strongly as they can practices so fatal to their good name and fame. Mr. Isaac B. Brown may affect to doubt that I have stated my true reason for ceasing to visit the "Home." Perhaps he may be able to explain the numerous resignations of Consulting Physicians and other members of the staff. The recent resignation of Mr. Chambers reminds me that Drs. Handfield Jones, Priestley, J. Hall Davis, and Messrs. Skey and Nunn—all honest men and true—were once on the consulting staff of the Surgical Home. Why are they not there now?

I am, &c.

Robert Greenhalgh.

77, Grosvenor-street, January 7.

Letter from Mr. I. Baker Brown.

[To the Editor of the Medical Times and Gazette.]

Sir,—I had the best reasons for believing that a committee of independent Fellows of the Obstetrical Society, in whom I had confidence, would have been proposed at the last meeting of the Society, and was sorry to find that the Council would not entertain the subject. I have now, therefore, written to the new Council to say that, if they will appoint a fair and impartial committee, I will place every facility in their hands for investigating my cases most rigidly. In the meantime, I feel confident that the new President will not allow personalities and unjustifiable language to be used against any Fellow in future discussions, and I beg to remind all Fellows of the Society that I am in no way to be held accountable for any damage the Society may sustain by the discussion of Dr. Tanner's paper.

I am, &c.

136, Harley-street, Jan. 7. I. Baker Brown.

TESTIMONIAL TO THE "PALL-MALL GAZETTE."

Letters from Messrs. G. W. Callender and J. C. Parkinson.

[To the Editor of the Medical Times and Gazette.]

Sir,—The spirited conduct of the proprietors of the *Pall-mall Gazette* in protecting the interests of the public and the honour of the Profession in the article upon Dr. Hunter, and in the defence of the case of Hunter *v.* Sharpe, has already been the subject of favourable comment in your pages.

Several members of the Profession, and a few other gentlemen, think it desirable to show some mark of their appreciation of this conduct, and propose to join in a limited subscription, the disposal of which shall be hereafter determined.

We beg to request your assistance in making known their intentions, and in furthering the object they have in view. G. D. Pollock, Esq., 27, Grosvenor-street, and T. H. Hills, Esq., 45, Queen Anne-street, have consented to act as treasurers, and subscriptions may also be paid to the Argyll-street branch of the Union Bank.

We are, &c.

G. W. Callender, 47, Queen Anne-street,
J. C. Parkinson, Arts' Club, Hanover-square.

THE BESETTING TRIAL OF OUR BOYS.

Letter from the Rev. E. Thring to Dr. Lionel S. Beale.

[To the Editor of the Medical Times and Gazette.]

Sir,—I beg to forward you for publication a letter from my friend, the head master of Uppingham School, which I am sure will interest your readers.

On another occasion I propose to offer further observations upon the Medical aspect of this question.

I am, &c. Lionel S. Beale.

61, Grosvenor-street, January 5.

Letter from the Rev. Edward Thring.

My dear Beale,—I will not refuse to give you my opinion on the subject you refer to. It falls fairly within your province. Before I do so, however, I must protest against a newspaper duel being considered as a means of advancing truth. It is simply the "judgment of God" of the middle ages adopted to modern habits. Then the sharpest lance, now the sharpest pen wins. But indeed not even this is true. The lists are not fair; the newspapers choose pretty well what they will print, and the only certain result is the satisfaction of the "ring" who enjoy this polite form of prize-fighting.

You question me about the extent of the evil and the way to meet it. The subject will be greatly simplified by distinctly defining what we mean. I conceive the question is only concerned with innocence and ignorance betrayed into sin, and has nothing to do with deliberate unchastity. At all events, the two subjects are entirely distinct—the former deals with a small class, the latter with a very large one. The confounding this distinction produces the phantom giants which, as it appears to me, both sides have been writing about.

A few words will dispose of the latter class. The laws of human nature within certain limits are very definite. As long as a great number of English homes are eminently luxurious, and, whatever the talk may be, live for luxury, the boys bred in them will grow up to animalism. Then these boys are sent with large supplies of money to schools which do not profess to deal with the education of every boy; of course they grow up to animalism.

Moreover, these schools dare not interfere too much. The parents who support this polished civilisation resent, very often with extreme and resolute energy, any attempt to enforce proper discipline on their own children.

The Universities, again, must deal with the men as they find them. Reform to any great extent at that stage is impossible; it must begin earlier. Thus it happens that, in strict accordance with the laws of human nature, a large number of young men is practically trained to animalism every year.

The *façon de parler* of homes and schools makes no difference; the practical training is of this character. Sensuality will always exist in the world. The sensual class is larger or smaller, according to circumstances; but it is, as a class, utterly distinct from the question now proposed, and ought not in any way to be mixed up with it.

I now proceed to the real point under discussion, which, as far as I have ever seen or heard, is wonderfully reduced in proportion by the above classification.

I was three years at a small private school which, I should have said from later experience, was eminently calculated in its arrangements to foster this evil; I am bound to say I never became aware of anything of the kind. I was nine years at Eton; during those nine years I was well aware from beginning to end of the luxurious unchaste class, but I never knew of the existence of Dr. Pusey's "besetting sin" in the school; what there was of it never came to light, as far as I recollect, and most certainly would have been visited both with punishment and shame amongst the boys themselves—as actually took place in a near approach to it which I do remember. In other words, no boy at Eton in my time was of necessity exposed to temptation and betrayed in this way, at least without full means of escape. I speak thus cautiously from the known difficulty of proving a negative.

Friends of mine since then have told me this was not the case in private schools where they had been, but that the whole set was corrupt in them. This is not unnatural under circumstances of prison discipline, few amusements, small numbers, and the consequent impossibility of escape if one or two bad fellows have power. I have now been upwards of thirteen years head-master here, perfectly alive to the possible existence of such an evil, and have never seen any reason to

suspect its presence. I do not mean that I deny the possibility, nay, the certainty, of individuals occasionally being caught by it. One boy did consult me on the subject, but I deny that it has ever formed a definite temptation here. I have spoken to my Medical man, and he unhesitatingly confirms this.

I will now touch on the second part of the subject—viz., what means should, in my opinion, be taken to prevent or cure. First of all, I most unhesitatingly condemn any precautions implying suspicion, and all approaches to individual treatment, unless an individual entirely voluntarily asks for advice.

Next, every father ought at an early period solemnly to warn his children against foul language and thoughts as the most accursed poison, and, when they arrive at the age of puberty, to write a short plain statement to the same effect, putting the deadly sin clearly before them in a few pointed sentences from Scripture, and also the utter destruction that lust too often brings, and the certain loss of happiness. This I believe to be a most important step.

Thirdly, as opportunity arises, which the Scripture lessons always give within a certain time, I always speak in the most decided and plain manner to my class. No boy in the upper classes here can sin from ignorance. I have heard that this plainness has had an excellent effect.

Fourthly, it is idle to suppose that there is any cure for animalism of all kinds unless higher tastes, objects, and occupations engross the mind. Good teaching for each boy, be he clever or stupid, something to interest all, whatever their tastes may be—carpentery, music, languages, athletics, gymnasium, games of all kinds, and a school garden is soon to be added;—these are the weapons with which we anticipate sensual evils, and ward off their attacks, and reduce them to a minimum. Nothing has been said of religion, for this simple reason—that religion, if true and able to act, acts through proper means, and moulds all external life in the best way. True religion does not act like a charm on sewage, but forces you to take a spade and drain it. Under proper circumstances, purity and chastity are as natural to young men as to young women, equally possible and happy. Proper circumstances mean plenty of occupation, higher objects, a knowledge of sin, without dwelling on details, no false exaggeration, but love of good, and exercise of mind and body. Flight in some form or another is in this case safety. I earnestly deprecate a perpetual pulling up by the roots to see how the plant is growing. Soul-growth, to be true, must be unconscious to a great extent, must be satisfied with honest efforts towards good and honest efforts to hate evil, and not be subjected to prying and dissection. My own conviction is very strong that even when the evil under discussion exists it is better subdued by these general remedies than by more special applications. Above all, the Legislature ought to stop with a strong hand the indecent pseudo-Medical publications which deluge the country. The thoughts ought never to be allowed for a moment to rest on foul subjects under any pretext whatever.

Believe me, yours most truly,

EDWARD THRING.

Uppingham, January 4.

THE DETECTION OF ALKALOIDS.

LETTER FROM PROFESSOR ALFRED S. TAYLOR.

[To the Editor of the Medical Times and Gazette.]

SIR,—I shall feel obliged if you will add the following remarks to the communication which I sent you last week, in reference to a paper headed "Toxicological Discrepancies."

Since my former letter was written, I have again tested the medicine, a portion of which I had preserved. I added to about half a drachm of it a solution of the iodo-hydrargyrate of potash (a mixture of solutions of corrosive sublimate and iodide of potassium). There was no change. The medicine was neither precipitated nor rendered turbid. A very diluted solution of veratria, tested at the same time, immediately became opaline. Some carbonate of ammonia had been previously added in order to place the artificial solution in the same condition as the medicine, and care was taken that there was no excess of acetic acid present, as the alkaloidal precipitate is more or less soluble in this acid.

I have explained the use of this test in enabling an analyst to state whether an alkaloid is really present or not in a liquid, in the "Principles and Practice of Medical Jurisprudence," p. 294 (1865). I have always found it to be a most satisfactory indicator of alkaloids, when used with proper precautions. It forms with a mere trace of the alkaloids an insoluble hydriodate combined with iodide of mercury. It has the great advantages over other tests proposed for a similar purpose, that it is quite free from colour, and that it is not affected by the presence of ammonia. It precipitates some alkaloids more readily and copiously than others, and it enables an analyst to distinguish the true alkaloids from some of the vegetable principles which resemble them. It is made by dissolving sixteen grains of corrosive sublimate and sixty grains of iodide of potassium in four ounces of water. As it gives a precipitate with albumen, this, when present, should be first removed by boiling the liquids to be tested.

In my former examination of the medicine, I had obtained a like negative result with this liquid. Other reagents, including tannic acid, were employed which corroborated this result, and the physiological effects of a full dose of the medicine were then tested by introducing a prepared extract into the cellular membrane of a rabbit. It had no injurious effect whatever. There was not a single symptom indicative of poisoning. The animal, however, subsequently died from the effects of a similar dose of pure veratria, showing that this poison really operates by absorption, and that, had veratria been present in the extract from the medicine, some effects would have been produced on the (herbivorous) animal.

The discrepancies, therefore, appear to me to resolve themselves into a small compass. One analyst draws his inference of the presence of veratria from the action of certain acids on something extracted from a medicine, the weight of which is not even mentioned. Another forms his conclusion of the absence of veratria or any poisonous alkaloid from the negative action of a test which precipitates veratria and alkaloids generally, and, secondly, from the extract producing in a living animal no such effects as veratria produces. The results obtained by sulphuric acid on traces of organic matter amount to nothing when the substance does not possess the leading character of an alkaloidal poison—namely, a poisonous action on the body—and other facts show that it has not the usual properties of an alkaloid. I am, &c.

January 2. ALFRED S. TAYLOR.

THE INDIAN MEDICAL SERVICE.

LETTER FROM AN INDIAN MEDICAL OFFICER.

[To the Editor of the Medical Times and Gazette.]

SIR,—You cannot imagine with what disgust the majority of us look upon the Medical service now, especially since the last new warrant, taking from us our highest appointment and three of the next best. We are obliged to do two and three duties, and get no extra allowance; whereas the military for every extra work get extra pay. An artillery officer having charge of an arsenal gets handsome staff allowance; a Medical officer in charge of a Medical depôt gets nothing, unless in addition he has a regiment. Three-fourths of the old service would leave it at once were they able; and glad are they to see that the young men of England are wise enough not to enter a service which is loathsome to the very members of that service. A major, second in command of a native infantry regiment, gets 1000 rupees a month, a Surgeon (ranking the same) gets only 825 rupees; and then we are told that we have had justice done us, and we ought to be satisfied.

Saugor, November 23, 1866. I am, &c. MEDICUS.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, DECEMBER 4, 1866.

DR. PEACOCK, President.

MR. HOLMES exhibited for Mr. NAYLOR a child nine years old, in whom there was

CONGENITAL ABSENCE OF THE WHOLE LEFT UPPER EXTREMITY,

and also of the clavicle, except a small portion of its sternal end, which could be felt as a small truncated process beneath the skin. The arm was represented by only a small papilla, and no trace of fingers was to be seen. This complete absence of even the rudiments of the limb, of which some trace is almost always to be found in cases of congenital malforma-

tion, raised the question (Mr. Holmes said) whether this was not rather an instance in which the extremity had been removed by some accident during intra-uterine life. The right elbow was anchylosed, but Mr. Holmes—who remarked that, as he hoped Mr. Naylor could have been present, he had not fully examined the case—was unable to say how this had been produced.

Dr. C. Hilton Fagge exhibited a specimen of

PRIMARY MILIARY CANCER OF THE LUNG.

The patient, a man aged 50, was admitted into Guy's Hospital under the care of Dr. Wilks. When first seen, he was sitting up in bed, suffering from great difficulty of breathing. On examination, the chest was found to be fairly resonant, except that there was dulness at the base of each lung. Sibilus was very generally audible; the expiratory sound was loud and prolonged; and posteriorly moist sounds were heard. There was also some amount of bronchial breathing at various parts of the chest. Dr. Fagge, under whose observation the case first came, concluded that the patient was suffering from capillary bronchitis, with, perhaps, some broncho-pneumonia. The expectoration was abundant, was rather viscid, and contained many fine air-bubbles. The heart sounds were normal, and the urine free from albumen. The patient was relieved by the treatment adopted, but his pulse became very irregular, and he died suddenly on the third day after his admission. On post-mortem examination, a considerable quantity of fluid was found in each pleural cavity. The lungs were bulky, and were filled with minute deposits of cancer. These deposits resembled miliary tubercles to some extent, but were rather larger and not so hard. They were found to be made up of well-formed cells, which were considered to be undoubtedly cancerous. The liver contained about a dozen deposits, of which one only was of considerable size; this consisted of well-defined delicate cells, many of them containing several nuclei. There were also minute deposits, supposed to be cancerous, in the substance of the left ventricle and beneath the pericardium over the auricles. It was especially noticed that the apices of the lungs were more free from the cancerous deposit than any other parts of the organs. There appeared to be no tendency for the cancerous matter to soften down or to lead to the formation of cavities. Dr. Fagge remarked that the case must be regarded as rare, for, with the exception of a doubtful instance exhibited by Dr. Brinton in 1856, no similar one appeared to have been brought before the Pathological Society. This form of pulmonary cancer had, however, been mentioned by Rokitansky, Bristowe, and others.

Dr. Charlton Bastian exhibited the

DURA MATER, WITH A NUMBER OF SMALL FIBRO-CELLULAR GROWTHS FROM ITS INNER SURFACE,

of a boy aged 5, who died of tubercular meningitis. The child had scarlet fever two years before, which was followed by otitis on the left side. A purulent discharge existed from this ear till within two months of the child's death. At the autopsy the left membrana tympani was found to be destroyed, and the tympanic cavity was full of thick pus, but there was no necrosis of bone. Both lungs filled with miliary tubercle. The brain presented the usual appearances met with in tubercular meningitis, but in addition it presented a marked extension upwards on the left side, nearly as far as the vertex, of the greenish-yellow inflammatory deposit. Nothing of this kind existed on the right side of the brain. On the inner surface of the dura mater, also, in the left parietal region, about forty or fifty small growths were seen, some of them pendulous, varying in size between a large pin's head and a mustard seed. The extension of the inflammation up the left side and the production of these growths seem to have been determined by the condition of the ear.

Mr. Spencer Watson exhibited drawings illustrating the microscopic appearances of inflamed cornea, and related in much detail the case from which they were made.

Dr. Powell related somewhat minutely a case of cerebral disease in a child, in which there was closure of the sutures, and at the same time a considerable quantity of fluid both in the ventricles and in the subarachnoid spaces. The fluid was probably poured out in consequence of atrophy of the cerebral substance.

Mr. Pick showed a

CASE OF ANEURISM OF THE THORACIC AORTA.

The sac was of large size, and had contracted adhesions, in one place, to the œsophagus; the walls at this point had given way, and the blood forced a channel for itself between the muscular fibres of the œsophagus; it has passed down and finally extravasated itself into the peritoneal cavity by rupturing its serous lining close to the cardiac orifice of the stomach.

Mr. Pick also exhibited

A CASE OF ANEURISM OF THE THORACIC AORTA BURSTING INTO THE LEFT BRONCHUS.

The aneurism principally affected the descending portion of the aortic arch, and here communicated with the left bronchus by an opening large enough to admit the finger; the opening, however, was partially closed by a plug of fibrine. The left lung throughout was in a state of pulmonary apoplexy; the blood, however, in the lower lobe had undergone very considerable change. There were also patches of apoplexy in the right lung. The nature of the case, during life, was obscure.

Mr. Henry Thompson showed

A SPECIMEN OF EPITHELIAL DISEASE OF THE BLADDER.

A gentleman, aged 62 years, had experienced more or less of difficulty and bleeding in micturition for ten years. He had been formerly relieved by visits to Vichy. About three months ago, his symptoms being worse, he came up to town to place himself under Mr. Thompson's care. The bleeding, which had been severe and provoked by the slightest exercise, at once gave way to injections of nitrate of silver into the bladder. He was able to walk two miles without any bleeding, and returned to the country greatly relieved. About a month after he came up, still with slight bleeding, but mainly on account of increased pain. It was evident his disease was advancing. Subsequently the symptoms became more severe, and after a few weeks he succumbed to his malady. It appeared during life that he was probably the subject of some growth in the bladder, and the long duration of the case and absence of constitutional and local signs suggested that it was not of a cancerous nature. The autopsy revealed a large mass of very soft and broken-down material in the bladder, loosely attached to a growth of wide base, circular in form, about three inches in diameter, occupying the floor and part of the right side of the bladder. There was no induration of the base, nor of parts around; no physical sign of its presence was discoverable from the rectum, so soft was the mass. The mucous membrane around showed the usual appearances of chronic inflammation. It is remarkable that no enlargement of the lumbar, iliac, or inguinal glands existed. The right kidney was studded with small growths of a similar kind. A careful examination was made by Dr. Michael Foster, late curator to the University College Museum, the result being that the growth was clearly and distinctly epithelioma springing from the mucous membrane. The foregoing case was contrasted with a case of encephaloid of the bladder, with the following history:—A gentleman, aged 72, had suffered for about three years from severe symptoms of bladder disease, resembling very closely those of calculus, for which he was repeatedly sounded by different Surgeons. Towards the end of his history the passing of blood became the predominant sign. This, together with the appearance of a rapidly growing tumour of the right temple, left no doubt as to the true nature of the malady. The autopsy presented the following appearances:—One kidney was entirely lost in a mass of encephaloid. The opposite was not involved, but was surrounded by masses of the same. The prostate partly, but chiefly the bladder, were involved in similar formations, and portions of these were in a state of advanced sloughing.

Mr. De Morgan showed a specimen of

CYSTIC DISEASE OF THE TESTICLE.

The patient from whom it came was a man, aged 35, who eight months ago severely bruised the testicle while riding. From this accident a large hæmatocele resulted, and was treated in succession with repeated tappings and the introduction of a seton. Still, however, a large swelling remained, and, as this was evidently of the testicle itself, the gland was removed. On cutting into it subsequently, Mr. De Morgan found that it was the seat of cystic disease. There was much solid matter occupied by cysts of various sizes, and filled with fluid, some blood-stained, and some serous, variously coloured. Cartilage was seen thinly scattered in small nodules throughout the mass; but no bone was to be discovered on the face of the section which had been made. The interest of the case lay in the origin of the disease, which was clearly to be traced to injury—probably a more common cause of many other diseases than can be proved by the possibility of tracing it. Another point worth notice was the presence of cartilage, a growth found with great frequency in cystic tumours.

Dr. Hermann Weber exhibited specimens of

DISEASED BONE, DOUBTFUL WHETHER CARCINOMATOUS OR SYPHILITIC.

A man, aged 40, who had first had syphilis about fourteen years before death, and had again exhibited symptoms of constitutional syphilis in 1864 and 1865, was admitted into the German Hospital in June, 1866, with severe pain behind the middle of the sternum, having at the same time a very cachectic appearance. The pain continued to increase, in spite of large doses of iodide of potassium; the shape of the sternum became soon much changed, owing to a fracture-like depression between the lower and middle third, where the bone felt as if it would easily yield to pressure. With increasing suffering and dyspnœa the patient died in September, about three months after the commencement of the pain in the sternum. The sternum exhibited two imperfect fractures; it was soft, the osseous tissue being almost entirely replaced by a greyish-red, rather firm substance of the consistence of sarcoma, yielding no juice, and exhibiting under the microscope, in a fibrous stroma, small nucleated cells, and much amorphous matter with fat globules. A similar alteration was observed in many of the ribs, in two of the cervical vertebræ, in some bones of the pelvis, and in the skullcap; there was no periostitis in the neighbourhood of the affected part. The kidneys and spleen were in the state of amyloid degeneration. No trace of cancer in any of the internal organs. Dr. Weber thought it quite impossible in the present state of our knowledge to decide whether the affection was caused by syphilitic osteomyelitis or by cancer, although the appearance corresponded with some forms described as primary soft cancer of the bones.

Dr. Hermann Weber exhibited also specimens of

SYPHILITIC DISEASE OF THE LIVER, DURA MATER, AND BRAIN,

taken from a man, aged 40, who had had several chancres during the last ten years, and had been repeatedly at the German Hospital, first in July, 1866, under Mr. de Meric's treatment for caries of the sternum, then under Dr. Sutro's with brain symptoms. The caries was much improved by iodide of iron and cod-liver oil, but in September he had a fit of unconsciousness, after which his mental faculties as well as his muscular power were much impaired, though not altogether destroyed; there was also dilatation of the right pupil, and increased reflex irritability of the left side. He died on November 8. The liver contained several firm, pale yellow tumours of irregular shape, the largest being about the size of a walnut; they were surrounded by a firm fibrous tissue, and consisted of small cells, amorphous substance, and fat in globules and granules. The dura mater covering the most anterior portion of both hemispheres was firmly adherent to the bone, and from it tumours of a pale yellow, opaque, rather firm and dry substance extended into the brain substance, which, in their neighbourhood, was softened, and contained many granular corpuscles.

A committee, consisting of Mr. Hulke, Dr. Cayley, and Dr. Hermann Weber, was appointed to report on the specimens.

NEW BOOKS, WITH SHORT CRITIQUES.

The Rinderpest of the Present Time, and the Contagious Cattle Distempers. By T. M. Madden, M.R.I.A., etc. Reprint. Pp. 42.

*** All know the proverb about shutting the door when the steed has been stolen, and Mr. Moore's neat little work may be looked upon (let us hope) as coming rather after the fair. Nevertheless, it requires a word of commendation for the painstaking inquiry, from which it has resulted, both as to the past and present of the so-called Rinderpest, and other allied complaints. We hope there is no discourtesy involved in our wish that Mr. Moore's valuable contribution to cattle plague literature may be useless so far as the *arrest* of the disease is concerned.

Der Kampf und der Sieg wider die Impfung im Volk und Parlament von England. Von Dr. Nittinger. Stuttgardt: Emil Ebner. Pp. 240.

The War against, and the Victory over, Vaccination in England.

*** Disadvantages may have resulted in certain unfortunate instances from vaccination, as in some recent cases in France and Italy, where syphilis was thus transmitted to a number of children; but that an operation which has been attended with such valuable results should be entirely discontinued is surely asking too much. Some amiable fanatics in England, as elsewhere, have taken it into their sage polls that vaccination is, or may be, the root of nearly all human ills, and want a stop put to it. The present work is of the same school, and in great part consists of English documents translated into German. We do not desire to enter into the subject at any length. Suffice it to say that the writer has succeeded sufficiently well—to please himself.

Deane's Illustrated Almanac, 1867. London: Deane and Co.

*** A publication of the well-known ironmongery firm, intended to combine instruction with amusement, and both with *profit*.

St. George's Hospital Reports. Edited by Dr. J. W. Ogle and Mr. T. Holmes. Vol. I., 1866. London: J. Churchill and Sons. Pp. 444.

*** Publications of this nature are becoming highly and deservedly popular, not only as furnishing a tie which continues to bind the former pupil with his old masters, but also as a means of making public a variety of interesting articles which might not otherwise see the light. The present volume contains some twenty-two articles, partly by the Medical officers of St. George's, partly by men formerly connected with that school. That all are good the names of their authors are sufficient guarantee; but we leave to their readers, who, we doubt not, will be many, the invidious task of saying which is best.

Report of the Papers, Discussions, and Proceedings connected with the Nottingham Meeting of the British Association for the Advancement of Science. By W. T. Robertson, M.D. London: Hardwicke. Pp. 305.

*** A perfect handbook to the Association, and a capital *résumé* of its proceedings.

The Pill Book, including Quack Medicines. By Arnold J. Cooley. London: Hardwicke. Pp. 116.

*** This little work will be found of great use to the general Practitioner, enabling him to vary his combinations of remedies almost indefinitely, yet in accordance with the experience of our best Hospital Physicians and Surgeons, and will also afford him some insight into the arcana of quack remedies.

The Diseases of the Skin; including the Exanthemata. By Ferd. Hebra, M.D., Professor of Dermatology in the University of Vienna. Translated by C. Hilton Fagge, M.D., etc. New Sydenham Society. Vol I. Pp. 396.

*** The work of our most celebrated dermatologist in a more accurate form than it is presented to the German public, having been carefully revised, and in some parts rewritten, by Professor Hebra. The translation is well done, and is highly creditable to Dr. Fagge. Will be welcome to all members of the Society.

On the Pathology of Cholera Collapse. By Horace Jeaffreson, M.D., late Resident Physician in Cholera Wards of the London Hospital. Reprint.

*** Strongly advocates the causation of collapse in cholera by inflammation of the intestines alone, and apart from any special effect of the cholera poison.

Speech delivered at a Meeting of the Liverpool Reform League on December 19, 1866, on a Plurality of Votes as a Needful Element in any Final Scheme of Parliamentary Reform. London: Longmans. Pamphlet.

*** "Ne sutor ultra crepidam." We don't interfere in politics, but we are much obliged to Mr. Macfie for sending us an intelligent speech on an important topic.

The Half-Yearly Abstract of the Medical Sciences. Vol. XLIV., July to December, 1866. London: John Churchill and Sons. Pp. 372.

Braithwaite's Retrospect of Medicine. Vol. LIV., July to December, 1866. London: Simpkin. Pp. 408.

*** The value of these annual synopses is now so well established that we need say nothing in their favour, while to enter into their contents would far exceed our limits. It is hard to say which is the better of the two; but both are so good that, whilst there is room for both, we sincerely hope both will succeed.

A Dictionary of Chemistry. By Henry Watts, F.R.S., etc. Part XXXVII. London: Longmans. Pp. 336.

*** The present part of this valuable work contains excellent articles on the compounds of silicon, on silver, soap, and sodium.

MEDICAL NEWS.

New Fellows.—The following gentlemen having been elected to the Fellowship of the Royal College of Surgeons at previous meetings of the Council, were admitted on th 10th inst:—

Thomas Jones Dyke, Merthyr Tydfil, diploma of membership dated November 2, 1838; and Thomas Edward Amyst, Diss, Norfolk, April 12, 1839.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Allison, J., L.K.Q.C.P.I., M.R.C.S., has been appointed Honorary Visiting Medical Officer to the Barrow-in-Furness Hospital and Dispensary.

Armistead, W., M.B., C.M., has been appointed House-Surgeon to the Barrow-in-Furness Hospital and Dispensary.

Beardsley, A., M.R.C.S., L.S.A., has been appointed Honorary Consulting Surgeon to the Barrow-in-Furness Hospital and Dispensary.

Ellis, T. S., M.R.C.S.E., has been appointed Surgeon to the Lying-in Charity, Gloucester.

Evans, Mr. E. C., has been appointed House-Surgeon and Secretary to the Glamorganshire and Monmouthshire Infirmary and Dispensary, Cardiff.

Harris, Dr. Gwynne, has been appointed Surgeon to the Royal Artillery, Popton Battery, Milford Haven.

Sinclair, W., M.D., L.R.C.P. and S.E., has been appointed Honorary Visiting Medical Officer to the Barrow-in-Furness Hospital and Dispensary.

Stuart, R., L.R.C.P. Edin., has been appointed Assistant Medical Officer of the Fisherton House Asylum, Salisbury.

Sutton, Dr. H. G., has been appointed Fourth Assistant-Physician to the London Hospital.

Stark, P. W., M.D., L.R.C.P. and S.E., has been appointed Honorary Visiting Medical Officer to the Barrow-in-Furness Hospital and Dispensary,

Trend, Dr. Theophilus W., L.K.Q.C.P.I., M.R.C.S. Eng., etc., has been appointed Admiralty Surgeon and Agent at Southampton, *vice* J. King Sampson, F.R.C.S. Eng., resigned.

BIRTHS.

ARMSTRONG.—On December 18, at Fulford, near York, the wife of L. Armstrong, M.D., 13th Hussars, of a son.

BLOMFIELD.—On December 28, at 8, Rye-lane, Peckham, the wife of Dr. Blomfield, F.R.C.S., of a son.

CHAPMAN.—On January 2, at Old Friars, Richmond-green, Surrey, the wife of F. Chapman, M.R.C.S.E., of a daughter.

HOUGHTON.—On December 30, at 6, Mount-street, Grosvenor-square, the wife of H. G. Houghton, M.D., of a daughter.

SPICKERNELL.—On January 4, at Eastern-parade, Southsea, the wife of Dr. G. E. Spickernell, of a daughter.

WATSON.—On December 29, at Little Huthwaite, Wortley, near Sheffield, the wife of A. M. Watson, M.D., prematurely, of a son stillborn.

MARRIAGES.

HUXTABLE—WALKER.—On January 1, at the Parish Church, East Budleigh, Devon, W. Huxtable, M.R.C.S., Belmont-villa, Budleigh Salterton, to Eliza, widow of the late Samuel Walker, Esq., Grove House, Sidmouth. No cards.

JOHNSON—FRECHEVILLE.—On January 4, at South Tedworth, Hants, W. Johnson, Esq., M.D., to Mary, eldest daughter of R. R. Frecheville, Esq. No cards.

DEATHS.

ATKINSON, B., M.R.C.S.E., J. P. for the county of Bucks, at the Rookery, Great Marlow, on January 6, aged 64.

CAHILL, A., M.D., Surgeon 25th Regiment, at the Avenue, Berwick-on-Tweed, on December 21, aged 84.

DESMOND, J., M.D. Edin., at Nelson-place, Youghall, Cork, on December 28, aged 79.

KITTSON, J. B., L.R.C.P. Edin., of Newport, co. Tipperary, on December 24, aged 26.

MARTIN, G. A., M.D. Edin., M.R.C.P. Lond., at Belgrave House, Ventnor, Isle of Wight, on January 7, aged 60 years.

PICKTHORN, Dr. G. R., R.N., Assistant-Surgeon H.M.S. *Challenger*, at Auckland, New Zealand, on October 21, in his 28th year.

ROSS, J. TUCKER, R.N., late Assistant-Surgeon Royal Naval Hospital, Simon's Bay, Cape of Good Hope, on December 31.

VISE, C., M.R.C.S.E., at Spalding, Lincolnshire, on January 6, in his 65th year.

VACANCIES.

BIRMINGHAM GENERAL DISPENSARY.—Honorary Surgeon.

NORTHAMPTON GENERAL INFIRMARY.—Assistant to the House-Surgeon.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Chailey Union.—Mr. William G. Tiley has resigned the Third District; area 3103; population 1162: salary £16 per annum.

Cricklade and Wootton Bassett Union.—Mr. Geoffrey V. Cooper has resigned the First District; area 10,760; population 2985; salary £40 per annum.

Tavistock Union.—Mr. Graham has resigned the Beerferris District; area 5850; population 2847; salary £22 6s. 8d. per annum.

APPOINTMENTS.

Banbury Union.—Patrick James O'Neill, L.R.C.S. Ire., L.S.A., L. K. and Q. Coll. Phys. Ire., to the Hornton District.

Camelford Union.—Arthur Wade, M.R.C.S.E., to the Boscastle District.

Chorlton Union.—Samuel Woodcock, L.R.C.P. Edin., L.R.C.S. Edin., L.S.A., Resident Assistant for the Workhouse.

Dartford Union.—Richard H. Hunter, M.R.C.S.E., L.S.A., to the Workhouse.

Greenwich Union.—Francis J. Ryder, M.R.C.S.E., L.S.A., Assistant for the Workhouse.

Halifax Union.—John Macnab, M.D. Aber., L.R.C.P. Edin., L.F.P. and S. Glas., to the Hipperholme District.

Oldham Union.—Abraham Leach, jun., M.R.C.S.E, L.S.A., to the Ninth District.

Sturminster Union.—Decimus Curme, M.R.C.S.E., L.S.A., to the Child Okeford District.

Wrexham Union.—Hallam Moore Dixon, L.R.C.Phys. Edin., M.R.C.S.E., L.M., to the Gresford District.

HARVEIAN SOCIETY.—At the annual meeting of this Society on January 3, the following gentlemen were elected officers for the ensuing year:—*President:* *J. E. Pollock, M.D. *Vice-Presidents:* T. Ballard, M.D.; *W. F. Cleveland, M.D.; *Ernest Hart, Esq.; J. B. Walker, Esq. *Treasurer:* Henry William Fuller, M.D. *Hon. Secretaries:* J. Brendon Curgenven, Esq.; Charles R. Drysdale, M.D. *Council:* Victor De Meric, Esq.; J. Eardley, Esq.; John Evans, Esq.; J. Gayleard, Esq.; *R. S. Jeffs, Esq.; J. Stewart Lamb, M.D.; James R. Lane, Esq.; J. Z. Laurence, Esq.; *H. W. Lobb, Esq.; Edwin Lowe, Esq.; *Duncan Menzies, M.R.C.P.; *J. Rushforth, Esq. An asterisk is prefixed to the names of those gentlemen who did not hold the same office the preceding year. The retiring President, Dr. Tyler Smith, read a very able address embodying the report and suggestions of the Committee on Infanticide. So important was the report considered that it was unanimously resolved it should be printed.

AT a meeting of the Harveian Society on December 20, Dr. C. Drysdale read a valuable paper on "Inherited Syphilis," which led to a discussion in which several of the members joined. We regret that pressure of other matter will not permit us to do more than allude to the subject.

FORMATION OF AN IRISH BRANCH OF THE BRITISH MEDICAL ASSOCIATION.—We are happy to state that, in consequence of the approaching meeting of the British Medical Association in Dublin in 1867, steps have been taken to organise an influential Irish District Branch. For this purpose, a meeting of members of the Medical Profession in Dublin was held on December 3, 1866, at the King and Queen's College of Physicians, Kildare-street, Dublin; Dr. Stokes, President of the College, in the chair. There were also present: Dr. Beatty, Dr. Tufnell, Dr. McClintock, Dr. Duke, Dr. Belcher, Dr. Kidd, Dr. Lawler, Dr. Finny, Dr. Frazer, Dr. Collis, Dr. Lyons, Dr. Benson, Dr. Head, Dr. Mapother, Dr. Hudson, Mr. Porter, Dr. P. C. Smyly, Dr. R. McDonnell, Dr. Atthill, Dr. Murray, Dr. Cruise, Dr. W. Moore, Dr. Fleming, Dr. Burke, Dr. Ringland, Dr. McSwiney, Dr. Bennett, Dr. Gordon, and Mr. William Stokes. A letter of apology from Sir Dominic Corrigan, Bart., was read, in which he regretted much his inability to attend, and expressed his hearty co-operation in the object. It was proposed by Dr. W. Moore, seconded by Dr. Lyons, and agreed to—"That this meeting resolve itself into a District Branch of the British Medical Association." *A Reception Committee* was then formed, on which the following gentlemen consented to serve:—Sir Dominic Corrigan, Bart., M.D.; Dr. Robert McDonnell; Dr. Banks; Dr. Beatty; Sir William Wilde; Dr. Lyons; Professor Law; Dr. W. Moore; Dr. Kidd; Dr. Bennett; Professor Haughton, M.D. *Local Secretaries to Reception Committee:* Dr. Tufnell and Dr. Cruise. It was also agreed that the members present should constitute themselves as Council of the Irish Branch Association. Mr. William Stokes, jun., was appointed Honorary Secretary and Treasurer.

MARRIAGE OF THE SO-CALLED AZTECS.—Our readers will probably recollect that some years ago two diminutive microcephalic idiots were exhibited in London under the name of Aztecs, and that a narrative was published detailing the circumstances under which they were forcibly removed from a city called Iximaya, in Central America. They will also recollect that, a few months after the exhibition of these individuals before several learned bodies in England, a paragraph went the round of the American papers, stating that these Aztecs were in nowise descendants of the veritable Aztecs who built the Mexican temples, but were merely Spanish and Indian mestizos, or "mixed breeds," and their parentage was traced. It was further stated that these unfortunate beings were brother and sister. However this may be, we regret to see that a marriage between them was effected last week in London, and that both of these deplorable beings enjoyed the ceremony extremely. It will be curious, if any offspring should be the result of this disgusting experiment, to ascertain whether the cranial and cerebral deficiencies of the parents will be transmissible. Whether such an opportunity will arise, we consider very doubtful. We wonder whether the "Wild Men of Jesso," whose cause the Aborigines Protection Society have taken up, will also attempt to perpetuate their race in confinement. We hope so for the sake of human charity. The marriage was effected at the Registrar's office of St. George, Hanover-square. The showman makes out that he has spent £2000 on the bride's *trousseau*.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Mr. Arthur Humphry's (of St. Bartholomew's) cases have been received; they will be inserted shortly.

Mr. Heckford's paper on Entrance of Air into the Veins, and Mr. Little's article on Venous Injections in Cholera, shall appear immediately.

Cholera at Port Glasgow.—Port Glasgow is twenty miles down the Clyde, between the city of Glasgow and the sea, and is not within the jurisdiction of Professor Gairdner. There have been no cases at Glasgow since the beginning of December, and not many at Port Glasgow. On January 8 two new cases of cholera were reported. Last week twenty-two cases are stated to have taken place, a large proportion of which proved fatal. The Hospital is now in active operation; suitable nurses have been provided, and every convenience necessary has been obtained.

Clitoridectomy.—Our table is covered with notes on this unpleasant subject, so that we are compelled to publish those only which refer to the operation as contradistinguished from the operator, and such as are signed with the writer's name.

L.B.—It is surmised that St. Thomas's Hospital will be completed, perhaps not entirely, in 1869. Being on the pavilion principle, a part may be opened as soon as completed. It is to contain 700 beds. The present temporary Hospital holds about 300 beds.

Dr. Bree.—The writer of the article to which our correspondent refers begs us to state that in the passage quoted he had no intention whatever of detracting from the fame of the great physiologist in question; but the precise contrary. His meaning, perhaps too tersely expressed, was simply that the discoveries of the physiologist named would probably in the course of time become resolved in a more general and definite law, and would thus cease to bear the significance that was attached to them when they were first put before the world.

F.R.C.S. Exam.—On referring to the College Calendar, we find that Mr. Holden was admitted a Member January 19, 1838; a Fellow, December 24, 1844; Mr. Coote, a Member July 4, 1838; a Fellow, December 24, 1844; Mr. Critchett, a Member October 11, 1839; a Fellow, December 24, 1844; Mr. Holt, a Member May 3, 1839; a Fellow, December 12, 1847. It will be seen that Mr. Luther Holden is the senior of the four gentlemen named. The circumstance to which you allude is accidental, as there were, we think, at one time no less than four Westminster Hospital Surgeons on the Council of the College of Surgeons.

TESTIMONIAL TO THE "PALL-MALL GAZETTE."—LIST OF SUBSCRIBERS.

	£	s.	d.
Professor Bentley	1	1	0
Dr. Brodie	1	1	0
Dr. Black	2	2	0
Professor H. Bennett	2	2	0
G. W. Callender, Esq.	2	2	0
John Churchill, Esq.	2	2	0
G. Critchett, Esq.	2	2	0
Holmes Coote, Esq.	2	2	0
T. B. Curling, Esq.	2	2	0
Dr. Druitt	2	2	0
Sir W. Fergusson, Bart.	2	2	0
Dr. Garrod	2	2	0
Dr. Greenhalgh	2	2	0
Dr. Gull	2	2	0
D. B. Hanbury, Esq.	1	1	0
Dr. Harling	2	2	0
E. H. Hills, Esq.	2	2	0
T. H. Hills, Esq.	2	2	0
E. Hart, Esq.	2	2	0
Luther Holden, Esq.	2	2	0
John Hilton, Esq.	2	2	0
R. Leigh Hollard, Esq.	1	1	0
Dr. Horace Jeaffreson	1	1	0
Dr. Jenner	2	2	0
Arthur J. Lewis, Esq.	2	2	0
T. Lawrence, Esq.	2	2	0
C. De Morgan, Esq.	2	2	0
F. Mason, Esq.	0	10	6
Dr. Murchison	1	1	0
John Morgan, Esq.	2	2	0
Dr. Martin	1	1	0
Hugh Owen, Esq.	1	1	0
G. Pollock, Esq.	2	2	0
J. C Parkinson, Esq	1	1	0
Dr. Paget	2	2	0
James Paget, Esq.	2	2	0
Oliver Pemberton, Esq.	2	2	0
J. Propert, Esq.	2	2	0
Henry Rogers, Esq.	2	2	0
James Rouse, Esq.	1	1	0
Professor Rolleston	1	1	0
W. S. Savory, Esq.	2	2	0
Thomas Smith, Esq.	1	1	0
Dr. Southey	2	2	0
Dr. Symonds	2	2	0
Dr. Sibson	2	2	0
H. Thompson, Esq.	2	2	0
T. Turner, Esq.	2	2	0
J. Soelberg Wells, Esq.	2	2	0
Dr. Forbes Winslow	2	2	0
Rev. M. C. Wrond	2	2	0
Alfred Willett, Esq.	2	2	0
W. Foster White, Esq.	2	2	0
Erasmus Wilson, Esq.	2	2	0
Sir T. Watson, Bart.	2	2	0

COMMUNICATIONS have been received from—
Dr. SUCKLING; Dr. D. MILLER; Mr. STOKES; Mr. HECKFORD; Dr. HOLT DUNN; Mr. I. B. BROWN; Dr. GREENHALGH; Mr. F. CHURCHILL; Dr. J. G. WILSON; Mr. CALLENDER; Mr. PARKINSON; Mr. J. E. D. RODGERS; Dr. W. T. GAIRDNER; Dr. LIONEL BEALE; Dr. HAWARD; Dr. HUGHLINGS JACKSON; Mr. G. R. SHERATON; Dr. BALLARD; Mr. J. CHATTO; Dr. MOXON; Professor A. S. TAYLOR; Dr. J. D. HULME.

BOOKS RECEIVED—
Edinburgh Medical Journal, No. 139—Paget's Harveian Oration—Wilkins's Etiology of Cholera—Journal of Mental Science, No. 24—Bulletin de l'Académie Royale de Médecine—Smith's Pneumonia in Young Children—Baker's Origin of Pyæmia—Robertson's Pavilion Asylums.

NEWSPAPERS RECEIVED—
Gazette des Hôpitaux—Medical Press and Circular—Gazette Médicale de Paris—L'Union Médicale—Sunday Gazette.

VITAL STATISTICS OF LONDON.

Week ending Saturday, January 5, 1867.

BIRTHS.

Births of Boys, 1031; Girls, 974; Total, 2005.
Average of 10 corresponding weeks, 1856-65, 1954·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	728	709	1437
Average of the ten years 1856-65	731·5	737·1	1468·6
Average corrected to increased population	..	..	1615
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa.	Cholera.
West	463,388	4	1	1	4	10	7	..	..
North	618,210	20	7	9	..	11	13	4	..
Central	378,058	4	7	5	..	11	4	3	..
East	571,158	7	9	8	..	14	9	5	..
South	773,175	8	12	12	2	8	11	4	..
Total	2,803,989	43	36	35	6	54	44	16	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·408 in.
Mean temperature	25·2
Highest point of thermometer	41·9
Lowest point of thermometer	6·6
Mean dew-point temperature	21·8
General direction of wind	Variable.
Whole amount of rain in the week	0·63

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, January 5, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending Jan. 5.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending Jan. 5.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	2005	1421	1437	41·9	6·6	25·2	0·63	64
Bristol (City)	165572	35·3	125	74	‡77	43·0	14·1	29·3	0·54	55
Birmingham (Boro')	343948	43·9	206	167	160	42·5	12·7	27·2	0·33	33
Liverpool (Borough)	492439	96·4	329	285	334	42·1	16·3	27·6	0·24	24
Manchester (City)	362823	80·9	218	205	‡218	43·0	14·0	27·4	0·28	28
Salford (Borough)	115013	22·2	65	58	65	42·9	13·0	27·3	0·59	60
Sheffield (Borough)	225199	9·9	169	119	97	34·0	15·5	27·2	..	..
Leeds (Borough)	232428	10·8	126	118	135	46·3	5·0	24·5	0·34	34
Hull (Borough)	106740	30·0	85	49	58	..	..	..	..	..
Newcastl-on-Tyne, &c.	124960	23·4	80	66	105	35·0	12·0	27·0	..	..
Edinburgh (City)	176081	39·8	97	85	106	38·7	16·0	27·9	0·20	20
Glasgow (City)	440979	87·1	356	257	277	47·0	13·0	27·5	0·33	33
Dublin (City and some suburbs)	319210	32·8	187	†157	150	45·9	2·8	27·5	0·84	85
Total of 13 large Towns	6187764	34·8	4048	3061	3219	47·0	2·8	27·1	0·36	36
					Week ending Dec. 22.	Week ending Dec. 22.				
Vienna (City)	(1863) 560000	..	..	..	331	..	..	§24·6	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·408 in. The barometrical reading increased from 28·91 in. on Wednesday to 29 92 in. on Saturday.
The general direction of the wind was variable.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.
† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.
‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.
§ The mean temperature at Greenwich during the same week was 41·3°.

APPOINTMENTS FOR THE WEEK.

January 12. *Saturday (this day).*
Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

14. *Monday.*
Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.
MEDICAL SOCIETY OF LONDON, 8 p m. Mr. Alfred Cooper, "On Fissure of the Rectum."

15. *Tuesday.*
Operations at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.
ANTHROPOLOGICAL SOCIETY OF LONDON, 8 p.m. Meeting.
PATHOLOGICAL SOCIETY, 8 p.m. Meeting.
ROYAL INSTITUTION, 3 p.m. Rev. Charles Kingsley, "On the Ancien Régime as it existed on the Continent before the French Revolution."

16. *Wednesday.*
Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

17. *Thursday.*
Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.
HARVEIAN SOCIETY OF LONDON, 8 p.m. Mr. W. Adams, "On the Treatment of Hip-joint Disease."
LINNEAN SOCIETY, 8 p.m. Dr. Cobbold, F.R.S., "On *Distoma Clavatum* from a Swordfish;" also, "On Experiments with *Trichina Spiralis*."
ROYAL INSTITUTION, 3 p.m. Rev. Charles Kingsley, "On the Ancien Régime as it existed on the Continent before the French Revolution."

18. *Friday.*
Operations at Westminster Ophthalmic, 1½ p.m.
ROYAL INSTITUTION, 3 p.m. Professor Tyndall, "On Sounding and Sensitive Flames."

ORIGINAL COMMUNICATIONS.

FUNDAMENTAL STRUCTURE AND ARRANGEMENT OF A NERVOUS APPARATUS.

By Dr. LIONEL S. BEALE, F.R.S.,
Fellow of the Royal College of Physicians, Physician to King's College Hospital, and Professor of Physiology and of General and Morbid Anatomy in King's College, London.

Few anatomical inquiries are of greater general interest, or have a more important bearing upon Pathology and Medicine, than the arrangement of nerves.

Many of those who study nervous action, as well as those who write upon diseases of the nervous system, appear almost to pass by the results of anatomical inquiry, as if they were of no use or interest to them. But how is it possible for us to gain much reliable knowledge concerning the nature of many of the most important healthy nervous actions, or the most ordinary nervous diseases, until we have ascertained the fundamental arrangement of a nervous apparatus? Even now many maintain that there are nerve cells unconnected with nerve fibres, and the utmost confusion prevails concerning the relation of the cell to the fibre, and the fibre to the texture, which is influenced, or which influences it.

The typical arrangement of a nervous mechanism has yet to be determined. Some think there are central nerve cells unconnected with fibres. It is supposed by others that the nerve in one part of its course may be influenced by a cell not connected with it, while in another part it affects a particular tissue by reason of its structural continuity with it. Some fibres, it is supposed, leave cells, and gradually cease without having any office to perform, while others pursue a very long course to their distribution. By some, nerves are said to end by free extremities, by others to lose themselves in the tissue or to become continuous with it. Some maintain that nerve force is electricity, others that it is another mode or form of force, and, like it, related to heat and motion, while others again regard the nervous force as something *per se*. Of the first, few have the consistency to maintain that intellectual action is of the same nature as ordinary nerve force, while the latter are content to make the assertion without attempting to explain what they mean. But is it probable that the nature of the nerve force will be determined before the precise arrangement of the nervous mechanism has been ascertained; and, on the other hand, is it not very likely that the discovery of the exact nature of the mechanism will lead to positive conclusions concerning the nature and mode of action of the nervous force?

I propose to give a very brief sketch of the conclusions which I have arrived at from the anatomical side. As my inferences are deduced from very many different investigations, and are easily understood, I hope they will be considered by those interested in Medicine and Physiology, and I trust that the observations upon which they are based will be carefully investigated by practical observers. I shall divide the subject as follows:—1. Peripheral nervous organs. 2. Nerve-fibres; and 3. Nerve centres.

The results of these investigations are such that it seems to me impossible to resist the conclusion that every nervous apparatus, from the lowest and simplest to the highest and most complex, *is a complete and uninterrupted circuit.*

Peripheral Nervous Organs.

The peripheral distribution of nerve-fibres may be studied in certain forms of connective tissue, as in the subserous texture of the peritoneum, in surfaces endowed with common sensation, in certain special sensitive organs, and in voluntary or involuntary muscle.

In the fibrous tissue of the abdominal cavity of the hyla or green tree frog, and especially in the mesentery, the ultimate distribution of the nerve-fibres can be clearly demonstrated. The finest fibres, which are unquestionably compound, are seen to form net-works, and no distinct ends or terminal organs can anywhere be detected. As in other situations, masses of germinal matter (oval nuclei or cells) are connected with these fibres in the manner represented in Figs. 11, 12, 16, 18, 19, 20. The number of these varies greatly in different parts. In the fibrous tissue they are few in number.

In the cornea of the same animal, net-works of delicate, pale, granular fibres can be demonstrated with great distinctness. The meshes are finer, and the nerves, perhaps, ten times as numerous as in the connective tissue of the abdominal cavity, and there are more masses of germinal matter or nuclei in connection with them than in the latter situation.

Among the muscular fibre cells, and *in the connective tissue on the outer surface of the lung, in that connected with the oviduct and with the vas deferens*, in the frog and newt, the same arrangement is observed. In all cases, at varying intervals, masses of germinal matter or nuclei, which are continuous with the tissue of the fibre, are to be detected. These are usually oval, and placed somewhat on one side of the fibre, so that some of the fine fibres of the compound fibre pass on one side of the mass of germinal matter without being connected with it. (Figs. 17, 19, 20.) The length of nerve-fibre between these nuclei differs materially in different textures, and in the same texture at different periods of age. They are most numerous in highly sensitive nerve organs, and during the earlier periods of development of all nervous structures. These masses of germinal matter (nuclei) have not been distinguished from the so-called connective tissue corpuscles.

In the skin of the frog, mouse, mole, and some other small animals it is not difficult to demonstrate networks of the finest nerve-fibres. The observer notices at the deep aspect networks of large dark-bordered fibres, more superficially networks consisting partly of dark-bordered, partly of pale nerve-fibres, and most superficially, and in many cases immediately beneath the epithelium, net-works composed entirely of the finest nerve-fibres, with their numerous nuclei.

In the human subject I have demonstrated the finest nerve-fibres in great number in the *pia mater*, in the *peritoneum*, *pericardium*, and *pleura*. Numbers are seen ramifying in the mucous membrane covering the epiglottis, immediately beneath the epithelium. The drawing representing this beautiful arrangement was figured in the *Archives of Medicine*, and it is published in the German and Italian translations of my work on the tissues.

In the organs of special sense the nerve-fibres and the masses of germinal matter are so numerous, and often concentrated within so small a space, that it is extremely difficult to demonstrate their ultimate arrangement. In some simple papillæ of the mucous membrane, however, mere loops are seen (Fig. 4). In others the summit of the loop exhibits transverse branches, so that networks are formed, as in Fig. 5. In others, again, the loop is compound, as in Fig. 6. And in some these compound loops are connected so as to form complex net-works (Figs. 2 and 3.) From this comparatively simple terminal nervous apparatus we gradually pass to the highly complex arrangement seen in the touch bodies (Figs. 7, 8, 9), in the papillæ of taste, and the highly elaborate arrangement seen in the retina, the organ of smell, and that of hearing.

I have specially studied the arrangement of the nerves in the papillæ of the tongue of the hyla or green tree frog. The results of these observations will be found in a paper presented to the Royal Society, June, 1864, and published in the *Philosophical Transactions* for the following year. The general conclusion arrived at in this memoir was that each of the numerous dark-bordered fibres occupying the centre of the papilla divided and subdivided near its summit into very numerous fine nerve-fibres, which formed an expanded net-work. No papilla could be found to which one nerve-fibre only was distributed, and I could not resist the inference that the fine fibres resulting from the division of one fibre, and entering into the formation of the expanded net-work or plexus, converged to the opposite side of the papilla to form another nerve-fibre, according to the plan represented in Figs. 2, 3, 7, in contradistinction to that represented in Figs. 1 and 8, where a single fibre is seen to divide into a net-work which is *terminal*, and which must, therefore, be regarded as the *end* or *commencement* of the nerve-fibre, in which case the fibres entering into it cannot be part of a circuit.

The corpusculum tactus is seen in my specimens to be but a compressed, somewhat spiral, and loop-like arrangement of nerve-fibres, connected with which are numerous oval masses of germinal matter, as is represented in Fig. 9. I have never seen a touch body with which only one single nerve-fibre was connected.

The highly sensitive tactile organs of insects consist of nerve cells, from which a fibre seems to pass towards the nerve centre. But upon careful examination this apparent single fibre is seen to consist of numerous fine fibres, and the cells at the summit continuous with these fibres may form part of a

circuit. Such an organ is represented as terminal in Fig. 8 and as part of a circuit in Fig. 7.

Pacinian Corpuscle.—The fine fibre in the axis of the Pacinian corpuscle divides at its apparent summit or terminal extremity into three or four lobes, which are prolonged downwards between the laminæ (capsules) of connective tissue as extremely delicate granular fibres, which are apparently connected with the numerous nuclei. Many of the layers which are seen one within the other, and which constitute the mass of the corpuscle, may be followed downwards to the stem, and form an envelope to the dark-bordered nerve-fibre. In some specimens I have been able to detect fine fibres, which appear to be prolonged downwards from the nuclei and sheaths of the corpuscle into the sheath of the dark-bordered fibre. According to this view, the Pacinian body must be regarded as consisting of a single dark-bordered fibre, the pale granular prolongation of which at its summit divides into branches, which subdivide and form a network around the extremity of the dark-bordered fibre. From this network return fibres may be traced into the sheath of the nerve. The arrangement will be readily understood by reference to Fig. 10.

Many other apparently terminal nerve organs exhibit the same fundamental structure as the Pacinian corpuscle. Instead of the dark-bordered nerve-fibre *ceasing* or *ending*, it breaks up into a leash of finer fibres, which are at first much compressed, and form a sort of knot, and afterwards give off fine fibres, some of which may be traced onwards, perhaps, to another nerve-fibre, while some run backwards in the sheath of the original dark-bordered fibre.

Unstriped Muscle.—Of the existence of terminal net-works of very fine nerve-fibres in involuntary muscle in all situations there cannot longer be any doubt. My observations upon this point, in the particular case of the frog's bladder, have been confirmed by Klebs, and there is comparatively little difficulty in demonstrating the fact in the bladder both of the frog and newt. In the extremely delicate bladder of the little green tree frog, or hyla, the dark-bordered nerve-fibres may be followed in every part of their course until the very fine fibre, really consisting of a leash of finer fibres, which are directly continuous with them, may be seen to communicate with some of the divisions of the fine fibre running with the dark-bordered nerve-fibre, Fig. 20. Hence, therefore, the demonstration of the peripheral portion of the nerve circuit in this instance is actually demonstrated. I have demonstrated the same arrangement in the muscular coat of arteries and veins, in the muscular coat of the stomach, intestines, ureter, and in other parts.

Striped or Voluntary Muscle.—I have written so many memoirs upon the distribution of nerves to voluntary muscle that it is only necessary for me to state that more recent investigations have strengthened my former conclusions. I have seen the *nerve-end organs*, *nerve tufts*, *nerve hills*, and other "*end organs*" of Kühne and other German observers, but I have demonstrated fibres *passing away from these bodies*, showing that, in fact, they are not end organs at all, but are merely a looped and convoluted arrangement of continuous fibres. These bodies are not to be seen in all muscles, but they are extremely numerous upon the muscular fibres of the cameleon's tongue, which organ, as is well known, is capable of being shortened to a tenth or twelfth of its length almost in a moment. It is not improbable that this concentration of nerve-fibres at intervals throughout the length of the extremely long muscular-fibres has reference to the suddenness and vigour of the contraction at the same moment in several parts of the fibre.

The larger nerve-fibres form net-works over the muscular fibres, as represented in Fig. 14, and net-works of finer fibres prolonged from these are demonstrable in the tongue of the hyla and in other situations, as I have fully described. The relation of the ultimate nerve-fibres to the contractile tissue of voluntary and involuntary muscle will be readily understood by reference to Figs. 11 and 12.(a)

If we examine the fine nerves which enter into the formation of any peripheral nerve net-work, we shall fail to discover any *ends or terminal extremities*, and if we carefully study any of the masses of germinal matter (cells, nuclei) connected with these fine nerve-fibres, we shall find that each one is continuous with the delicate fibre at two points or more; or, in other words, fibres pass from these masses of germinal matter in different directions, as represented in Figs. 11, 12, 15, 16, 17, 18, 19, and 20. In no case does the mass of germinal matter seem to form the end of a nerve.

Again, if we study the structure of the finest nerve-fibre with the aid of the $\frac{1}{25}$ and $\frac{1}{50}$, we shall obtain evidence which leads us to infer that these finest fibres are themselves compound, and consist of still finer fibres. The spot where a branch diverges laterally from a fine fibre is invariably triangular in form, as if the diverging branch were made up of fibres pursuing opposite directions in the main fibre, Fig. 16, *a*, *a*, *a*.

From my observations I have been led to conclude that the ultimate peripheral nerve net-works are arranged according to the plan represented in Fig. 15. My views concerning the mode in which the nerve trunks enter with the formation of the peripheral net-works, and the course of the various nerve currents through a small portion of such a nervous net-work or plexus will be understood by reference to Fig. 13.

The careful investigation of the arrangement of the finest nerve-fibres in various peripheral sensitive nervous organs, in skin, in the various kinds of connective tissue, and in striped and unstriped muscle, leads me to conclude that there are not free ends whatever, and that the nervous tissue does not become continuous or blend with, or gradually pass into, or become lost in, other tissues, but that in all cases plexuses or net-works exist. The facts demonstrated in connection with this first part of the inquiry, the peripheral distribution of nerves, receive a ready explanation upon the view that a nervous apparatus forms a complete and continuous circuit, of which the peripheral net-work or plexus forms a portion. It is but fair to ask that those who advocate physiological doctrines incompatible with the results of anatomical observation should state that their doctrines are so or demonstrate that the anatomical observations are erroneous. In other papers I shall endeavour to show that a careful study of nerve trunks and nerve centres leads to the conclusion that there are complete and uninterrupted circuits.

ON DR. JOHNSON'S THEORY OF CHOLERA.

By W. MOXON, M.D.

In a short note to the *Medical Times and Gazette*, Dr. Johnson challenges me to remove the discussion of his theory to another place at a future time. My reason for not accepting this proposal is that it is not in accordance with my present undertaking, which is to examine his theory as it now stands before the Profession. If Dr. Johnson intends in his future communication to say the same as he has hitherto said, I can better deal with it at leisure, as I am now doing; whereas, if his views have altered, I have no means of judging but that I may concur in them.

In the same note, Dr. Johnson accuses me of parodying and misrepresenting his theory. I am surprised at this, because, as he will see by kindly reading my papers again more carefully, I have not made the slightest attempt to represent his theory in any way or shape, and have not even alluded to it, except in the headings of my articles. My two communications have dealt only with his attempt to overthrow the commonly received view which attributes importance to the loss of liquid from the blood in cholera. In defending that view, I submit to have shown—1. That it is an error to assume that

(a) With regard to the statements recently made by Dr. Moxon "On the Peripheral Termination of a Motor Nerve" (*Microscopical Journal*, October, 1866), I must remark,—1. That what he terms *a* motor nerve is a *bundle of finer fibres*. 2. That no *termination* whatever is represented in his drawings. 3. That it may be proved experimentally that nerve-fibres, by no means the finest demonstrable, disappear if the specimen be kept in water for very much less than forty-eight hours. Any one who examines Dr. Moxon's very careful and correct drawing will feel astonished that he should have arrived at the conclusion that the large fibre passing to the muscle was a single nerve-fibre. It is half the thickness of the trunk, which leaves a ganglion consisting of upwards of fifty ganglion cells. This "nerve-fibre" is, in fact, one of *main nerve-trunks*. I have discussed the distribution of nerves to insect muscle in a paper published in the *Microscopical Journal* for October, 1864, which Dr. Moxon has probably not seen. I can assure him that, although numerous fine nerve-fibres were ramifying over the muscle depicted by him, they would not have been visible in a specimen soaked in water. Hundreds of good observers have directed their attention to this question of the distribution of nerves to muscle for years past, and it would have been settled long before either Dr. Moxon or I commenced to observe if it had been possible to determine it by any such mode of examination. Doyère also represents merely *nerve-trunks*; but it must be borne in mind that his drawings were made thirty years ago. It is almost needless to observe that the nerve distribution to the tissues and organs of small animals—especially minute insects—must be so very elaborate, delicate, and on so minute a scale, that the investigation presents extreme difficulties. For instance, the numerous movements of a small fly or a flea necessarily involve a highly complex arrangement of nerves, but all we can demonstrate are the main trunks. Would any one maintain that no smaller ramifications could exist simply because he could not see them?

orthodoxy holds loss of liquid from the blood to be the only cause of choleraic collapse, the truth being that those who ascribe importance to such loss of liquid and desire to stop it if they were able, nevertheless admit other conditions as concurring to superinduce the consequent collapse. 2. That even if so thoughtless a view were held, Dr. Johnson's arguments do not disprove it, while they fail entirely to shake the commonly received opinion, which holds a deficiency of liquid in the blood to be that element in the causation of choleraic collapse which confers on such collapse its distinguishing peculiarities.

I shall now proceed to discuss Dr. Johnson's theory, and hope not to deserve the imputation of misrepresenting it. The positive statement which forms the foundation of it is at page 42, and stands thus—"The one great central fact is this, *that during the state of collapse the passage of blood through the lungs from the right to the left side of the heart is in a greater or less degree impeded.*" The substance of this statement is, however, not proper to Dr. Johnson's theory; it has formed the ground of the views of those writers who, with Bell, used the name cholera-asphyxia, and also of the theory of Dr. Parkes, from whose descriptions Dr. Johnson supports it. But there is one thing in the quotation I have given which is proper to Dr. Johnson, and that is the style and means of its introduction to his readers as the one great central fact. These words, one, great, central, and fact, compose together a powerful form of affirmation. The qualifying terms are admirably chosen; single simplicity, magnitude, and all-commanding position are successively depicted by the file of adjectives; while the substantive—what shall we say of it? It is the substantive of substantives; it would be well always to give it a capital letter—Fact. It is a word that must be held sacred in physical inquiry; it is the very divinity thereof. Now, can our author ever dare to invoke that name for his aid and support when he takes it in vain so flagrantly, not only here, but, for another instance, on page 50, where he says, "would deny that spasm of the arteries is as real a fact as spasm of the muscles?" Have we, then, comparatively real facts, more real facts, and less real facts? And must I set myself to show that the one great central fact is not a real fact? But who can dispute a fact? If this obstruction in the lungs is a fact, there is an end of the matter; there *is* an obstruction of the lungs. But the truth is that it is no fact at all; it is an inference only, and, I hope to show, a very questionable inference. *The word Fact should not be used when the word inference is the proper term;* while the adventitious words, the one, great, and central (which would be seen at once to be unsuitably magniloquent for qualifying a mere inference—who would say, the one great central inference?) can only have the effect of exaggerating the unfounded assurance which the unwarranted word Fact is calculated to produce in the mind. Those authors whom I have alluded to as having preceded Dr. Johnson in the drawing of the inference I have quoted, do not state this inference as a fact. Dr. Parkes says "that the Facts he has observed seem to point out unequivocally that in cholera the blood does not pass through the lungs." This is a strong, but a legitimate, expression of opinion; it respects the all-important difference between facts and mere conclusions. I may, and do, accept the Facts which Dr. Parkes has, with such admirable superiority to labour and danger, collected, and which he has so clearly stated; but the form in which he puts his view as an inference, leaves it open for me to contest his conclusion from them, and I do contest it, and believe that the post-mortem appearances in cholera better support the opinion that an actual loss of liquid from the blood had caused the agony than that the agony was caused by primary or special insufficiency of the respiratory function. I also think it may be seen that these two views are not wholly contrary to each other.

In contesting the inference that during the state of collapse the passage of the blood through the lungs from the right to the left side of the heart is in a greater or less degree (specially) impeded,(a) I am not contesting Dr. Johnson's theory, but only the foundation of it. The part of the whole view set forth in his book which is peculiar to him—viz., the spasm of the pulmonary artery—I shall consider separately. One may hold no proper part of Dr. Johnson's theory, and yet maintain the above inference (as indeed Dr. Parkes, Bell, and others do), but one cannot hold that theory without maintaining the inference; with the inference the theory falls.

Let us consider the evidence which Dr. Johnson offers in proof of this fundamental proposition. The evidence adduced is of two kinds. 1. Direct proof of the obstruction to blood-flow in the lungs; and, 2, "confirmatory evidence" from the explaining power of the supposition of such obstruction. Now, though Dr. Johnson hurries from the first sort to the second, it is very necessary to keep them separate, and especially to examine the first sort carefully and weigh it patiently before allowing ourselves to even look at the second.

For whilst direct evidence of the obstruction to blood-flow will be of course decisive if it is sufficient, it is all-important to remember that no amount of confirmatory evidence from the explaining power of a theory is of any value while that theory is itself doubtful. Unhappily, too, the respective attractiveness of these two sorts of evidence is just the reverse of their respective intrinsic merits. People will turn away from the dry discussion of the sufficiency of the direct support to a theory, but they are sure to listen while told how admirably it beguiles away their difficulties. But, alas! the easy explanation a theory gives may only call out a sigh of regret it was not true, and this very regret forms the danger of looking too soon at its ready explanation; because, when we have seen how happy we thus might be with it, we become loth to part with it, and, accepting the theory for its plausibility, we wink at its deficiencies in the hard commonplace matter of substantial verity. It may be very delightful to think how many difficulties would be got over if it were only true, but before we flatter our eyes with the sight of things that yellow metal would buy, it is well to satisfy ourselves that it is good gold. It is important, then, that we should turn from the second sort of Dr. Johnson's evidence, and concentrate our attention on the first, which is the only valid sort; the second has no value whatever unless the first is valid.

Now the direct evidence is so short that I shall give it entire. It commences on page 42, line 14, and is as follows:—"Very conclusive evidence as to the existence of impeded pulmonary circulation during life is afforded by the appearances observed in the heart, blood-vessels, and lungs after death. The post-mortem appearances within the chest have been described with more or less minuteness by several authors, but by no one, I believe, with such care and accuracy as by Dr. Parkes. *In the great majority of cases in which death has occurred during the stage of collapse, the right side of the heart and the pulmonary arteries are filled and sometimes distended with blood, while the left cavities of the heart are generally empty, or contain only a small quantity of blood, the auricle being partially, and the ventricle completely and firmly, contracted. The tissue of the lungs is, in most cases, of pale colour, dense in texture, and contains less than the usual amount of blood and air.* With respect to the EXTREMELY ANÆMIC condition of the lung: when death has occurred during the stage of collapse, there is an entire agreement amongst those authors who have most accurately described the post-mortem appearances. There is something surprising, as Briquet and Mignot observe, in the contrast between the almost constant occurrence of this extremely anæmic condition of the lung, from which scarcely even a few drops of blood flow when the tissue is cut, and the hyperæmia of most of the other viscera. There is a remarkable contrast, too between this anæmia of the lung when death has occurred during collapse and the great engorgement of the lungs which is almost invariably found when death occurs in the febrile stage which often follows reaction. Now it is evident from the appearances here described that during the stage of collapse there is an arrest of blood in the branches of the pulmonary artery *before* it has reached the pulmonary capillaries. The arrest at this point explains the REMARKABLE ANÆMIA of the texture of the lungs during collapse, while the hyperæmia of the lungs after reaction is due to the engorgement of the pulmonary capillaries." Dr. Johnson then proceeds to point out the explaining power of all this.

In this extract, again, we must distinguish between what is proper to Dr. Johnson and what is common to him and other authors. By doing so, we shall this second time perceive that our author obtains an unwarranted appearance of support for his theory, by assuming the certainty of what is doubtful, and assuming the universality of what is even exceptional.

First, then, notice that the substance of the above extract divides itself into two distinct parts, one a purely descriptive part (which I have put in italics), and the other an allusive part, which I have altered only by putting certain terms of it

(a) I introduce the word "specially" because such passage may be impeded only as part of a general impediment—a position I would allow as probably the true one in choleraic collapse; but this cannot be the sense intended, as it would be of no force in regard of an impeding cause acting in the lungs such as the author argues.

into capitals. It at once strikes the reader that while the descriptive part as concerning the lungs is moderate, the allusions made to it are put in terms which are out of all character strong. Why should lungs be called "extremely anæmic" for being "in most cases pale and containing less than the usual amount of blood"? The effect of thus stimulating one's facts with strong adjectives is to excite them into making their appearance with airs unbecoming to their commonplace quality, and trying to prove what is far above their force. If the lungs really were extremely anæmic, and the pulmonary artery really were so monstrously distended, the pulmonary veins so amazingly shrunken, as our author's diagrams show forth, then, perhaps, some suggestion of spasm of the pulmonary arteries might for a moment cross one's mind, but who would raise such a speculation on the bare affirmation that the lungs are *in most cases* pale and have *less than the usual* amount of blood? These ordinary statements must be intensified before they can appear as justifying the mention of such a speculation. When they are aggravated into "extremely anæmic," and are helped by such a diagram as appears to reinforce them, even then it is astonishing that an hypothesis so gratuitously extraordinary could be gravely advanced as *the* truth.

My first position is, then, that Dr. Johnson's theory of cholera rests, not upon the description of the heart and lungs which he gives as quoting, but upon verbal and diagrammatical intensifications of that description.

But, secondly, that description itself—is it indeed the correct expression of everybody's experience in the morbid anatomy of cholera? Very far otherwise. It is important to know that the authors whom Dr. Johnson arrays as those to be consulted in reference to cholera, and whose authority thus ostensibly surrounds the statements he makes, as quoting from the best authors, that those authors not only do not give such a description even as the sober statement in italics (let alone the allusive intensifications), but that by far the majority of them with forcible language declare the lungs to be highly engorged with blood, and the left cavities of the heart to be full of it. We will let the term "extremely anæmic" pass, a mere intensification as it is, the value of which, as of an overdrawn cheque, vanishes the moment the smaller balance of real substance is detected; and, taking the moderate descriptive part, we shall see that it is in direct contradiction to almost every author who describes the state of the lungs in cholera. In support of this I will quote such authors as I have referred to.

(To be continued.)

THE ROTATORY FILLET: ITS PRACTICAL APPLICATION.

By G. R. SHERATON, L.R.C.P.E., M.R.C.S.

The following are a few cases in which the steel rotatory fillet (a) was employed to facilitate delivery in cases of difficult parturition, arising from the several causes in which the use of forceps, vectis, etc., was indicated.

Case 1.—S. G., aged 26 years, a short and stout person, dyspeptic and hypochondriacal. At the seventh month of utero-gestation she was attacked with epileptic convulsions, which recurred at short intervals over a space of two days and then gradually subsided. The remedies employed were—aperients, small and repeated doses of morphia, cold affusion to the head, and a blister to the nape of the neck. She had frequent bearing-down pains betwixt the convulsions, but on examination there were no other indications of labour. The "pains" subsided, and she soon was able to perform her household duties. Her previous history is particularly interesting from the circumstance that in her two former confinements (both of which I attended) the progress of the labour was impeded by contraction of the outlet, occasioned by the approximation of the tubera ischii, rendering instrumental interference necessary. The forceps could not be applied laterally, and with great difficulty I succeeded in applying them posteriorly, and in slipping them to either side, by pushing up the head from the tuberosities of the ischia to admit them. I had great difficulty in extracting, the forceps having slipped two or three times from the great amount of force required; the perineum was slightly ruptured on the first occasion, and a stillborn child was born on both — evidently from the pressure of the points of the instruments. Pelvic abscess followed, and the convalescence was protracted. Craniotomy might have been employed with greater advantage, but there were indications of vitality of the fœtus.

On March 15th, I was again sent for. She had been in labour twenty hours. The liquor amnii had escaped; the pains were frequent and straining. On examination, I found the head had descended into the cavity of the pelvis, and was occupying the normal position. There was no rigidity of the soft parts. I waited about six hours, during which time the pains became less frequent and weaker, the pulse rapid and feeble, the vagina hot and dry, and the head had not descended to any perceptible extent, but seemed closely impacted and immovable betwixt the rami ischii, as on the former occasions. I was unable to detect the placental murmur, nor yet the sound of the fœtal heart on the application of the stethoscope, and as the natural efforts seemed ineffectual, and the exhaustion infinitely greater, it was evident that the time for instrumental interference had arrived; I therefore sent for the craniotomy instruments, and in the meantime proceeded to test the efficacy of the fillet, as it afforded an excellent opportunity for so doing. I had not the slightest difficulty of introduction, no force being required to pass it over the convexity of the head. I then proceeded to rotate the blades, and had no difficulty in doing so till the blades came in contact with that portion of the head which was closely impacted between the rami ischii, but by pushing up the head sufficient space was obtained to admit the blades of the instrument, and to pass it round the head to the desired extent. The instrument which was used on this occasion was made hurriedly, and had a long diameter of only 4¾ inches, and which I found to be too short, and I should have experienced great difficulty had not the great flexibility of the blades (No. 32 wire gauge in thickness) enabled me to bring it over the long or occipito-mental diameter of the head. There were short straining pains excited during the application of the instrument. I then proceeded to apply tractile force, at first gently, and, finding that the instrument did not slip, I gradually increased the amount of traction till my whole strength was exerted upon it, and this was kept up, with short intervals of rest, till delivery was effected. I found that whilst traction was being made I was enabled to change the position of the head, and also that it exerted a certain amount of lateral compressing force upon the head. The child was stillborn, as expected. No marks, abrasions, &c., were to be observed upon it. The mother was not aware that instrumental aid had been made use of. She made a good recovery, only one visit being afterwards needed, and she was able to perform a portion of her household duties within a week.

Case 2.—D. D., aged 31 years, a stout and robust woman. I was called in on April 10, and found her in labour of her sixth child. The liquor amnii had escaped the previous day without pains, but they commenced shortly afterwards and continued to increase, and at the time of my attendance were strong bearing-down pains, and the intervals extremely short. On making a vaginal examination I found a hand at the vulva (the left), the os dilatable, and the maternal passages generally in a state favourable for delivery. As nothing was to be expected from the natural efforts, I at once proceeded to deliver by turning, which was somewhat difficult to accomplish, as the uterine contractions were extremely active; but I at length succeeded in bringing down the feet and effecting delivery of the body of the child, and then I experienced considerable difficulty and was unsuccessful in my efforts to extract the head by ordinary measures. The pulsation of the cord was scarcely perceptible, and further delay would have insured the child's destruction. I introduced the blades of the fillet and passed them round the head without difficulty, and with a moderate amount of traction I accomplished the delivery without further difficulty. The secundines followed in due course, and she made a good recovery. She was not aware that instrumental aid was employed to complete the delivery.

Case 3.—D., aged 37, in labour of her sixth child. On being called I found her in bed, the pains weak and at long intervals, she vomited incessantly, the pulse rapid and weak, and she was evidently much prostrated. She had slight pains for the last twelve hours, which had been much stronger and more frequent previous to my arrival. She had not enjoyed good health during her pregnancy, having suffered much from pain, fainting, loss of appetite, etc. On examination I found that the head had descended into the pelvis and occupied the normal position, great relaxation of the soft parts, and the

(a) Described in the *Medical Times and Gazette*, July 21, 1866, p. 74.

head seemed of small size. I waited a considerable time, and, the vomiting having somewhat abated, I ventured to give a small quantity of pulv. ergot and to place a bandage round her. The ergot was at once rejected, and also brandy, tea, etc. The vomiting continuing, nothing was therefore to be expected from the further administration of the ergot. The condition of the passages being most favourable for delivery, and the safety of the mother and child demanding immediate interference, I considered it a suitable case for the employment of the fillet. I introduced it with the blades a little apart, forming a sort of fenestrum; and gradually rotating the blades as I placed it over the chin, and the instrument was at once applied. A very slight amount of tractile force was sufficient to effect the delivery. In this case the application and delivery did not occupy more than one minute, and the mother was not aware that her speedy delivery was due to instrumental aid. Compression over the abdomen excited a slight pain, and the secundines separated with slight traction at the cord. There were no marks or bruises upon the child. She made a speedy recovery, being able to leave her room on the fifth day.

A CASE OF PUERPERAL ECLAMPSIA—RECOVERY.

By C. B. SUCKLING, M.D.,

Senior Obstetric Surgeon, Queen's Hospital; Professor of Midwifery, Queen's College, Birmingham.

Mary E., aged 20 years, married, primipara, a healthy-looking woman, inclined to robustness, of sanguine temperament, and cheerful disposition; had enjoyed good health until her marriage. She supposed herself to be taken with labour pains on December 1, 1866, at 10 a.m. I was summoned at 10.30 a.m., and found her in the following condition:—The pains she suffered from were not, in my opinion, true labour pains. This was subsequently confirmed on examination per vaginam. Her feet, legs, and thighs were enormously swollen from dropsical effusion; also the external organs of generation. Here, so great was the œdema that it was only with the greatest care and difficulty that an internal examination could be made. The labia resembled two huge collars of fat rather than their own symmetrical shape. The clitoris partook equally of the same degree of enlargement. The swelling was limited to the parts below Poupart's ligament, with the exception of a slight puffiness of the integuments of the face and orbits. There was thirst, quickness of the pulse, and flushed countenance, with no undue disturbance of the sensorium, no pains in the head, no spasmodic twitchings of the muscles of the face or legs, or any apparent signs of approaching convulsions. The patient, with the exception of the symptoms mentioned, was calm and collected—the only anxiety she evinced was concerning the unnatural size of her lower extremities, which she stated had been gradually enlarging during the past few weeks. I could not obtain any quantity of her urine, which was much to be regretted, but it was described as being of a dark brown or smoky colour. There being no signs of labour coming on soon, I prescribed cold spirit lotions to the head, leeches to the temples, and saline purgatives, requesting that the patient should be kept as quiet as possible, and that they should send for me as soon as the pains came on. The following morning at 9 a.m. a messenger was despatched to me in great haste. I found the patient in convulsions. Before their accession she had been very sick. The aperient medicine I had ordered previously had acted powerfully, and she had micturated freely in the bed. I at once made a vaginal examination, not without difficulty, owing to the violent unconscious resistance offered to the introduction of the hand; the os uteri was relaxed and dilated to the size of a shilling; the membranes entire, and the head of the fœtus in the first position. My friend and colleague Professor Clay, whose valuable counsel I sought, agreed with me, that as there were no regular uterine contractions, and no symptoms indicative of immediate danger, it would be advisable to leave the case in the hands of Nature a few hours, until the pains should recur more frequently and regularly, and that on my next visit I should administer chloroform, and, if necessary, deliver the woman by artificial resources. At 11 a.m. the same day I was sent for, and found the patient almost comatose. This had been preceded by another attack of convulsions. She could be aroused to partial consciousness by shaking her well, or by dashing cold water on her face. On examining her, the child, placenta, and membranes were found in the bed surrounded by very little blood; the uterus was well and firmly contracted, but the mother still remained in the same semi-comatose condition. During my attendance she suddenly recovered from her partial lethargy, and became quite furious, with flushed face, quickened pulse, and bloodshot eyes. I at once placed her under the influence of chloroform to the degree of the first stage. She became tranquil immediately, and fell into a quiet sleep. There was scarcely any hæmorrhage. After remaining with her some time, I left, with strict injunctions to the attendant that the room should be kept darkened and cool, and that she should be on no account disturbed. On my next visit—morning—she was still in the same state, but could be awakened by force. As the pulse was somewhat depressed, I ordered a little brandy and cold water to be given at short intervals—a stimulant which I would strongly recommend under such circumstances. In the evening she could be aroused easily, and answered questions put to her, yet somewhat incoherently. The following day she was better in every respect. The head was cool, the skin moist, the vessels of the eyes uninjected, the pulse normal in frequency and power, the bowels had been well moved, and the œdema of the legs and face had very considerably diminished. The lochia were natural in colour and quantity. After this period the patient made a rapid recovery, and on the tenth day from the commencement of labour she might be said to be convalescent. She states that she remembered nothing of what transpired during the time her condition was so perilous; in fact, her mind then was a perfect blank. This oblivion, I may remark, is a noticeable feature after convulsive seizures of this kind.

I record this case, as I think it unique, and that the sum of obstetrical experience is made up of the narratives of such-like, and that it belongs to the category of those which are highly interesting to the accoucheur, not only because of the great mortality which attends them, but of the conflicting opinions existing concerning their nature, causes, and treatment.

This case is, I opine, one of those which are to be attributed to congestion of the renal vessels from pressure dependent upon the puerperal state. Dr. Cormack has noticed this relationship. I may observe that the patient had never had an epileptic fit, nor was epilepsy to be traced to any member of either her husband's or her own family. She had, therefore, no predisposition to the disease from this source; nor had she ever been intemperate either in eating or drinking; no mental emotion had ever given her a moment's disquietude; nor does it appear that atmospheric influence had any effect in producing the convulsions, as the situation of the patient's dwelling was healthy. It was not of epidemic origin, as there was no other case of the like nature in the district. Although I had not an opportunity of examining the urine, or detecting the presence of carbonate of ammonia, I am inclined to think that there was some noxious material in it, most probably albumen.

As I do not purpose discussing the various theories which are rife upon the causes of puerperal convulsions, I need not enter into the merits of albumen and urea as the respective agents in the causation of this disease. This has been ably done by the masters of obstetric science. To show that pressure of the renal veins does operate in the production of albumen, we have the undeniable testimony of Robinson, Meyer, and Frerichs. That the disease in this instance was not ascribable to Bright's disease, was proved by the absence of amblyopia, and even amaurosis. Here there was no abrogation of the functions of the retina, but simple albuminuria produced by pressure of the uterus on the blood-vessels, and consequent congestion of the kidneys. As soon as the pressure was removed by the birth of the child, we had total and rapid disappearance of the œdema and convulsions.

As points of interest in the foregoing case, I would mention the following:—The non-necessity of general bleeding by the arm; the supervention of the convulsions on the occurrence of uterine pains; the absence of any special or known predisposing cause, with the exception of the gravid state, and the non-plethoric condition of the patient; the existence of no epidemic disease in the locality. After the birth of the child we had none of the evils enumerated as so frequently supervening, such as loss of memory, giddiness, vertigo, headache, and other cerebral symptoms. There were no signs of peritoneal inflammation, to which the patients are specially liable after attacks of eclampsia; nor was there anything like an approach to renewed convulsions. We have also practical demonstration of the fact that the convulsions do not annul

the muscular contractions of the uterus, and that labour may be terminated without the aid of manual interference.

The action of chloroform had a marvellous effect in abating the mental excitement and moderating the intensity of the convulsions. I believe its agency had chiefly to do in preventing a return of them, and that, by favouring the relaxation of the os uteri and soft passages, it facilitated the progress and natural termination of the labour. Professor Channing, Drs. Churchill, Skeleton, Braun, Professor Simpson, and M. Cazeau all bear testimony in terms of high commendation of this anæsthetic in these cases. The last-named authority strongly recommends it when the os is very rigid and the convulsions are persistent; it diminishes their frequency, and sometimes prevents their return.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

THE LONDON HOSPITAL.

Statistics:—Arrangement—New Wing—Telegraph for Assistant Surgeons—Ophthalmic and Aural Departments—Pathological Demonstrators—Number of Cases Last Week—Compound Depressed Fracture of Skull, Trephined—Large Dog-Bite—Strangulated Femoral Hernia; Operation, Death—Obscure Case of Uræmic Poisoning (?)—Acute Moist Senile Gangrene—Compound Comminuted Fracture of the Leg; Death—Secondary Syphilis in a Boy—Multiple Lupus—Herpes Zoster—Multiple Exostoses—Detached Epiphysis—Strangulated Femoral Hernia; Operation, Recovery—Division of Median Nerve, &c.—Tertiary Syphilitic Ulcer of Penis—Injection of Chloroform in Enlarged Bursa—Influence of Cold on Medical Practice.

This Hospital is situated in one of the most densely populated neighbourhoods of the metropolis, very near to the docks, and, therefore, from its position, must command a very large and varied Surgical practice. This gives it great advantages, but with corresponding disadvantages. It is rather out of the way of the civilised parts of London, and although it is an excellent place for work, its neighbourhood is not a very pleasant one to live in. However, we understand that one of the metropolitan railways will pass near the Hospital, and that one of the stations will be close by the gates.

From a statistical account issued by the Hospital authorities, we find that during the last twenty-four years 238,160 accidents were brought for treatment, no fewer than 29,209 of these being fractures. Last year no fewer than 16,234 casualties were treated, and 2996 were admitted. The number of cases of injury to the head from falls from a great height is very large, as also that of fractures of the spine. Besides these Surgical cases a very large number of patients are brought for apoplexy, poisoning, drunkenness, etc. During the year 1864 Dr. Woodman, the then resident Medical officer, saw 34 cases of alcoholism, each patient being brought in insensible. To the wine and spirit stores at the docks is owing the large proportion of these cases. The patients are brought in by the police for "sucking the monkey." We do not, however, in the present report enter into particulars as to the Medical practice at the Hospital, but hope shortly to do so. Each case in the Physicians' ward is carefully recorded by the recently-appointed Medical Registrar, Mr. Heckford. The admission day is Tuesday, but more patients are taken in on other days as accidents and emergencies than on the day fixed by rule. So far as we have observed, no urgent case is ever sent away. Although the Hospital is often reported full, the authorities, so far as our experience goes, never fail to find room for extra cases of acute disease, as rheumatic fever, or for injuries.

The wards are arranged so as to form three sides of a square, or one-half of the letter H. The transverse part faces the street, and on its ground floor is a passage extending the whole length of the building, and communicating at either end with two large wards occupying the ground floors of the other two sides. These are appropriated as male "accident wards." The passage at its west end also communicates with the new wing. The other floors are very similar in arrangement, but the middle of the first one is occupied by the Chapel. On the third floor are separate wards for cases required to be kept "select." Partly enclosed by the three sides is a quadrangle, which forms an admirable promenade for the convalescent patients. In summer this space is gay with multitudes of flowers. Quite behind the Hospital altogether is a piece of ground, on which it has been proposed to build a Medical College.

In July, 1864, the Prince of Wales laid the foundation-stone of the Alexandra Wing, which was to have been opened formally this autumn, but, owing to the outbreak of cholera, it was deemed advisable to dispense with any ceremony. We believe, however, that a ceremonious opening of the building already practically opened will take place in the summer. The main building accommodated about 445 beds. This new wing adds 75, but many of these will be taken up with beds removed to relieve the crowded state of the older portion. The house-governor, Mr. Nixon, tells us that we shall be quite moderate if we say that there are now upwards of 500 beds available.

A new receiving room and out-patient waiting halls will be exceedingly advantageous, especially as aural and ophthalmic departments are to be added. We recently mentioned that the committee had decided to set apart space for eye wards. The wording of our remarks might, however, lead to the conclusion that these wards were ready for occupation. The alterations are not yet fairly begun. The old students of the Hospital will be glad to hear that the small, dark Medical out-patient rooms will be altered, and, we hope, improved, into these eye-wards. The late Surgical out-patient rooms will be the Medical out-patient rooms in future. At present these rooms are about the most dreary-looking suite which we have yet seen in our Hospital rounds, but we believe they will shortly be much improved. Another change worth noting is that, besides the porter at the door, a nurse has been appointed to attend the females in the Medical out-patient rooms during the Physician's attendance. It is a matter of wonder that this was not thought of before.

It has hitherto been the rule that the Assistant-Surgeons should live within a short distance of the Hospital, but Mr. Couper and Mr. Little have now obtained permission to live at the West-end, on the understanding that these gentlemen will maintain, at their own cost, a wire from the Hospital to their residences. Mr. Little lives in Brook-street, and Mr. Couper in Park-street. We have already referred to this private telegraphy, and have now only to say that communication is rapid and easy.

The changes at this Hospital have been numerous during the last twelve months. Dr. Parker and Dr. Fraser have resigned, and thus Dr. Andrew Clark and Dr. Ramskill have become Physicians. The corresponding vacancies in the Assistant-Physicians' staff have been filled by Dr. Morell Mackenzie and Dr. Sutton.

Lately the number of pathological demonstrators has been increased from one to three, as it was felt most justly that one, however able and conscientious a worker, could not do justice to each and all of the post-mortem examinations in connexion with the practice of the Hospital. Mr. Little continues as Surgical Pathologist, and Dr. Hughlings Jackson and Dr. Sutton make the Medical post-mortem examinations. It is also under consideration to increase the size of the post-mortem room, so as to make it more convenient for purposes of demonstration. The room known as the Depository will, it is hoped, be obtained for the post-mortem examinations.

We now come to the more purely Medical, or rather Surgical, part of our report. For a very able and interesting account of the Hospital and School and their belongings, see the *Medical Times and Gazette*, vol. ii., 1862, p. 411.

During Mr. Hutchinson's last week, there were 330 cases of accidents of all sorts treated, of which 35 were admitted. There were also cases admitted by "governors' letters," and as "extra cases" by order of the Surgeon, making about 45 in all, the average weekly number (1866) being 57·6.

Mr. Little has under care, in Gloucester Ward, a man who was admitted on Saturday with a compound depressed fracture of the skull. Primary trephining was performed, and the fragment elevated. The dura-mater was not injured, and was not even seen in the operation. The man has since had repeated rigors, and is in a very precarious condition.

A boy, 4 years of age, was brought in on Thursday, having had his left cheek severely bitten and torn by a dog which was supposed to be mad. Mr. Little cut away the edges of the laceration, and adjusted the parts with harelip pins. The evidence as to the dog's madness was that it had bitten seven

other persons, that it seemed wild, and foamed at the mouth. It had been killed. The other children were not brought. The wound healed well, and he has been made an out-patient.

On Friday was admitted, under Mr. Little's care, a woman, aged 46, with a large left strangulated femoral hernia. The strangulation had existed for two days, and the woman was very ill. An operation was performed without delay. The hernia could not be reduced entirely until the sac had been opened. Only intestine of a very dark colour was seen. The woman had had a slight irreducible hernia for several years. She had been constantly vomiting before the operation, and continued to do so almost without cessation till she died thirty-two hours afterwards. At the post-mortem no peritonitis was found, not even a greasy condition of the peritoneum; but there were streaks of congestion here and there, and some distance from the femoral ring was found a portion of intestine, almost as large as two walnuts, which had evidently been very tightly strangulated. It was of a very dark colour (almost black), with spots of ash-grey colour of commencing gangrene in it. The woman had probably died from the shock of the tight strangulation of the intestine.

There was also under Mr. Little's care an obscure case of death in a comatose condition, probably from uræmic poisoning. The patient was a feeble old man, admitted with double hydrocele. He was then sensible. After about forty-eight hours he suddenly became insensible, and within twenty-four hours died. At the post-mortem his right kidney was much enlarged and disorganised. The ureter also was enlarged; it ended below in a pouch, and no opening into the bladder was found. A calculus was carefully looked for by Mr. Little, but none discovered. His prostate was not much enlarged, and his bladder was quite healthy, and contained about a pint of clear urine. During life, his urine had escaped involuntarily, and when examined once did not contain albumen There was no stricture of the urethra. The left kidney and ureter presented no particular changes, so that why the man should die remains a mystery still. The bladder, etc., were reserved for further examination.

Mr. Little also admitted a case of acute moist gangrene of the inner toes in a man aged 52, who had lately been weakened by an attack of cholera. The condition of his arteries was very interesting. They felt like rings of chalk. He had no arcus senilis.

A young man was brought to the Hospital after having fallen from a height of 80 feet, without sustaining serious injury.

An intemperate woman, aged 55, was admitted for compound fracture of the leg. There were two wounds, neither of large size. Both bones were much comminuted, and a small piece was removed. It was decided not to amputate. The leg remained quiet for a few days, she then had a severe rigor, ushering in erysipelas. No attempt at suppuration occurred, only a thin serous fluid oozed out, and she never rallied sufficiently to warrant amputation.

An interesting case of secondary syphilis, as evidenced by condylomata at anus, a scattered rash, and ulcerated throat, in a boy aged 12, must be reserved for future note.

Amongst the more interesting cases at present in Mr. Hutchinson's wards, are two examples of multiple lupus. In each case the patient, a child, is spotted over with lupus patches, arranged much in the manner of psoriasis. In one case, all the patches ulcerate at the margins, but the other is very remarkable and interesting on account of the entire absence of ulceration. Of the latter patient a carefully-finished portrait has been taken. Both of them are well worthy the inspection of any one interested in rare forms of skin diseases.

A young man has just been discharged who was admitted on account of unusually severe herpes zoster on the upper part of one thigh, and an old man in whom very large patches of herpes zoster on the chest had ulcerated. The vesicles were confluent, and the ulceration involved patches as large as the outspread hand.

There is in George ward a very curious case of multiple exostoses. The patient, a boy of ten, has symmetrical exostoses on almost all his long bones, those on the left side being in every instance larger than the corresponding ones on the right. Mr. Hutchinson has excised two, which were so large as to be inconvenient (from the left femur and fibula).

A boy, aged about 13, was admitted, having had his left hand crushed by a toothed wheel. Primary amputation was necessary, and the interest of the case lies in the fact that on dissecting the parts the carpal epiphysis of the radius was found to be clearly separated from the shaft. The shaft itself was much broken; the epiphysis was entire. As is usual in these cases, the lower end of the shaft was completely denuded of periosteum, the membrane, together with the external fibrous tissues, remaining attached to the epiphysis. Mr. Hutchinson remarked that he had found this state of things in all the recent specimens of separated epiphysis which he had had the opportunity of dissecting.

A week ago Mr. Hutchinson operated on a case of femoral hernia which presents some interesting features. The patient was a woman of middle age, for long the subject of hernia. The tumour had become strangulated on the Sunday evening, and she was brought to the Hospital very ill on Tuesday morning, having, however, been sick only once, and that immediately after a dose of medicine. In all other respects her symptoms had been decided and severe. Mr. Hutchinson remarked that, though sickness was undoubtedly the most definite symptom of strangulation, yet we could not always rely upon it. He had known one instance in which a patient died after ten days' neglected strangulation, having never vomited at all. In the present case the taxis was found to be impracticable, and the operation was performed. The sac was not opened. Calomel and opium half a grain and one grain respectively every four hours were ordered, and ice applied on the abdomen. The woman did perfectly well afterwards. The skin wound healed entirely by first intention, but a fortnight later it gave way, in consequence of suppuration beneath it. She has been ordered a truss, and is about to be sent out.

In one of Mr. Hutchinson's wards there is at present a woman whose median nerve was completely divided by a cut from a piece of crockery twenty years ago. There is no evidence of separation of the nerve. All the parts supplied by it are still devoid of sensation, and the little muscles about the thumb, excepting those supplied by the ulnar, are quite atrophied. The interesting points about her case are—First, that she has learnt to write, holding her pen between her little and ring fingers, and says she can even hold a needle so. It is her right arm which is injured, and she has learnt to use her left for all purposes except writing.

Secondly, as regards the nutrition, she states that several times she has accidentally burnt the paralysed fingers very deeply without feeling it, and that they healed well. They have never been inflamed. All the fingers are bent forwards, and a little clubbed at the ends. She has not suffered much from the painful aching which is not infrequent in these cases. She says that it has only been in very cold weather that the hand has been painful, and then there has been more aching above the scar of the wound than in the hand itself. The scar is at the commencement of the lower third of the forearm.

Thirdly, as regards the maintenance of the temperature, the paralysed fingers are at present about a degree hotter than those of the other hand, the trial being made when the patient was in bed and after both hands had been exposed for about half an hour. This poor woman was admitted on the present occasion for a wound involving the trunk of the ulnar nerve, and her entire hand is now paralysed. Pins can be thrust into most parts of the ulnar territory without her feeling it, but at the tips of the fingers she possesses feeble sensation, which appears to be increasing from day to day. It is hoped that the ulnar nerve is not completely divided, and as the wound has almost healed by first intention, there is a fair prospect of its improvement.

In the Jews' ward there is an interesting case of tertiary syphilitic ulceration on the penis. The patient, a healthy middle-aged Jew, cleanly circumcised, was seen by Mr. Hutchinson in private, in consultation with Mr. Dyte, about ten days before his admission. The sore was then as large as a crown piece, but oval in form, sloughy at its base, and with undermined swollen edges. The chief question of diagnosis seemed to be between phagedæna and epithelial carcinoma. There was the scar left by a chancre fifteen years ago at the meatus, but the patient, a married man, denied any recent exposure to contagion, nor did his present sore in the least resemble any form of primary cancer. Mr. Hutchinson ordered the treatment for phagedæna. This had no good result, and the man subsequently came into the Hospital. The immersion plan, hip bath, night and day, was persevered in for another week, and opium was given. The sore did not spread, neither did it show any tendency to heal. Mr. Hutchinson directed attention to some features in which it resembled an inflamed cancer, and expressed fears on this score. A third diagnosis, however, suggested itself, that it might possibly be a tertiary ulceration of the same kind as those frequently met with on the lower extremities. Acting

upon this hypothesis, the iodide of potassium in ten-grain doses was prescribed. The sore immediately cleaned, and is now rapidly healing. Let it be noted that the man has no other symptom of constitutional syphilis, nor, according to his own statement, has he had any since the original attack twenty years ago.

A few weeks ago, Dr. Senft-leben, of Berlin, in a visit to the Hospital, mentioned to Mr. Hutchinson that in Germany injections of chloroform had been used with great success in the treatment of hydrocele. A patient having been admitted with a large, thin-walled bursa in front of the patella and its ligament, which had resisted treatment by blisters, etc., it was determined to try this method of cure. The tumour was as large as an adult fist, but lengthened and flattened. It was not inflamed. Mr. Disney Thorp, the House-Surgeon in charge of the case, punctured the cyst with a hydrocele trochar, drew off the whole of the fluid, and then injected a drachm and a half of pure chloroform, which was left in. No particular pain was caused, but the bursa quickly refilled as large as before. It remained full for about a week, then absorption commenced, and in three days every trace of fluid and of swelling had vanished. It is intended to try the same plan in other cases.

With regard to the question of the influence of cold on the number of casualties brought to the London Hospital, to which we referred last week, we must bear in mind that the supply comes chiefly from men at work, not from those walking in the streets. Therefore any cause (such as cold) throwing many out of employment will also diminish the number of casualties. When every one is employed in summer, the number of accidents is very large; but when bricklayers, dock labourers, etc., are out of work, the number of accidents will be small without reference to the amount of the traffic. The number of admissions from street accidents is proportionately small.

ST. THOMAS'S HOSPITAL.

BLISTER TREATMENT OF RHEUMATISM.

(Cases under the care of Dr. PEACOCK.)

For some time Dr. Peacock has been employing in his wards at St. Thomas's Hospital the treatment of rheumatic fever by blisters around the affected joints, as recommended by Dr. Davies. In some remarks which he made upon the results of the cases so treated, he stated that when he first had recourse to the use of blisters he employed them too timidly, applying them only around one or two of the more seriously affected joints. Thus used, he did not find the benefit from the treatment which he had anticipated. The joints so treated were certainly much relieved, but the general febrile disturbance was not diminished, and the cases appeared to pursue their course little modified by the treatment. Since that time he had had recourse to the use of blisters much more freely, applying them around all the affected joints simultaneously to the number of five or six, and repeating the application if necessary; and his experience fully bore out the reports of Dr. Davies as to the efficacy of the treatment.

The cases in which he had met with the most satisfactory results were—first, those in which ordinary constitutional measures had been tried for ten days to a fortnight with but little benefit; and secondly, cases which are not of uncommon occurrence, in which patients are admitted in a very prostrate condition, labouring under cardiac symptoms the result of previous attacks of rheumatic fever, or with some other serious complication, and whom it is therefore very undesirable to reduce by prolonged eliminative treatment. In the former class of cases he had found free blistering immediately productive of the greatest advantage, the affection of the joints being relieved, the constitutional symptoms subsiding, and convalescence being quickly established. In the second class of cases, he had seen the local and constitutional symptoms at once disappear after scarcely any constitutional treatment, and before the prostration of strength had been materially aggravated.

He had not as yet had sufficient experience of the treatment to speak with confidence as to its effect in diminishing the tendency to the development of heart complications; but in no case in which the treatment had been tried, and in which the patient was previously free from cardiac symptoms, had the heart become affected; and he thought it was fair to suppose that, by affording the means of rapid external elimination, and so cutting short the duration of the disease, the chances of serious complications arising would be much lessened. In cases in which there was old cardiac disease it became of the greatest importance to provide some rapid means of cure, for in such cases the heart was very apt to become again the seat of inflammation, and the existing disease, even though slight, to be rendered serious. In such cases, therefore, he thought the blister treatment most advantageous. He said, also, that the question of annoyance to the patient from the use of blisters might be entirely set aside; the pain from the blister was so insignificant, compared with that of the disease, that the patients scarcely noticed it, and had in no instance complained, even when several blisters were applied at the same time.

In confirmation of his remarks, Dr. Peacock specially referred to the two following cases as types of the forms of disease before referred to, in which the blister treatment proved particularly useful:—

Case 1.—*Acute Rheumatism—Old Mitral Disease—Great Anæmia—Rapid Relief from Blisters—The Rheumatism cured—The Cardiac Disease remaining as before.*

C. M'C., aged 22, a widow, with one child a year and nine months old, admitted into Elizabeth's Ward on August 22, 1866. When admitted she was labouring under symptoms of rheumatic fever, and was very much prostrated. She stated that her father and mother were both dead, the former having died about 60 from bronchitis, the latter at 54 of bronchitis and dropsy. She had lost one sister after her confinement, who had disease of the heart after rheumatism; and of three others who were still living, one was delicate and had had rheumatic fever. She had never had any brothers. She herself had always been delicate, and had suffered from palpitation of the heart for six years, and six months before her admission she had had an attack of inflammation of the chest. She was of a very fair complexion, with light hair, and very pale and thin. The rheumatic symptoms under which she laboured commenced three days before admission. When admitted she had great pain and some swelling in both ankles and the left knee and shoulder. A systolic murmur was heard at the apex of the heart, and there was considerable constitutional disturbance, with much prostration of strength. She was directed to have blisters applied near the affected joints, to take two grains of iodide of potassium and ten of bicarbonate of potash in an ounce of decoction of bark three times daily, and to have four ounces of wine in the day.

August 29.—She is very much relieved. The skin is cool and moist, the pulse 108 and feeble; tongue clean and moist. There is still some swelling about the ankles, but the tenderness is much less both about those joints and in the right knee and shoulder. There is a soft systolic murmur audible most intensely and most prolonged at the apex. About the nipple it is preceded by a rougher sound. The blisters all rose well and discharged freely, and their operation was attended by immediate and great relief to the pain.

30th.—The blistered surfaces have quite healed. The ankles still continue slightly enlarged, but the pain and tenderness have entirely disappeared. Pulse 72, quiet. She is very weak and anæmic. The murmur still continues. The systolic sound is immediately preceded by a short but distinct sound of a somewhat harsh character. To discontinue the former medicines, and take quinine and iron, and have the mixed diet with potatoes.

From this time she steadily improved, except that on one occasion she had a violent attack of palpitation, caused by excitement at seeing a child dying in the ward. She was discharged cured of the rheumatic symptoms and much improved in general health, but with the mitral affection as before, on September 20.

Case 2.—*Acute Rheumatism—Very little Relief from General Treatment continued for Ten Days—Great and immediate Benefit from Blisters—Entire Cure.*

C. C., aged 20, single, in service, admitted into Elizabeth's Ward on September 28, 1866, labouring under symptoms of rheumatic fever of three days' duration. She had had a cold for about a month before the commencement of the rheumatic symptoms, and did not know any special cause for her seizure. She was first taken with pains in the back, passing to the shoulders and knees, and shortly afterwards became feverish. When admitted she was suffering severely from the rheumatic symptoms, with proportional constitutional disturbance. The catamenia had been absent for nearly two months. She was

directed to have the bath, to take two pills of blue pill and rhubarb, and ℈j. of bicarbonate of potash every three hours. The following day she had some pain in the region of the heart, and a mustard poultice was applied, and a dose of calomel and opium given.

On October 4, twenty minims of vin. colchichi were directed to be taken in the carbonate and sulphate of magnesia mixture, and she was ordered to have eight grains of Dover's powder each night.

On October 9 Dr. Peacock, who up to this time had been from home, first saw the case. Up to this time there was little, if any, improvement. Her pulse was quick (120 in the minute), tongue much furred, skin warm, very moist, and the perspiration had a very sour smell; she was suffering extremely from the rheumatic pains, and the right knee, the left ankle and knee, and the two shoulders were swollen and excessively tender, and she lay in a very constrained position and could not bear to be moved. The heart's sounds were without murmur. She was directed to discontinue the colchicum, but to take the Dover's powder at night and, as the bowels were confined, the aperient medicine, and to have blisters applied above the five affected joints.

12th.—All the blisters rose well and discharged freely; she is very much relieved; tongue still furred, but less so than before; pulse much less quick; skin still moist, but the acid smell is almost entirely gone; the joints are still very tender, but are less swollen, and the pain is somewhat better, except in the left shoulder; she has slept more comfortably last night; the bowels are sufficiently acted upon, and she passes water freely—quantity, two pints in 24 hours; specific gravity 1023; very acid; slight flocculent deposit, partially dissolving on application of heat, and entirely on addition of nitric acid.

15th.—Expresses herself as decidedly better; her tongue is clean, though slightly dry; pulse quiet, 64; skin comfortably warm and moist; she sleeps well at night, and is free from pain; there is still some swelling and tenderness of the left knee and ankle, and of the right shoulder; she speaks with some difficulty, and the throat is red and the tonsils swollen. To have two other blisters applied—one below the left knee, and the other in front of the right shoulder; the mixture to be taken only twice daily.

18th.—The last two blisters rose well, and the pain and tenderness and swelling of the joints have entirely subsided; tongue nearly clean, but somewhat dry; pulse quiet and feeble, 76; bowels sufficiently acted upon. To continue the mixture and take the quinine and iron pills twice daily.

22nd.—She was not quite so well, having a recurrence of pain, and two other blisters were applied—one above the left ankle, the other above the corresponding knee.

On the 28th she complained of pain across the chest, for which no cause was detected, and she had also pain in the extremities; she was becoming weaker, and the pulse was increased in progress and irritable. The pills were directed to be taken thrice daily, and she was ordered to have three ounces of wine.

29th.—She is much better, being entirely free from pain, and the joints are not tender, though still somewhat stiff; tongue slightly furred and dryish; pulse feeble and somewhat irregular, 68; the throat is still sore, but the tonsils are less enlarged. To have the pills increased to three daily, and to take four ounces of wine.

From this time she steadily improved, being entirely free from pain, and the joints completely recovering their mobility. She continued, however, to speak somewhat thickly, and the tonsils, more especially the right, were still enlarged. This, however, subsided, and she was discharged cured on November 22.

UNIVERSITY COLLEGE HOSPITAL.

*** We have much pleasure in publishing the following letter from Dr. Jenner; at the same time we acquit our correspondent of any intentional misstatement, as the phrase protested against by Dr. Jenner fell from the lips of a Hospital official. It was an expression too indefinite, but we conceived it to mean that drugs were not given for the sake of giving something, nor without some positive indication for their use, and that other therapeutical means were chiefly relied on. We hope, however, that Dr. Jenner's letter will serve as a correction of any misconception into which our remarks may have led our readers.—Ed.

Sir,—In the last number of the *Medical Times and Gazette*, under the heading Reports of Hospital Practice, "University College Hospital," is the following sentence:—"As a general rule, it may be said that at University College they do not believe much in the efficacy of drugs." Now, so far as I am concerned, this is positively incorrect, for I do believe in the efficacy of drugs, and do believe "much" in the efficacy of drugs.

I may add that I have been informed by one of my colleagues who was in charge of the cholera cases in the autumn, that they were severally treated according to the indications present, and that to the far larger number of the cases drugs were administered. I limit myself intentionally to mere facts, and trust that you will give this note as prominent a place in the next number of the *Medical Times and Gazette* as the original statement (erroneous, certainly, so far as it includes myself, and I believe erroneous in regard of my colleagues) occupies. I am, &c.,

Wm. Jenner, M.D.,
Professor of Medicine, and of Clinical Medicine in University College, and Physician to University College Hospital.
18, Harley-street, W., Jan. 16, 1867.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0

Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.

Post-office Orders and Drafts on Army or Navy Agents, should be made in favour of Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d. | A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d. | A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, JANUARY 19, 1867.

IN BONDAGE.

Medical teaching ought to be both honourable and profitable. It is neither the one nor the other, though time has been when it was both. Thrones and dynasties are not the only things that have been turned topsy-turvy since the beginning of this century. The progress of civilisation that we brag about ends mainly in making a tyrant of the multitude instead of the man. Nor are the professions what they were. Dogmatic divinity no longer damns and dictates unconditionally, but accommodates itself to fancies about pew-rents and Puseyism. Law occasionally condemns *more majorum*, but the *vox populi* reprieves or pardons. Physic finds out that there are changes of type in other things than disease. Fashion rules fees, and Physicians follow the fashions. As with the practice of the Profession, so with its beginnings, teaching, and learning. There were formerly teachers who taught what they knew and thought, and hearers who went to hear what could not be learnt from books. The individuality of the teacher is now smothered in the prospectus of the school. The prospectus of the school is the deformed offspring of the curriculum. The curriculum would never have existed but to bring all things to the level of the mediocrity of monopoly. We should be sorry to shock such a respectable body as the College of Physicians, such a disinterested body as the College of Surgeons, such an influential body as the Society of Apothecaries; but really and truly, Messrs. Presidents and Chairman, we can only look upon your ways and doings, your rules, regulations, and curriculums in reference to

Medical education, as one shade better, if so much, than the detestable unwritten laws of the Sheffield Trades' Unions and the despotic dominations of Messrs. Potter and Co. Whose tongues have you left unloosed to lecture? Whose hand have you left free to demonstrate? Time was when learned Europe, at least, heard of Cullen as a teacher of Physic, of the Munros as teachers of Anatomy, of the Bells as teachers of Surgery, of Denman as a teacher of Midwifery, of Baillie as a teacher of Pathology, of Abernethy and Cooper remodelling and refining the practice of a whole generation. But how did these men stamp their mark upon their age? Did they and their compeers lecture by measure, or square their prelections by the standard manuals of the day or the well-known desiderata of antiquated examiners? No; they had something of their own to say, and they said it in their own way. The man himself was then the school, and he spoke as man to men, and men were glad to listen. But how now? and what can be said of that which is called the present system of Medical education? Let us look at it and see what it is and does. A certain number of men out of the population have to make themselves fit for practising upon the rest the arts of Medicine and Surgery. They are from all ranks of life, of all sorts of capacities, and with all sorts of destinies before them. Some are poor, others rich; some clever, others fools incorrigible; some start as presidents *in posse*, others look up to a Poor-law appointment. Those who know what they are about, and what they have got to do, would naturally say—We shall go and learn Anatomy of this man, we shall study Medicine under that Professor, and take the practice of Surgery from such and such an operator. Something we shall acquire from books, and much we shall gather by clinical intercourse. We shall find out as we go on what we are best fitted for, and the best way of fitting ourselves for it. Not so fast, young man. All, whoever they are, or whatever they may intend to become, are met on their first move by an impediment which makes them the slave of slaves for the rest of their educational career. This imposition is a curriculum or course of study. We are not now going to consider its selfish origin and purpose. Worse than enough for us that such things exist. It ordains that every man, according to what he is to be, in addition to reasonable proof of age, general acquirements, and good moral conduct, shall produce certificates of having heard a certain number of lectures on a specified list of subjects in a given time at certain recognised schools, and of having done a certain amount of clinical work at certain recognised Hospitals. No other course is open to him. He must hive himself and be fed in the hive. He must go to some particular homestead, put his neck in the halter, and submit to be home-fed. It is of no use to say I study Medicine, unless it be as a Guy's man, or a St. George's man, or a man of some other school. And what does he find at these recognised schools? Men associated together for the special purpose of teaching, and teaching from inclination or because they are qualified to teach, and doing the team of horses, oxen, mules, and donkeys, taken out of the Hospital lot, all with bit, bridle, blinkers, and bearing rein, and forced into the collar for the sake of dragging along the school. Hospital and school—school and Hospital. In most cases the Hospital has given birth to the school; once or twice the school, for its life's sake, has aborted or adopted a sort of foundling crippled Hospital. Anyhow, the two things now work with a will? Far from it; more likely only an odd coexist, or Siamese-twin it, as a matter of necessity—bad as the arrangement is. So the square pegs of the Hospital have to be fitted into the round holes of the school. The staff of the Hospital must do the work of the school, or find journeymen lecturers to help them.

The saying is, that "no man can serve two masters." Every Medical lecturer has at least three. His class is his master; the school is his master; and the curriculum is his master. His class is not his own, but put before him by the school. It comes to him in the attitude of criticism, listens to him condescendingly, and records approval according to the students' test, whether or not "he knows what the examiners want." In the school he is just part of the machine. His particular cog must be like the rest of the cogs. A very little eccentricity would throw the whole thing out of gear, stop all motion, and make it the order of the day to get rid of him. If his school is slow and orthodox, slow and orthodox he must seem to be; if fast and sensational, he must shut his eyes to his reputation, and go the pace. But the worst tyranny of all is the tether of the curriculum and the examination standard. The lecturer must lecture only at certain times and seasons; he must lecture only at certain recognised schools, and he must bear in mind that only certain-shaped things are recognised as facts and doctrines at the examination board. Medical facts may, for aught we know, be, as the scoffers say, Medical fictions; but, at any rate, it ought to be the business of our examiners to take the fictions of the day as their rule. Yet it will not do for lecturers and students to assume that it is so. Woe to the examinee, and curses on the lecturer, that makes such a mistake. In teaching, teach what your grandfather learnt; in learning, learn what your grandfather taught. Lecture anywhere but at a recognised school; teach what Owen, or Huxley, or Virchow would recognise as science; and see whether your certificates would be recognised or your pupils passed. "*Quid rides?—de te Fabula narratur.*"

THE WEEK.

FOOD FOR THE PEOPLE.

The Society of Arts have, at the instigation of Mr. Harry Chester, appointed a committee to inquire into the supply of food, produced in this and other countries, available for the working classes, a proposal which recommends itself to all. There can be no doubt of the fact that our people are underfed, and now, when there is such a general movement throughout the country for the reduction of wages, we fear that the labouring man will be in worse case than ever. As well pointed out by Mr. Chester, there are many substances available for nourishment destroyed simply because these cannot be brought into markets where they would bring prices which would remunerate the producer, especially milk. But there is more than this; for, in many parts, articles of diet which are highly relished, in others are absolutely despised. To take a single illustration, eels, which are so highly prized in London, are in Scotland voted unclean, and if caught for amusement are thrown away as useless. Again, in many places mushrooms grow abundantly, but they are not utilised because the people hav a dread or dislike of all "toadstools;" tons of watercresses growing, but they are only fit for cows. Many parts of our coast swarm with shell fish, which can be caught with very little trouble, only that trouble is not taken. What, therefore, is most essential is that the resources of one part should be utilised for the benefit of another, instead of being, as they now are, neglected or despised. We really do not so much want new articles of food introduced as that old and known ones should be properly appreciated, and that the people be shown that things they have been wont to reject are really of great value. Bread will ever remain the staff of life, but bread by itself is insipid fare. Let our working classes be taught where to look for a relish, and they will only want one thing more, which in reality is one of the most essential of all—they must be taught how to cook it. One phase the inquiry shows some symptoms of assuming which we greatly dread; food cannot be estimated by so many grains of carbon or so many of nitrogen; neither of these are

capable of nourishing the body. As we have before insisted in our articles on the "Philosophy of Food," experience is the guide as to what contains most nourishment and is best adapted for supporting the labouring man. What is wanted is that the experience of one district should be made available in another, for really the ignorance displayed in this way is perfectly astonishing; this, combined with improved means of preservation and transit, will do much to relieve, though they may not perfectly remedy, the present deficiencies in the diet of our working-classes.

EFFECTS OF COLD.

The last Weekly Return of the Registrar-General discloses the effect of the severe weather which set in at the commencement of the new year. The deaths, which numbered 1436 and 1437 in the two preceding weeks, rose last week to 1891, so that an increase of 455 deaths was recorded. The thermometer fell at Greenwich to 7°·7 and 6°·6 on Friday and Saturday, the 4th and 5th inst. Ten inches of snow fell on the previous Wednesday, and on the next Saturday the waters of the Thames were below the freezing point. The results of the cold in the first week of the year are apparent in the mortuary returns of the succeeding week; and a comparison of the deaths at different periods of life in the two weeks shows at once the class to whom cold is most fatal. Of young people under 20 years of age 697 died in the first and 733 in the second week; at ages 20-40 the deaths were 195 and 240; at 40-60 they were 233 and 353; and at 60 years of age and upwards the deaths increased from 312 to 565. The deaths from small-pox, measles, scarlatina, and diarrhœa declined; but bronchitis rose from 178 to 375, phthisis from 178 to 209, whooping-cough from 54 to 73, typhus from 44 to 59, and heart disease from 62 to 86. "In such weather," says the Registrar-General, "to give fire, food, and clothing is to give life." This is so true that it makes one's blood boil to think of the number of strong idle rogues who get the lion's share of parochial relief, while the really deserving poor just starve to death. The application of public money in a way which tends to draw hordes of tramps and vagabonds to London needs to be checked, and a system of greater supervision in the administration of relief, so as to find out the most necessitous cases of poverty and distress, should be inaugurated as soon as possible.

A GALLANT MEDICAL STUDENT.

We draw our readers' attention to the heroic conduct of Mr. Copland, a student of the London Hospital. He had been skating in Regent's-park on Tuesday afternoon, and was just about to leave when he heard that the ice had given way at some distance from the place where he was. He saw that no one was near enough to render any assistance, and immediately skated as fast as possible over the intervening ice and plunged in, without hesitation, close to the spot where he could see a head above the water. He was able to save the lives of three girls of about 10 or 12 years of age, though one of them was very much exhausted when he got her to land. There was a large space almost free from ice, and his overcoat and skates were a great incumbrance when in the water, but he availed himself of a large piece of ice which was floating near by pushing it before him, and which helped considerably to keep him afloat. This occurred about an hour before the terrible accident already reported in the papers. Then two other London Hospital men fell in, but fortunately near the edge, and they escaped with a wetting. We heartily congratulate Mr. Copland on his promptness and courage, and the London Hospital on numbering among its students so brave a fellow. A man who is so ready for an emergency, and who can keep his wits about him to do so much as Mr. Copland did in the midst of great danger, may be assumed to have a fine basis of manly qualities on which to build a large reputation for whatever he undertakes as the object of his life. Coolness, promptness, and courage are great elements in forming a good Physician or Surgeon.

THE LONDON MEDICAL SOCIETY.

At a meeting of this Society on Monday night, Mr. Canton exhibited a patient who had been operated on for what proved to be a myeloid tumour in the antrum of Highmore. This had been excised, and the patient was now well, only, as Mr. Canton had made a horizontal incision below the eye in removing the diseased mass, and the integuments had considerably shrunk, there was a slight degree of ectropion. He showed a photograph of another case where the whole of the upper jaw had died and been removed, yet, in course of time, the gap had filled up and the deficiency was scarcely noticeable. Mr. Alfred Cooper then read a capital paper on "Fissure of the Rectum," showing how often this disease is overlooked, and the patient treated for some other complaint; that the great symptoms were acute pain during defecation, continuing more dull for a long time after, aching pain in the loins, sometimes streaks of blood on the stools; that the fissure can usually be exposed by merely separating the buttocks, but that in operating for it, which should be done by a *free* incision, care should always be taken to find whether there is any polypoid growth associated, as this frequently prevents a cure. Where operation is inadvisable the disease may sometimes be got rid of by using strong calomel ointment and regulating the bowels. The President, Dr. Hare, *par parenthèse*, said that he had found the same ointment most valuable in cases of pruritus pudendi. Mr. Harrison said he had sometimes succeeded in curing the fissure by the pressure of a cone introduced into the rectum. Mr. I. B. Brown, jun., thought that rest for a month after was advisable. Most present seemed to think so long a period was unnecessary. Mr. W. Coulson preferred an ointment of the suboxide of mercury to one of calomel. Mr. Marshall had seen two cases where the operation had done no good. Mr. Henry Smith had one unfortunate case, having operated on a diabetic patient; insisted on the danger of operating on such cases, and showed that the fissure might sometimes in such be cured by local application. Mr. Canton had seen in cases of long standing a very relaxed state of the mucous membrane of the bowel, which had also to be removed by operation. Mr. Weeden Cooke threw out a remark as to the importance of ascertaining whether there was any syphilitic taint in the very intractable cases.

HUNTER *v.* SHARPE.

The most striking testimony to the interest we, as a Profession, had in the above trial, has been furnished by the conduct of two of the principal scientific witnesses, Drs. Williams and Quain, who have, we are informed, "in the handsomest manner declined to accept any fee for the assistance" they rendered the *Pall Mall Gazette*.

THE ROTHERHAM DISPENSARY AND ITS MEDICAL STAFF.

At the moment of going to press we have received a letter, which we publish in another column, and a newspaper, giving an account of a meeting of the supporters of the Rotherham Dispensary, in which it was resolved that all the Medical men of Rotherham and its neighbourhood should be elected honorary Surgeons to the Institution. As this proposal had not been previously submitted to the Medical Officers—and, in fact, took them by surprise—they naturally felt aggrieved at it, and before the termination of the meeting sent in their resignation. Whatever good may be reasonably ascribed to the principle of extension of Medical staffs, it seems that to make a radical change in the constitution of the staff of a Medical charity without consulting its members is to treat them with injustice and discourtesy, and we think the Medical staff perfectly justified in the course they have taken.

ATTEMPT TO RECRUIT THE NAVAL MEDICAL SERVICE.

We hear that the Admiralty are proposing to enlist recruits for the Medical service of the Navy, by offering to pay their expenses at the rate of forty shillings a week during the fourth year's Medical study which their regulations require. The proposition we have seen, however, is one which we think no young man of education and spirit would be likely to accept. They are to enter into a bond to remain in the Navy ten years, and in case they do not pass their examinations at the end of the fourth year of their studies, they undertake to return all the money they have received. A few hungry men may be tempted into a service which is now deservedly the most unpopular in the state, by such a proposal, but no young man, we think, would willingly sell himself for ten years for a miserable pittance of two pounds a week. If the Lords of the Admiralty wish to make the Naval Service attractive, let them treat their Assistant-Surgeons as the Peninsular and Oriental Company treat their Medical Officers, and there will be no lack of candidates.

THE MORNING MEDICAL VISIT AT KING'S COLLEGE HOSPITAL.

A circular has been issued to the students of this Hospital, informing them of the facilities which exist for clinical study, and for practice in case-taking, auscultation, and microscopical examination of excretions. Case-taking is made a *sine quâ non* to pupils who desire a certificate of attendance. The circular concludes with the following suggestive paragraphs. The antithesis between what is required of a student by an Examining Board, and that which is required by the public good and his own conscience, seems to imply that some Examining Boards may be a little behind their time:—

"For some years past there has not been that earnest desire on the part of the class to take advantage of the great opportunities afforded, in the wards of our Hospital, for acquiring a thorough knowledge of disease, *and although nothing that is there to be learnt may be required by the Examining Board* at which the student intends to present himself, it is certain that all his attention and industry should be devoted to acquire that practical knowledge of disease and its investigation which can alone enable him to practise his Profession to the advantage of the public and in a manner satisfactory to his own conscience.

"To convince the student of the importance of microscopical and chemical work to modern Medicine, it is only necessary to mention the significant fact that every Surgeon entering the Army, although fully qualified to practise, has to pursue a course of instruction in these departments, as far as they are connected with his future duties, at the new school at Netley, and to *pass an examination* before he is permitted to practise."

ABSOLON *v.* STATHAM.

We hope, for the sake of the reputation of the legal profession, that there is a mistake in the report which has reached us, that the plaintiff in the late action of Absolon *v.* Statham has given notice of a new trial. Should this prove true, we wonder whence the funds necessary to set an action going are derived. We should have thought that even speculative attorneys would have hesitated to encounter the risks of such a proceeding. We have no doubt that if the persecution of Mr. Statham is thus continued the active sympathy and assistance of the Profession will not fail him.

THE GERMAN HOSPITAL.

The Governors of the German Hospital at Dalston have recently created a new office in the Institution, that, namely, of Honorary Assistant-Physician. This has been done in order that the out-door patients may be attended by a senior Practitioner, in preference to the resident Medical officers, who, though selected always for their ability, are of course young in the Profession. Already there are, we hear, two aspirants for the new office, both connected by previous services with the Hospital, and considered most competent men. One of these, Dr. Baumler, has been a Resident Medical Officer for three years; the other, Dr. Castaneda, has held the office of Honorary Physician to the Western Dispensary, connected with the Hospital, for seven years. The claims of the two candidates, considered in regard to scientific reputation, may be considered as well balanced, but as Dr. Castaneda has the advantage of seniority and length of service, he stands on these grounds in the most favourable position. In cases where candidates are equal in Professional position, the rule of *seniores et priores* seems a fair one to be followed.

THE ELECTION OF HOUSE-SURGEON AT THE SUNDERLAND INFIRMARY.

The Sunderland Infirmary requires a House-Surgeon, and it is in dispute whether the candidates should be chosen entirely by the Governors, or whether a list of those eligible shall be nominated by the House Committee and Medical officers, and then submitted for final decision to the general body of Governors. By the latter mode of proceeding many of the evils of canvassing would be avoided, and the labour and expense to the candidates diminished. The matter has been postponed for the purpose of obtaining the rules of similar institutions on the point. We should think that the Governors of such an institution would gladly be spared the trouble of deciding on the claims of all comers, and we are certain that the Medical officers would be likely to estimate the claims and fitness of rival candidates with greater success than a body of laymen, who can know but little of the duties to be performed, or of the qualities and acquirements required for the office.

THE CHARGE OF INHUMANITY AGAINST MR. MASSINGHAM.

We have at last before us Mr. Massingham's defence of the conduct for which he has been censured by a coroner's jury and suspended from his office of Poor-law Surgeon by the Guardians of Bethnal-green. We have no wish to anticipate the decision at which the Poor-law Board may arrive. We have thorough confidence in the impartiality of the report which will be presented to the Board by Dr. Markham, the Inspector who has investigated the case; but we think that we are not overstepping the limits of editorial caution when we state that the case now wears a very different aspect from that in which it was left by the coroner's inquiry. In the first place, it appears from the evidence of Mr. Hetman Harris, the Surgeon who made the post-mortem examination, that the woman—Mrs. Ferry—died from pneumonia and effusion into the pericardium, and that the fatal event was only partially attributable to the shock of her confinement. The woman was confined on Wednesday, January 2, and it was on the evening of that day that an order to attend her was brought to Mr. Massingham. Mrs. Massingham deposed that the woman who brought the order said that the labour had been over some hours, and that she did not want Mr. Massingham to see the patient; she only wanted some medicine for after-pains, and she asked him "if he would call the next morning on his rounds." The next morning, at half-past eight, a woman—Mrs. Fox—came to Mr. Massingham's, and said she wished to see the Doctor. Mr. Massingham, who had been suffering from dysentery during the night, was then dressing, and said that he would see the person in half-an-hour. He did not know who she was or whence she came. It appears that he did not see her. The following is his account of what afterwards occurred:—

"About ten o'clock a girl, whom I did not know, and whom I do not recognise even now, came to the Surgery and said, 'Will you come and see mother? she is dying.' I said, 'Fiddle-de-dee, nonsense, your mother won't die yet.' I supposed then that the girl had come from a private patient in Prospect-terrace, who used to faint away, but who, I knew, was in no imminent danger. I am quite sure the girl did not tell me where she came from. I did not ask her, because I made sure she came from Prospect-terrace, to which I had

PERIPHERAL NERVE APPARATUS. PLATE I.

Mode in which a single nerve fibre is supposed to terminate, according to most authors.

Fig. 3.

Mode of formation of network or plexus of finest nerve fibres.

Fig. 4. Fig. 5. Fig. 6.

Arrangement of terminal pale nucleated nerve fibres in papillæ.

Fig. 2.

The author's view of the arrangement of the nerve fibres and formation of the terminal plexus or network of fine nerve fibres.

Fig. 7. Fig. 8.

a *b*

Fig. 9.

Touch-body. Papilla, finger. Human subject.

Fig. [illegible]

Pacinian corpuscle. Mesentery. Cat

Fig. 11.

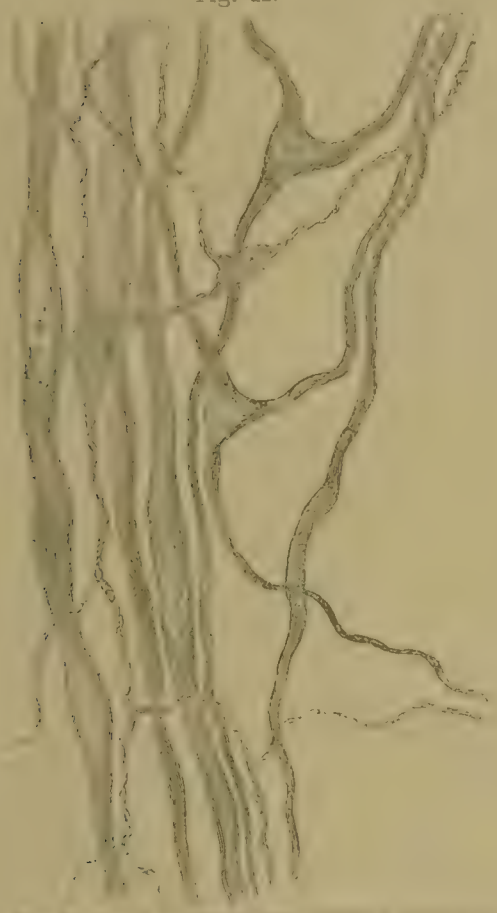
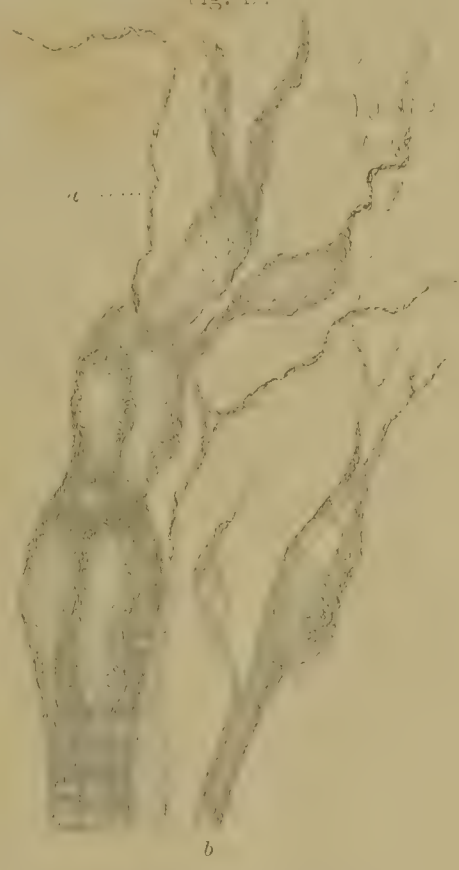


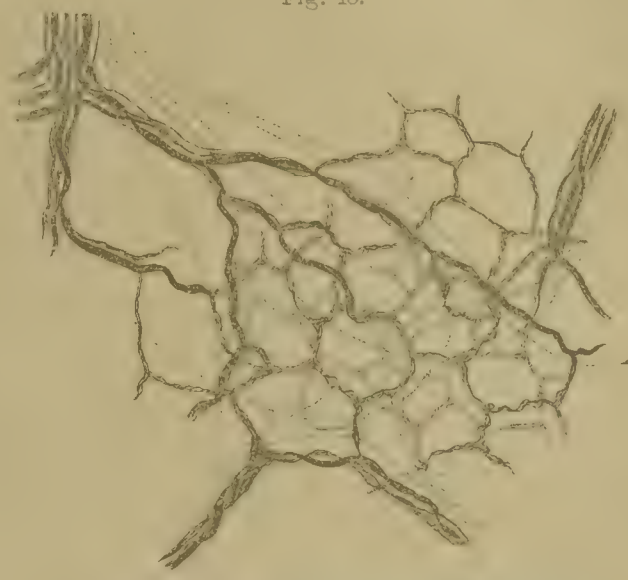
Fig. [illegible]



b

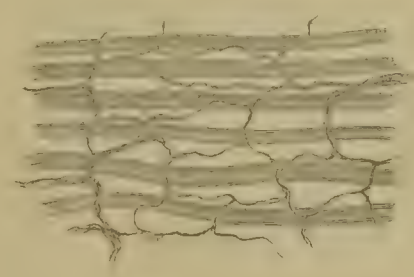
Striped muscle, with fine nerve fibres, from the summit of a papilla. Tongue of the frog. *a*, fine nerve fibre. *b*, germinal matter, or nucleus of nerve fibre. × 1800.

Fig. 13.



Drawing to show the manner in which plexuses or networks of fine nerve fibres are formed The course of the numerous nerve currents TO and FROM the trunks, is indicated by the dotted lines.

Fig. 14.



Muscular fibres from tongue of hyla, with terminal plexus of nerve fibres ramifying amongst them.

Fig. 15.

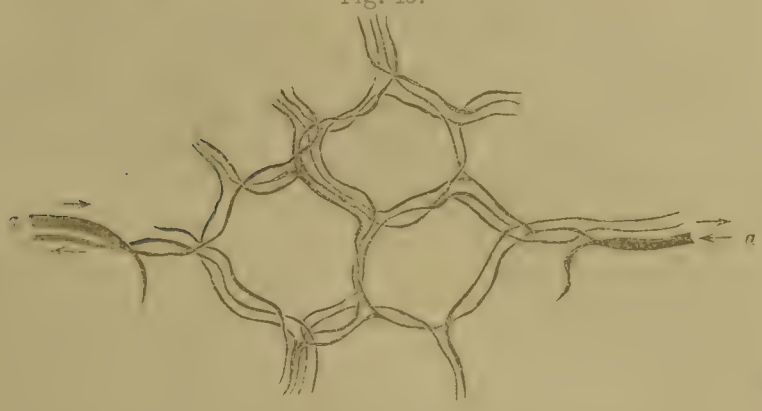


Diagram to explain the author's view of the arrangement of the finest nerve fibres composing the 'net works.' *a a*, dark-bordered and fine nerve trunks.

Fig. 16.

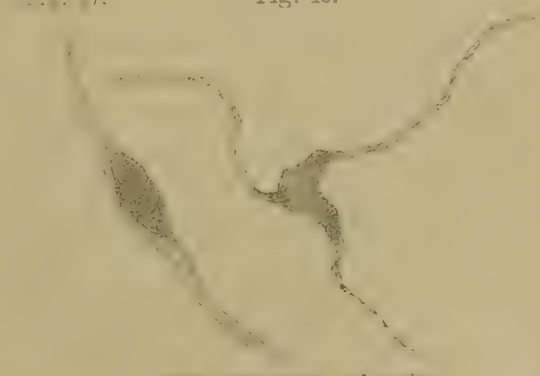
a

a

a

[illegible] nerve fibres. *a*, points at which some of the component nerve fibres diverge and take a new direction.

Fig. [illegible]



[illegible] nerve fibres and [illegible]

Fig. 20.

Fig. 19.

[illegible] nerve fibres [illegible]

a

b

[illegible] [illegible] [illegible]

often been fetched with the statement that the patient was dying. I did not say to her, 'There is no use your crying, for that will not bring her back again.' I did not say to her, 'If your mother was put to bed yesterday she will not die to-day.' The girl says she once got medicine from me; but the number of persons to whom I give medicine is 600 or 700 in a week. The parish does not supply the drugs. I was reading a newspaper when the girl came, and I do not know that I looked up to see her. It was a girl who used to come from Prospect-terrace. My usual hour for going on my rounds is eleven o'clock, and it was then not half-past ten. Directly after the girl went out Mrs. Grimmo came in, and said, 'Come and see Mrs. Ferry; we think she is dying.' I said, 'It can't be from the effects of her labour; she must have something else the matter with her.' She then told me she was turning blue, and I said I would see her on my rounds. On my way I had to call on a man in Wellington-place who I was told was dying of consumption. While I was in that patient's house I was taken ill again, and obliged to go home. I at once told my son to go and see what was the matter with Mrs. Ferry, and I would go there directly myself. He returned and said she was dying from congestion of the lungs and heart disease. I was unable to go then until two o'clock, and I then found her dead."

It is also to be noticed that the order sent to Mr. Massingham was not marked "urgent," nor did it mention that the case was one of midwifery. Mr. Massingham's son, who attended for him, is a young man in his 21st year, and has attended 16 or 18 midwifery out-patients for the London Hospital.

On the face of this evidence, we think that it is clear, first, that the patient's friends neglected to obtain for her Medical advice in an acute disease which had existed before her confinement. 2. That Mr. Massingham was not applied to until the child had been some time born, and was then not urgently requested to visit her, and that there was no intimation of urgency on the order which he received. 3. That an urgent request was made the next morning by the girl, but that Mr. Massingham did not credit her representations; in fact, he thought she came from another patient; and that, from illness and having other patients to see, he delayed seeing the woman herself, but sent his son to visit her. 4. That Medical assistance on the day of her death, if it had been procured, would have been unavailing. On the whole, we think that, however unfortunate the termination of the case has been, it would be unjust to charge it on Mr. Massingham, who, it must be added, has the largest district in Bethnal-green to supervise, and has from 1300 to 1400 pauper patients a year under his care.

FROM ABROAD.—M. GIRAUD-TEULON AND THE PARIS FACULTY—THE DISCUSSION AT THE ACADEMY ON NURSE-CHILDREN.

THE comparatively decayed condition of the Paris Faculty, adverted to last week by our Paris correspondent, is due not only to the causes to which he alludes, but also to the spirit of exclusiveness which characterises it. With the opposition to competition which it entertains in common with all close corporations, it has a special dread of anything approaching to specialism. Witness its treatment of M. Ricord, and the determined and successful stand it made against the appointment of Liebreich, the distinguished ophthalmologist. In this last matter the Faculty, indeed, had a good reason on its side, which seemed to cover its specialty objection; for it was sought by a mere act of power to obtrude upon it an oculist who had succeeded in becoming a popular favourite in court circles. But another instance of the prevalence of the same feeling has just been manifested without any such excuse. Ophthalmology, it must be allowed, is at a very low ebb in the Paris Faculty as compared with its position in the schools of Germany and Britain, and, anxious to improve its condition, M. Nélaton, in this respect more liberal than many of his colleagues, eighteen months since established at his clinic a special ophthalmological department, which he confided to the highly competent hands of M. Giraud-Teulon. It proved a marked success, both pupils and Practitioners gladly availing themselves of the opportunity of learning what has been accomplished in this important branch of Surgery during the last 15 years. This procedure was, however, only tacitly permitted on the part of the authorities, and has evidently given umbrage in some quarters; for, notwithstanding that the lectures were conducted without ostentation, they have been prohibited in future by the Director of Public Assistance, on the ground that they have been privately complained of by some of the Medical Body, *i.e.*, the Faculty. It is not proposed to establish any official substitute for them, and so French students must gain their knowledge of the *present state* of ophthalmological science where they can.

M. Broca, at the last meeting of the Academy of Medicine, continued the discussion on the Mortality of Nurse-Children in France, this being the first occasion of his addressing that learned body since his election into it. He observed that this is a question suitable for investigation by the Academy, for whatever rules may be laid down by the Government should be based upon a thorough preliminary examination of the Medical bearings of the subject. M. Broca doubts whether the Academy is, as yet, sufficiently instructed as to the causes of the excessive mortality which exists, many of the statements and documents adduced being found on analysis to be destitute of that scientific precision which can only render them trustworthy. The statistics of M. Brochard, whose alarming statements chiefly gave rise to the present discussion, prove to be erroneous, the mortality, as stated in these, being considerably exaggerated, and, in fact, all that can be said at present is that there is a great mortality among nurse-children and new-born infants; but the age at which the maximum of this mortality occurs is not precisely known, any more than its exact amount or its most active causes. The best means of acquiring these data would be by a careful statistical investigation, conducted by a committee of the Academy, such investigation extending over those departments to which Paris consigns most of its nurse-children. An official return of the percentage of mortality in various departments, for the years 1861-64, shows that while for the whole of France this is 17.638, in the department of the Crease it is only 11.18 per cent., and that of the Manche 13.09. It rises from 21.55 in Vaucluse to 22·68 in Basses Alpes, 24·96 in Yonne, and 29·52 in Eure et Loire. The great object is to render possible in all the departments the slight mortality (11 per cent.) which prevails in that of the Creuse, and this is an investigation well worthy the solicitude of the Academy. The population of France is, in fact, stationary, and is not increasing even in the same proportion as it did prior to the revolution of 1789; but this does not arise, as stated by M. Lefort, from the diminution of births, for since 1828 these have increased, especially of late years. It is in the great mortality of nurse children that the cause of this stationary condition is to be sought. An exact statistical inquiry is the first thing which will enable the Academy to indicate the causes of the mischief and suggest the remedy.

M. Blot is of opinion that efficient aid should be given to the Infant Protection Society, which has already done great good, and may do much more if properly encouraged. He objects, however, to one project of this society, that of creating maternal colonies, which he thinks would only lead to dangerous agglomeration. One great object should be to diminish the number of hireling nurses by inducing mothers to suckle their infants, even rendering them aid when necessitous.

A discussion on the same subject at the Lyon Medical Society would seem to establish that the mortality of nurse-children is as crying an evil in that part of France as in the departments adjoining Paris. One result of the discussion was the formation of a Lyon Society for the Protection of Infants, its chief objects being the encouragement of maternal suckling by assisting indigent mothers, the institution of an effectual means of inspection, the bestowal of rewards upon deserving nurses, and the prosecution of such as flagrantly neglect their duties.

FURTHER NOTES ON WINE.

By the Author of the "Report on Cheap Wine."

WINE REALLY CHEAP—WINE ENOUGH IN THE WORLD FOR US ALL—PRICE AND MANAGEMENT OF WINE—CHEAPEST KINDS.

(Continued from *Medical Times and Gazette*, 1867, Vol. i., p. 45.)

I have been much attacked for giving my former contributions the title of "Reports on Cheap Wine." Doubtless, the word "cheap" has, with some people, unpleasant associations. And it is quite true that there are some great luxuries which are of necessity scarce, and therefore fetch a high price, and that some cheap imitations of these are nasty enough. And so cheap turtle soup is probably suggestive of fœtal calf; cheap venison of carrion; and cheap Clos de Vougeot, or Château Lafitte, of spirit and damsons. Yet our greatest luxuries consist really of things which are of themselves cheap enough, but which, if perfect of their kind, give us half the comforts of our life. The aim of the really luxurious man should be not to indulge occasionally in costly and exceptional delicacies, but to have all ordinary surroundings, all homely details, as good in their respective kinds as possible. What can be greater luxuries than pure fresh air, moderate warmth, and cleanliness? What a treat is good homely soap and a good towel? Yet how cheap compared with some perfumed soap that can't cleanse and diapered towel that won't wipe you dry? How absurd to see tasteless and second-rate bread, bad butter, bad potatoes, even in houses where the expenditure in unnecessary luxuries is extravagant? where, perhaps, some port, Madeira, or "Château something," at fabulous prices, are the boast of the cellar, but where they can't pour you out a tumblerful of decent ordinary claret at luncheon. I affirm that the greatest luxuries are derivable from the enjoyment of cheap things, *i.e.*, of things produced bountifully and plentifully, when such things are good each according to its proper standard.

This is pre-eminently the case with wine. There is far more enjoyment got out of wine by the many who are able to drink without stint a good pure ordinary, than by the few who are able to purchase the rarest vintages; and as, like all things for popular use, wine must be cheap if popular, it is worth while to examine into this point. Are we to believe the few who, in solitary grandeur, tell us that all cheap wine is rubbish, or can we persuade ourselves that wine is really plentiful, and that there is wine enough in the world for us all?

I have two books before me, one an amusing shilling'sworth, entitled "L'Art de Boire, Connaitre et Acheter le Vin,"(a) by M. Maurial, enriched with a vocabulary from which the uninitiated may gather the meaning of those grand technical terms used with so much effect by connoisseurs—such as *séve*, *corse*, *velonté*, etc. The other is a very serious work, of which I propose to give an analysis. M. Pasteur's "Études sur le Vin, ses Maladies, Causes qui les Provoquent, Procédés Nouveaux pour le Conserver, et pour le Vieillir," a book which—if the statements made in it from careful experiment in the laboratory shall be substantiated by the every-day experience of wine-growers in their cellars, shows that we shall have good wine more cheap and abundant than ever. From these works one gathers that there are 2,200,000 proprietors of vineyards in France, 1000 varieties of vine cultivated, 2,000,000 hectares of land devoted to vineyards, and a crop in 1864 of 50,000,000 hectolitres of wine, worth 500,000,000 francs. Now it is one happy peculiarity of the vine culture that it has, as it were, its own zone, and intrudes on nothing else. "See," as a Burgundian said to me of his glorious country, "the hills nourish the vine, whilst the arable fields below them yield corn for bread, and the meadows on the river banks are pastured by fat beeves." The teetotallers, who rave about the wickedness of converting a twopenny loaf into a pot of beer, are dumbstruck by the vine. The vine is not like barley, that grows on fat arable land; you may see vineyards surrounded by what in England we call *scrub*—*i.e.*, a stony, half-waste country, scantily covered with heath and a few trees, and the vine-growers tell us that this would grow capital wine if added to the vineyards. There is no reason, therefore, why wine should not be plentiful. This is a point on which any one may satisfy himself who thinks of the quantity of land fitted for viniculture in France, the Rhine, Switzerland, Italy, Austria, Hungary, Greece, Spain, and Portugal. In wine countries, the value of new wine, in good seasons, is the value of the cask that holds it; for the grower will fill one cask with wine if people give him an empty cask. In wine countries, people who go to hotels find wine—that is, ordinary wine—just as in cider countries they find cider, put on the table free of charge. Of course, fine wine is charged for.

The *Gauphine* which M. Du Lac offers to English Medical men and institutions (see *Medical Times and Gazette*, November 24, 1866), and the wine offered by M. Sasse, of 38, Noble-street, City, are examples of the cheapness of wine coming from one department of France, l'Hérault, which alone produces thrice as much wine as the whole kingdom of Portugal. It will be there seen that M. Du Lac offers 50 gallons of wine for 55s., if the purchase takes the trouble of seeing to the freight and expenses; or that he will himself transmit this quantity to London to Medical purchasers, free of charge, for 65s.—that is, 1s. 4d. per gallon, or 2⅔d. per bottle. This represents the cost of the wine—including the rent of the vineyard, labour, and all charges. In addition to this, the English Customs levy 2d. per bottle for duty; there is, moreover, a trifle for cartage from the docks, etc., which would bring up the wine in cask to (say) 5d. per bottle. Lastly comes the expense of bottling. If a man has bottles, and his man or maid servants will take the trouble to well wash them with shot, then rinse and dry them, and if he will fine and bottle the wine himself, the only further expense is the corks—say, one halfpenny per bottle—and a certain amount of labour and time that otherwise would not have been profitably employed. Otherwise, a wine-cooper will bottle a half hogshead for 6s., and a whole one for 10s. 6d.; and there are persons who will provide old champagne bottles and corks, and do the bottling and laying down at half-a-crown a dozen; this makes the wine come to 7½d. per bottle—say 8d., bottles included.

The Gauphine, so described, is a stout, rough new wine, adapted for family use. I know several Medical friends who have placed it on their tables for a long time, and the whole family have found it palatable, wholesome, and nutritious. The wine of M. Sasse is nearly the same in character and price. Either may be had retail in London at 1s. per bottle. But not only is the Gauphine so cheap intrinsically, but at the present moment the London agent of MM. Fauché, Fils, et Brisac, of Bordeaux, offers last year's wine at 90 francs for the barrique of 46 gallons, which is very little dearer than the Gauphine.

These wines, it may be said, are new (1866); but there are ordinary Bordeaux wines of 1864 to be had in London retail at 5s. per gallon, or 12s. per dozen. For 13s. an admirable wine can be got. But if anyone wants a wine older, lighter, finer, of which he can drink any reasonable quantity with refreshment and without headache, he can get a light, dry, wholesome Bordeaux, or a Burgundy, that would be a most elegant wine after having been six months in bottle, for 200 francs, or £8, by the barrique of 46 gallons at Bordeaux. This is a wine wholesome, agreeable, and creditable; costs from 10d. to 1s. per bottle; and is equal to what would be purchased retail at double the price. I have had such wines from Beaune and Bordeaux, and found them answer extremely well. People who live in wine countries tell me they like new wine, as a matter of taste, for ordinary use. But, then, new wine is

(a) Paris: 112, Rue de Richelieu. Price 1 fr. 20c.

coarser, rougher, not so bright, apt to throw down too great a sediment in bottle, and altogether not so pleasing to most of us as those older ordinary wines that I have indicated. It is not so gentlemanly a drink; but as for the others, they might be put before any man, and suit any modest *ménage*, *simplex munditiis*, where comfort is prized above show.

But—(and here let me call to mind that I am writing with the most practical aim; I want to increase the use of wine, and to decrease that of spirits)—some will say, we should be afraid to have a cask of wine; it is such a delicate thing, we should not know how to manage it. And here I must appeal to my Professional brethren just to show what a simple matter this is, and how it is to be done. Formerly, we used to read of *church ales*—*i.e.*, a whole parish, under the guidance of the parson and churchwardens, clubbed together, bought a set of brewing apparatus, and brewed beer in common. Why should there not be village wine clubs, with M.D., M.R.C.S., L.R.C.P., and L.S.A. as presidents and members of council? One reads of book clubs, sewing unions, mothers' meetings, goose clubs, and similar pious orgies, coal and blanket clubs, and other half-charitable, half-provident institutions—why not a village wine club? Why might not the widow, instead of begging a bottle from the rectory, or buying it at the public-house, where "Neat Wines" is read in apocryphal characters over the door—why, I say, should she not have a dozen of any wine that may suit the taste or pockets of the members? Then, if a cask of wine comes, of course it should not be put, like beer, into a scullery or coal cellar, or any damp or offensive place, but into any comfortable dry room, not near a fire, nor yet exposed to great cold. Then the wine should be fined. If the bung be drawn (and it is loosened by giving a few smart taps with a hammer to the cask round it), and a hole be bored with a gimlet, about half-a-pint of wine may be drawn into a tumbler. With this, the whites of six eggs, and a saltspoonful of salt should be thoroughly beaten up, and the mixture be poured in at the bung-hole. Then the whole contents of the cask should be thoroughly stirred up and mixed together with a clean stick; after which, the cask should be filled right up, with the same kind of wine if there be any, or with any good wine like it; or if there is no wine at hand, this part of the process must be omitted. Then the bung should be replaced, and the cask so turned that the bung shall be covered with the wine; and this is a general rule for all wine, for which oxidation is judged inexpedient. After standing at absolute rest about three weeks, it is fit to bottle. This is what I have seen done by a French wine merchant, on whose authority I rely, and there is nothing in the whole process that may not be done by any person of intelligence. If the local wine merchant be a sensible man, he will help in this scheme, he will encourage customers to have *casks* of "ordinaire," for the way to extend the demand for wine of *all* sorts is to spread the knowledge of it; to get all classes to look on wine as an habitual aliment, and not as an occasional luxury or dram.

And, seriously speaking, what a boon wine is in a house for sick and healthy; what a medicine it is too; what a tonic, alterative, astringent, laxative, stimulant, sedative, all according to the needs of the case. A consumptive patient is kept awake these cold nights by tickling cough, inability to bring up phlegm, dyspnœa, and restlessness. Boil together equal parts of pure red wine and water, sweeten well with white sugar-candy, and add a good pinch of isinglass to make it smooth. Let the patient sip this cool.

Again, a patient is nervous, exhausted, headachy; has been up late at night, or is recovering from influenza, and wants a reviver. Fill a teacup half full of good strong infusion of black tea, sugar *ad lib.*, and fill up with red wine. This is a capital *mélange*, for a knowledge of which I am indebted to M. Sasse.

I have had cases of what may be called "nervous diarrhœa, or the diarrhœa of nervous persons," the bowels acting, perhaps, from three to sixteen times daily. Such cases correspond in some degree to what the ancients called lientery, and what is mentioned in Boswell's "Life of Johnson" as "lubricity of the intestines." The bowels act on the slightest provocation: from any kind of food that disagrees; from hot drinks, especially tea; and above all, from emotion and worry of mind, the thought of business, of meeting strangers, of going on a journey, or the like, being sure to bring the malady on. Restless nights, bad appetite, a disposition to take stimulants, and other symptoms of weakness and irritation coincide. Of course to the patient the diarrhœa is the disease; to the Physician it is but one of the many conditions of imperfect health present. Be this as it may, the rational use of wine checks the diarrhœa and cures the patient. In such a case the patient should be directed to drink a bottle of good Beaune daily, such as he can get for half-a-crown, and nothing else save a little water. For breakfast no tea and egg, but a slice of meat or rasher of bacon, some bread, and a little water reddened with wine, or else cold milk and water. An ordinary good dinner, and a supper of bread and meat, at which the bottle of Beaune may be used up. Such a diet produces an immediate and radical change in the patient's state, and, of course, it is supplemented by a cold tub and bracing régime in other respects. It will be said that this is an expensive remedy, but I only know that in the case of one patient I calculated that the cost of tea, sugar, pale ale, sherry, brandy, tonics, *and chalk mixture* left him a gain of about twopence a day.

Thus far I have endeavoured to show that wine need not be dear; that it is a necessary of life to large classes; and that whoever, directly or indirectly, encourages and promotes the use of wine, and the facilities for obtaining it, is doing a really charitable act, whether in the guise of commerce or no.

GENERAL CORRESPONDENCE.

UNIVERSITY EDUCATION FOR MEDICAL MEN.

LETTER FROM PROFESSOR HUMPHRY.

[To the Editor of the Medical Times and Gazette.]

SIR,—I cordially agree with you in the desirableness of University Education for Medical students, and rejoice to find the Profession and Medical press beginning to awaken from the lethargy in which they have so long remained on this point.

The proposed scheme of a Medical Hall might serve to attract students and so do good, but whether it is the best means of attaining the desired end admits, I think, of question. It would introduce a new element—that of marking off a particular class from the rest of the University in their social life—which is foreign, indeed opposed, to our present system, and which would be attended with more or less sacrifice of one great advantage of the present system—that, namely, which results from the blending together in each college of students derived from different ranks and classes of society, and destined for different vocations of life. Students of the same college associate a good deal together, comparatively little with those of other colleges; and the restriction of the association of Medical students to those of their own class, consequent on their being clustered in one college, would, I think, be a loss, a very considerable loss.

It is not clear that this would be compensated by an equivalent advantage in economical or other ways. The necessary expenditure in the new institution cannot be much, if at all, less than it is in the present colleges, and the real expenditure would be as it is now, very much optional. Some—not a few—of our students live very economically, and pass through the University at small cost; others are extravagant; and the same difference will be found among the students in a Medical College. There are exceptions, of course, but, as a general rule, the expenditure of a student at college bears a relation to that to which he is accustomed in his home and to his previous habits and mode of training; and the average ex-

penditure of Medical students will probably be very little affected by their combining in one hall or college.

The serious item in University education is the additional time required—the extra year or so at school preparatory to coming, and the extra year or so required in the Universities. This does and must greatly limit the number of Medical students in them. Parents designing their sons for the Medical Profession are generally anxious to select the course by which they are most quickly qualified to practice. Those only who can afford and are willing to give them a more extended education look to the Universities. Hence, the Medical students who come are rather better off, pecuniarily, than the average of their class, and aspire to the better positions in the Profession. Their means and habits of life justify a somewhat greater expenditure; and this should be borne in mind in comparing the cost of a University education with that of an ordinary Medical student. It can scarcely be affected by a Medical Hall or College, because the extra time required, which, as I have said, is the great cause of the extra expense, will not be thereby diminished.

The more intelligent and industrious students may, and do, acquire a share of the revenues of the colleges by obtaining scholarships, prizes, and even fellowships, for their proficiency in classics and mathematics, natural science, in some colleges, being also taken into account. These sources of income and incentives to work will, I conclude, not be forthcoming in the new Hall.

I view the matter from this point because I conceive that a prime object is to reduce the cost of the University education for Medical students, and I fear the promoters of the scheme of a Medical Hall will be disappointed in this, while the attempt will involve the sacrifice of certain definite advantages.

There are, it would seem, colleges enough already in the two Universities, and, instead of adding another, the best mode would be to render the existing institutions more available to the wants of the Medical Profession by such an extension of the teaching as may be most suitable to Medical students, and by offering a fair share of honour and reward to those who distinguish themselves in the examinations in Natural and Medical Science.

The first has lately been done at Cambridge to a considerable extent. The various branches of Natural Science preliminary to the special study of Medicine, and the elements of the latter, including practical details, may be mastered here, n spite of many deficiencies which I hope may gradually be supplied, as well, perhaps, as in any other place; and the increased number of the students shows that our efforts are being appreciated. To compete with the metropolitan schools is by no means our object. The Universities should be content to lay a good foundation, and should leave the completion of the work of special Medical education to be carried out, where alone it can be thoroughly done, in the great schools of the metropolitan towns.

With regard to the second desideratum—the admission of students of Natural and Medical Science to a fair share of the honours and rewards of the Universities—something has been done, but much remains to be effected. The justice of the claim is so obvious that it will assuredly be admitted ere long. The institution of a Natural Science Tripos, the large outlay in the building of lecture-rooms, laboratories, museums, and working-rooms, and the foundation of new professorships and lectureships will, in all probability, be followed by the assignment of some of the college scholarships and fellowships. This, however, rests with the College authorities, and, in the meantime, a greater impulse would, I think, be given to Medical education in the Universities, and more real good would be done by the institution of University scholarships for proficiency in the Natural and Medical Sciences than by the foundation of a Medical Hall or College.

I am, &c.

Cambridge, Dec. 31, 1866. G. M. Humphry.

This letter, in answer to questions privately put to him, is published with Professor Humphry's permission.

MEDICAL EDUCATION AT OXFORD.

Letter from Mr. George Cowell.

[To the Editor of the Medical Times and Gazette.]

Sir,—I was much interested in reading your article, in this day's Number, with reference to the paper read by Professor Daubeny, before the British Association, at Birmingham. I beg, however, to question the policy, and even the possibility, except on a very small scale, of establishing a college, such as you suggest, specially devoted to those seeking to enter the Medical profession. I would call the attention of your readers to the college about to be established at Oxford in memory of the late Rev. John Keble. It will supply the want, so ably referred to by yourself, of a college for those who cannot afford all the expenses so difficult to avoid in the present Oxford houses, and from its large size, comprehending, as it will, men intended for all professions, will be far preferable as a place of education to a college more or less exclusively Medical. It appears to me it is the interest of all of us to help on the establishment of this college, as it will, doubtless, be a great boon to the Profession, and prove a means of increasing the number of Oxford degrees amongst us. I trust you will grant this suggestion a place in your columns.

I am, &c. George Cowell.

Belgrave-road, S.W., Jan. 12.

TOXICOLOGICAL DISCREPANCIES.

Letter from Professor J. E. D. Rodgers.

[To the Editor of the Medical Times and Gazette.]

Sir,—Although the immediate object of my present communication is to make known the real cause of the discrepancy between the results of Professor Taylor's experiments and my own, it must be admitted that the peculiar course that he has followed in dealing with this important question calls for a few remarks.

A careful perusal of his letters will show an anxiety to attract the attention of your readers to another case, and other matters, which have obviously nothing to do with the present difference of opinion, and it cannot fail to be observed that while the results of my experiments are corroborated by a high toxicological authority—Dr. Letheby—he offers no confirmatory testimony as to his own.

With respect to the case referred to, having the greatest objection to depart from any real object at issue, I will only observe that Professor Taylor is evidently profoundly ignorant of many of its important surroundings, and that the jury, together with several well-informed and experienced Practitioners, differed from him in opinion, and were firmly convinced that the lady did not die from puerperal convulsions, but from poison.

In his letter, published in your valuable journal of the 5th inst., Professor Taylor writes that "during the last five or six years he has in several cases obtained from the extracts of the stomach and duodenum, in examining suspected cases of poisoning, residues which gave the colours with sulphuric acid and chloride of tin, relied upon by Mr. Rodgers as positive evidence of the presence of veratria." He makes no mention of the third reagent, hydrochloric acid. Upon this statement I will observe that if he adopted precautions similar to those which I invariably exercise, viz., to get the alkaloidal body as free from foreign matter and in as pure a state as possible, and proved by iodo-chloride of mercury and Bourchardat's test (solution of iodine in iodide of potassium), that an alkaloid was present; if he did this, and in the application of the sulphuric acid test he has found a beautiful carmine tint, instantly developed on the application of heat, and also the characteristic reaction from the chloride of tin, I say most emphatically that veratria was present, and that he failed to recognise it.

The mode of analysis pursued by me to determine in the present instance whether the suspected mixture contained an alkaloid was as follows:—To nearly an ounce of the mixture a slight excess of hydrochloric acid was added, and shaken occasionally. In about ten minutes sufficient ammonia was added to render it alkaline, and the whole was then agitated with an equal volume of pure ether. Two portions of the etherial solution were then evaporated to dryness over a water bath in separate watch glasses; to the residues distilled water was added, and the fluid in each glass allowed to evaporate to a small bulk. The glasses were then removed from the bath, and allowed to cool, when cold Bourchardat's test was added to the one, and iodo-chloride of mercury to the other. In each case a precipitate was produced. The presence of an alkaloid was thus indicated, and the application of the tests already described in my former letter proved it to be veratria. Not wishing to occupy valuable space unnecessarily, I have omitted the details of the experiments that led me to this conclusive result.

Let me now request the attention of your readers to certain parts of Professor Taylor's letter to the father of the deceased children. He gives the following passage taken from his report to the Home Secretary :—"The sediment in the bottle of medicine, and a teaspoonful of the medicine, making together nearly half a grain of solid matter, were given to a young rabbit. They produced no symptoms of poisoning, and after the second day (the rabbit having run about and taken its food as usual) half a grain of real veratria was given to the animal. In an hour or two there were symptoms of paralysis, but no convulsions, and the animal died during the night, in about eight hours after taking the poison."

He then observes that "veratria is a solid and not very soluble poison except in acid liquids, while the medicine prescribed for the children was alkaline, owing to the presence of some sal volatile (carbonate of ammonia)."

While admitting that my experiments "are good," he would still lead his readers to conclude that they were worthless in comparison with his own upon the rabbit, and states his conviction that the deaths of the children were occasioned by "cholera or choleraic diarrhœa."

It will be in the recollection of your readers that the symptoms of the children assumed for the first time a serious aspect after the administration of the medicine in question; that these symptoms were drowsiness, giddiness, violent vomiting and purging, increased on the second dose; and that, in addition, after the third dose, violent convulsions, foaming at the mouth, together with insensibility, supervened, and continued for many hours prior to the death of the children; also that during the paroxysms the bodies of the sufferers were so stiff as though they were each "in one piece."

To the above symptoms I must now add that the evacuations were highly offensive, and contained feculent matter to the last, and that there were no rice-water stools.

Your readers, I think, will agree with me that the history of these unfortunate cases presents no similarity to cholera or choleraic diarrhœa.

In consequence of Professor Taylor directing attention to the insolubility of veratria in alkaline liquids, I have recently ascertained by careful experiment that six ounces of water, containing twenty grains of carbonate of ammonia in solution, will dissolve no less than three grains of pure veratria.

Professor Taylor had one ounce and a half of the mixture, and it will be seen by the extract from his report to the Home Secretary that he gave but one teaspoonful of the fluid portion of the medicine to the rabbit; consequently he omitted in his experiment to give a quantity of the mixture that could contain nearly three-quarters of a grain of pure veratria; hence the discrepancy. Mr. Southern's children took the fluid—the rabbit did not; consequently Professor Taylor's experiment is valueless.

I have already pointed out in my former letter that no reactions like those obtained from the mixture in question, and which no alkaloid but veratria will yield, could by any means be obtained from such a mixture as Professor Taylor reports it to have been.

Such a mixture, however, when carefully treated in the manner described, will yield a precipitate with the iodo-hydrargyrate of potash (iodo-chloride of mercury), owing to the presence of the alkaloid emetine; yet in your journal of the 12th inst. Professor Taylor writes that he obtained no precipitate on adding that reagent, and it therefore becomes a matter of some scientific as well as public interest to know how he could possibly say that there was ipecacuanha wine in the suspected mixture if he never determined the presence of the only body that could enable him to express a trustworthy opinion. His now published experiment is therefore at variance with the composition of the mixture as given by him; and permit me to add that the mixture handed to me by Mr. Southern for analysis, which most unquestionably contains veratria, and part of which was given to Professor Taylor, did and will yield a precipitate with the iodo-chloride of mercury when treated as he describes.

Professor Taylor admits that my experiments were good; he can do no otherwise; and I will leave your readers to judge whether or not I am right that the serious discrepancy has arisen simply from the unsatisfactory manner in which he performed the experiment upon the rabbit.

I am, &c.

J. E. D. Rodgers, M.R.C.S., L.S.A.,
Professor of Toxicology in the London Hospital Medical College.

London Hospital, January 14.

CLITORIDECTOMY.

Letter from Dr. R. Greenhalgh.

[To the Editor of the Medical Times and Gazette.]

Sir,—I forgot to append to my last note that, having again expressed my opinion about clitoridectomy, I must decline any further correspondence with Mr. Isaac B. Brown.

I am, &c.

77, Grosvenor-street, W., Jan. 22. R. Greenhalgh.

Letter from Mr. Holt Dunn.

[To the Editor of the Medical Times and Gazette.]

Sir,—Not being an operator, it is not my intention to enter into the merits or demerits of this operation, the discussion being in much more able hands; but writing under the above heading, I feel in justice to my friend, Mr. Baker Brown, I ought to state that he has performed that operation, both in the Home and in private practice, with my entire concurrence, and with marked benefit to my patients, who, I am satisfied, under Medical treatment alone, would have remained in this distressing condition until now. Dr. Greenhalgh, in his letter published in the *Lancet* of the 29th ult., referring to his visits to the London Surgical Home, after paying a well-merited compliment to Mr. Baker Brown as an operator, goes on to say :—"But I saw more than that. Truth compels me to add that I saw there scenes, and heard details, which I will not further characterise than by saying that I thenceforth advised my class never again to visit that institution, and came to a like resolution as regards myself."

This statement embodies a charge, by insinuation, of the gravest nature against some one or more belonging to, or present at, the Home; and as one of the late Medical visitors, and a constant attendant at the operations for years, I feel I should be neglecting my duty did I not notice this part of Dr. Greenhalgh's letter, my experience being the very reverse of his.

I have found the Home in every sense what its name implies, and it is not, and should not be spoken of as, an ordinary Hospital. There gentlewomen that would not go to a regular Hospital receive skilled Medical and Surgical attendance, with careful nursing, that would otherwise be beyond their reach; and not only has the institution been recognised by royal favours after the test of personal inspection, but I have in my possession a mass of written evidence of its worth from Medical men and grateful patients who, having been there, give, as the result of their experience, a very different account to that of Dr. Greenhalgh, and there is at this moment a lady patient of mine there who will fully confirm every word I have written in its praise.

In conclusion, I would ask Dr. Greenhalgh, in fairness to myself and the other gentlemen he has met there, to state fully what he either saw or heard, and what to justify him in debarring his class from the particular field of instruction he and the Profession from all parts of the world have been pleased so long to enjoy. I am, &c. Holt Dunn.

109, Hereford-road, Westbourne-park, W., January 7.

DR. PUSEY'S STATEMENTS.

Letter from Mr. James Dixon.

[To the Editor of the Medical Times and Gazette.]

Sir,—I think most of your readers must have welcomed Dr. Beale's out-spoken, sensible, and manly letter published in a recent number of your Journal.

We seem just now to be surrounded by an atmosphere of obscenity, and much of our Medical literature, instead of its once wholesome, practical, and manly tone, smacks of Holywell-street, rather than of Paternoster-row. On one side the clitoridectomist whispers in our ear foul tales about our women, while, on the other side, Dr. Pusey is trying to persuade us that our hearty, jolly boys, just now in the full swing of holiday enjoyment, are so many candidates for ruin of mind and body, if they are not forthwith made over to the questionings and closetings of priestly confessors.

We know that in certain boys there exists about the age of puberty a strong sexual feeling, and when this is fostered by evil example, by obscene books, etc., self-abuse is liable to be practised. The question is,—how can it be best counteracted? Dr. Pusey says, by priestly scrutiny; Dr. Beale says, by opposing effeminate, solitary, moping habits, and by encourag-

ing all that tends to openness of character and a love of healthy pastimes. I, for one, agree with Dr. Beale, and cordially wish him success in his efforts to convince those who have the care of boys that the course he indicates is the right one.

I am, &c.

Portman-square, Jan. 12. JAMES DIXON.

THE STAFF OF THE ROTHERHAM INFIRMARY.

LETTER FROM MESSRS. J. HARDWICKE, E. ROBINSON, AND W. OXLEY.

[To the Editor of the Medical Times and Gazette.]

SIR,—We, the undersigned, the late Medical officers of the Rotherham Dispensary, beg to forward to you the *Sheffield and Rotherham Independent*, containing a report of the proceedings at the annual meeting of that institution on Thursday last, also a copy of the rules. We would call your attention to that portion of the report which bears upon the enlargement of the Medical staff. For a long series of years the duties were performed by two Physicians from Sheffield (there being none in the town strictly practising as such) and three Surgeons resident in the town. Some years ago the Physicians retired because they considered their services were not required, and since that time all the duties have been easily performed by the Surgeons. There is also a house-Apothecary. One member of the Medical staff has served twenty-two years, another (a native of the town) for six or seven years, members of whose family have been honorary Surgeons for upwards of forty years; the third (also a native of the town) for three years. We unhesitatingly state that the institution has worked satisfactorily, and we presume, from the vote of thanks annually recorded that the Medical staff have also done their duty. Each Medical officer attends and receives patients two days a week, and very generally the hour is not fully occupied, so that there is no need for the assistance of the other seven Medical men in the town, nor accommodation for them. Until the meeting on Thursday last, no intimation had been given to us or the committee of any difficulty or inconvenience having been experienced by the House-Apothecary, as conveyed in the remarks of Mr. Coward. The proposal to appoint all the Medical men of Rotherham and Masbro', ten in number, as honorary Surgeons, was an amendment to a proposition to add to the staff a Medical man then present (a comparative stranger in the town) on account of his reputed interest in the institution, which can only be inferred from a few letters written by him in the local press in favour of an Infirmary, not yet even decided upon. This deviation from the regular custom of announcing a vacancy (when it occurred) and thereby giving all the Medical men in the town a fair chance of election by ballot, as specified in the rule, completely took us by surprise. Both the propositions were moved by members of the Committee who had not intimated their intention, either at a special meeting, for the purpose of considering resolutions bearing upon the erection of a public Hospital, held half-an-hour before the general annual meeting, nor at the ordinary meeting of the Committee, held a week previously.

We do not object to an increase of the Medical staff, if needful, and carried out in accordance with the rules, but we think the irregularities at the annual meeting, in defiance of the rules, are such as to be worthy of record and remark in your journal.

We are, &c. JUNIUS HARDWICKE,
EDWD. ROBINSON,
Jan. 16, 1867. WM. OXLEY.

THE STRAND GUARDIANS AND THE POOR LAW BOARD.—At the meeting of the Strand Union Guardians on Tuesday evening, the request of the Poor Law Board, made upwards of three months since, that the guardians should enter into arrangements for giving additional Medical assistance to the Strand Union Workhouse, came on for discussion. After a great deal of discussion, it was resolved by a majority of one that there should not be a resident Medical officer appointed, and also that Dr. Rogers' salary should not be increased to enable him to provide additional Medical attendance for the inmates of the workhouse. The guardians, therefore, are acting in direct opposition to the directions of the Poor Law Board, and it remains to be seen what steps in the matter the latter will take.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 8, 1867.

Dr. JAMES ALDERSON, F.R.S., President.

A PAPER was read with a peculiar title, and of such a singular character, that we only refer to it in order to say that it was admitted into the programme of the Society's proceedings by mistake. It was not properly introduced to the Society, and had been read contrary to law. The consequence is an abstract of it will not appear in the Society's *Transactions* nor in the journals.

Mr. T. HOLMES read a paper entitled

SEQUEL TO A CASE OF COLOTOMY RECORDED IN THE LAST VOLUME OF THE "TRANSACTIONS," THE PATIENT HAVING DIED OF AN AFFECTION IN THE CÆCUM SIMILAR TO THAT IN THE SIGMOID FLEXURE OF THE COLON, FOR WHICH THE OPERATION WAS PERFORMED.

The patient remained in good general health, passed all the fæces through the artificial anus, and was in a state of comfort for several months. He still continued occasionally to pass urine from the anus, and complained occasionally of pains in the pelvis. About fifteen months after the operation the fæces again made their appearance in the water. Soon the fæcal discharge from the artificial anus ceased, and he began to be in great distress from pain and difficulty in passing water, which was as much loaded with fæces as before the operation. In fact, he fell again into the condition from which he had been relieved, and in this condition he died in the month of October, 1866. The parts were removed for exhibition to the Society. They show that the original opening was between the sigmoid flexure and the bladder; that it was not caused by the malignant disease, but, as far as can be determined, by ordinary ulceration; that the same action had taken place in the cæcum, by which it had become adherent to, and had been ulcerated into, the bladder, and thus the operation was from that time rendered nugatory. But for this fresh affection he might have enjoyed a long life, as the original diagnosis was correct, and the operation was calculated to afford complete relief from the original disease. The paper is accompanied by the preparation, and a drawing of the parts by Dr. Westmacott.

Mr. CURLING agreed in the remarks which had been made by Mr. Holmes in his paper, and which, though this case ended badly, showed the correctness of the diagnosis, and justified the operation. In these cases, however completely the operation might be performed, it was not always possible to prevent some of the fæcal matter from escaping into the intestine below. He related a case in point. It was curious in Mr. Holmes's case that two adhesions existed in different parts, and ulcerated into the bladder in two places. In this respect the case he believed was unique.

Mr. JOHN WOOD inquired whether any signs of an abscess having existed in the peritoneal cavity between the peritoneum and bladder could be detected.

Mr. CHARLES HAWKINS said that cases of this kind were not necessarily malignant, and referred to the instance of a man who, without any previous illness or symptoms of disease, was startled at finding fæcal matter mixed with his urine. A stone in the bladder was found, which was removed by lithotrity; after this the urine made its way into the rectum, but no fæcal matter passed with the urine. The opening had evidently contracted to such an extent that fæcal matter could not escape from the rectum. The man did not die from this disease, which was evidently not malignant.

Mr. T. HOLMES regretted that the preparation of the parts had, by accident, not been brought before the Fellows. It was, however, in the museum of St. George's Hospital, where any gentleman who took an interest in the case might inspect it. He had not been able to find any trace whatever of an abscess. He had seen a case of recto-vesical fistula, like that related by Mr. Hawkins, in which there were no premonitory symptoms.

Dr. DRYSDALE related a case of obstinate diarrhœa, in which he considered there was some organic mischief likely to require an operation.

Dr. SYMES THOMPSON mentioned a case of diarrhœa in

which the evacuations were mixed with a large quantity of watery fluid. In this case there was a communication between the ovary and the rectum.

Dr. Robert Lee referred to a case of cancer of the uterus, which spread to the rectum, and from which the patient died a miserable death. He inquired of Mr. Curling whether he had performed an operation in such a case.

Mr. Curling replied that in the case in which he had operated great relief was afforded, though, of course, no permanent benefit followed. He had not since seen a case in which he had advised the operation; but he believed there were exceptional cases in which an operation might be performed with the result of affording some relief to suffering.

Dr. Robert Lee had seen 400 cases of cancer of the uterus, and had come to the conclusion that no method of treatment would stop the progress of the disease. He had once tried to remove the cancerous mass by ligature, but without any benefit; and in one or two cases in which a similar proceeding had been resorted to, hæmorrhage to nearly a fatal extent ensued. All kinds of escharotics had signally failed of success; and in some instances had only aggravated the symptoms, and accelerated the fatal result. Yet in these cases a cure had actually been promised! You might relieve symptoms in cases of cancer of the uterus; but it was useless or worse to attempt its extirpation.

THE PATHOLOGICAL SOCIETY.

Tuesday, December 18, 1866.

Dr. Peacock, President.

Dr. Cayley and Mr. Hulke's report on Dr. H. Weber's case of

MOLLITIES OSSIUM, DOUBTFUL WHETHER CARCINOMATOUS OR SYPHILITIC.

We have examined the soft adventitious tissue in the sternum and ribs, and find its minute structure has been accurately described by Dr. Weber. Taking into account the type of the cells, the presence of a true intercellular substance (although in very small quantity), and the tubercular arrangement of the interstitial fibrous tissue, we are inclined to rank the growth with the sarcomas, and on the same grounds do not consider it a true cancer.

Dr. Cayley and Mr. Hulke's report on Mr. Nunn's case of

TUMOUR OF SHOULDER-JOINT.

The tumour, a subglobular mass, $2\frac{1}{2}''$ by $3\frac{1}{4}''$ in diameter, had been cut in halves, and had lain for some weeks in methylated spirit. Its rough characters were much altered, but its minute structure was well preserved. The tumour lay in the subcutaneous fatty tissue, which formed a stratum of some thickness about its circumference, but which had disappeared from its summit where the tumour and the deeper layer of the cutis cohered. The deep surface of the tumour was overlaid by a thin sheet of coarse bundles of striped muscular fibre. Structure: A capsule and a parenchyma are discernible. The capsule consists of bands of common connective tissue, interwoven in places, the general direction of which is more or less parallel to the outer surface, and of a few elastic fibres. Groups of fat-cells occur sparingly amongst the more superficial bands. The parenchyma is composed of a reticulum, and a softer tissue filling its meshes. The coarser tubeculæ of the reticulum are prolongations of the capsule, with which they structurally agree. They are opaque, white, and the larger spaces mapped out by them are filled with a finer net of paler, less opaque fibres, which are really bands of large fusiform cells. The soft tissue lying in the finest meshes consists of oval and roundly oval cells, and polygonal cells from $\frac{1}{4500}''$ to $\frac{1}{1500}''$ and upwards in diameter. The largest of these consist of a thick capsule, or outer membrane, enclosing two, three, or four nucleated cells; while the smaller cells have a thin membrane, and are mostly mononucleated. These lie in a finely fibrillated or granular matrix, which is abundant in some situations, but scarcely present in others. In some sections an alveolar structure was observed. This may have been in some instances an illusion produced by the section obliquely cutting across bundles of fusiform cells in the level of several nuclei; but in most instances the appearance was doubtless real, because the diameter of the cells exceeded that of any possible section of a fibre-cell. These parts of the tumour show an anatomical affinity with cancer by their alveolar structure, and by the almost complete absence of intercellular tissue; but the principal part of the mass has the structure of a trabeculous spindle-celled sarcoma.

Mr. Bryant exhibited a specimen of a

CASE OF HARD CANCER OF THE TESTICLE (LEFT).

A farmer, aged 64, was admitted into Guy's Hospital, under his care, on December 11, 1866, with a disease of his left testicle. He was a healthy man, and had had two wives and ten children. His right testicle had been always very small. The left was of the natural size, although placed somewhat high in the scrotum. A year ago he first observed his left, a healthy organ, to enlarge; it was also painful, the pain shooting up the cord. The enlargement gradually increased, but for the last four months it was more rapid. On admission the organ was the size of a good fist, placed high up in the scrotum. It was of stony hardness, and somewhat tender, with a smooth surface. The cord was short, and could be distinguished with difficulty. There is some enlargement of the gland in the groin. The testis was excised on December 15, and as shown is a splendid example of that rare form of disease the hard cancer of the organ. It evidently involves the whole gland, the epididymis included. A section of the gland measured $4\frac{3}{4}$ inches by $2\frac{3}{4}$. Microscopically, all the well-known features of the hard cancer were to be seen.

Mr. Bryant also exhibited a specimen of

CHRONIC ENLARGEMENT OF THE TESTICLE FROM INFLAMMATORY INFILTRATION.

A twine-spinner, aged 36, was admitted into Guy's Hospital, under Mr. Bryant's care, on November 29, 1866, having been under observation for some months previously, with an enlargement of the right testicle. It appeared that fifteen years previously he had gonorrhœa, and at this time his testicle first inflamed He recovered completely from this attack, and remained well till nine years since, when, after lifting a heavy weight, the same testicle began to enlarge, and since that date it has been "always bad." During the nine years many abscesses had formed in the organ, and had discharged themselves through the scrotum. He had never had syphilis. On admission the testis was much enlarged, being as large as a good sized egg; it was hard and tender, although the absence of the true testicular pain was very marked. Several tumours existed in the organ, and the scrotum was fairly glued to the gland. It was tolerably certain that the organ was not worth much, and that excision was the best practice. The operation was performed on December 18. On examining the testicle it was clearly evident that the body of the gland is completely infiltrated with inflammatory fibrinous material, and larger masses of yellow fibrous tissue are plainly visible in the centre of the gland. Some small portion of the organ appears to be healthy and to be spread out over the masses described, but the bulk of the gland has been evidently destroyed. The epididymis appears to have been involved in the disease.

Dr. Morell Mackenzie exhibited an

OSSIFIED ARYTENOID CARTILAGE EXPECTORATED

by a patient sent to him for laryngoscopic examination by Mr. Buxton Shillitoe. The patient, a tradesman aged 58, had no symptoms of syphilis or phthisis, but aphonia had followed a few weeks after a fall on the head, and the cartilage had been expectorated at a later period. A drawing showing the appearance of the larynx, as seen with the laryngoscope, after the expectoration of the cartilage, was exhibited.

Mr. William Adams (of Harrington-square) exhibited an

ENLARGED SPLEEN,

weighing five pounds fourteen ounces, which was removed (post-mortem) from a gentleman 60 years of age. The case had been under Mr. Adams' observation for three years. The symptoms were loss of flesh and power; epistaxis occurred twice, but to no great extent; no other hæmorrhage; severe diarrhœa twice. For the last twelve months he had not been able to attend to any business. The immediate cause of death was congestion of lungs. He was treated at first with quinine and adherents, and afterwards with iodide and bromide of potassium for several months continuously, but without producing any diminution in the size of the organ. Arsenic and nitro-muriatic acid were each given for a considerable time with the same result. No other organ of the body was diseased; the liver was large, but appeared healthy; the mesenteric and other lymphatic glands were healthy. The heart and large veins were full of white clot; very little red blood escaped from the cut vessels, and that was dark in colour. The spleen had formed extensive adhesions to surrounding parts, and the greatest difficulty was experienced in

removing it from the body. Mr. Adams drew attention to this fact, for the consideration of those Surgeons who contemplate excision of the organ for sphenic leukæmia. Microscopic examination showed no morbid element in the spleen.

Dr. Langdon Down exhibited a specimen of

ULCERATION OF THE APPENDIX VERMIFORMIS.

The patient had suffered from peritonitis a year before his fatal illness, which followed an evening's dancing. The appendix contained small waxy granules, and the ulceration which had been the prelude to the first attack had been arrested, the opening having been closed by adherent omentum. Dancing had detached the omentum and led to fatal peritonitis.

Dr. Langdon Down also exhibited

A BALL OF COCOA-NUT FIBRE WHICH HAD CAUSED FATAL OBSTRUCTION.

The patient was an idiot boy, who had swallowed fibres of cocoa-nut at various times. Vomiting and complete obstruction lasted fifteen days. Galvanism mitigated the vomiting, and re-induced the secretion of urine, by removing the mass from the duodenum to the lower part of the ileum.

Mr. Christopher Heath showed a

LARGE CANCEROUS ULCER OF THE BASE OF THE TONGUE.

This specimen was removed from a man aged 54, who was sent to Mr. Heath suffering from difficulty of breathing, and great fœtor of breath. He had been out of health nine months, and latterly had had great difficulty of breathing, particularly when he attempted to swallow. He had become much emaciated. The finger detected an ulcer about the epiglottis, but there was no obstruction to the passage of food, a good sized bougie being readily introduced. He was admitted into the Westminster Hospital on July 7, 1866, and on the 17th the breathing had become so difficult that it became necessary to interfere. Dr. Gibb examined the throat with the laryngoscope, but only succeeded in obtaining a partial view, owing to the great irritability of the parts. He saw, however, an ulcer at the base of the tongue, close to the epiglottis, and coincided with Mr. Heath in the propriety of immediate tracheotomy. The operation was accordingly performed, and gave immediate relief. During August the patient was very comfortable, and improved much in health, so much so as to be able to walk about occasionally. In September, however, the tongue and the sublingual tissues became much swollen and infiltrated, and he began to lose ground rapidly, but had no difficulty of breathing to the last. He died exhausted on September 25, 1866. The specimen showed a large excavated ulcer, the base of the tongue eating deeply into the tissues, and at one point going through the entire thickness of the organ. The epiglottis was involved in the disease, and in great part destroyed, but the larynx was unaffected. The sublingual tissues and the glands in the neck were much infiltrated with cancerous material. The ulcer was evidently of an epithelial character.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, January 2, 1867 (Annual Meeting).

Robert Barnes, M.D., President, in the Chair.

Dr. F. Shepherd, Messrs. Corner, Thoiman, and Weller were elected Fellows of the Society.

The first case read was one by Dr. Fairbank, where the woman in the sixth month of her pregnancy was crushed between the wheel of a waggon and the parapet of a bridge. Immediately on this happening there was a gush of blood from the vagina, and on removing the woman to her home, which was not far off, Dr. Fairbank was able to find that the pelvis was fractured, the fracture passing through the horizontal ramus of the pubes into the obturator foramen. The patient was chilly all over, her pulse was slow, and she was very pale. This happened in the afternoon, and when visited later her pulse was found to be rather better, but as the evening wore on she became more and more restless, the pulse rose to 150 per minute; still she was able to pass urine. She spent a bad night, with occasional vomiting, and in the morning her abdomen was tense, her countenance anxious, and no fœtal sound could be heard. She got several doses of opium, and warm fomentations were applied over the injured parts. On the third day she was still more feeble, and her pulse was softer, but the vomiting still continued, and there was a certain amount of tenderness over the abdomen. On the 4th she was better, the pulse was 100, urine natural, and a strong belt was applied so as to compress the pelvis; from this she felt great relief. She continued to improve, and in two months she was able to walk about, but the right side of the pelvis continued flatter than the left. Three months after labour came on, and the fœtus was quickly expelled. When examined it presented all the appearances of only having reached a six months' maturity. It came to the knowledge of the reporter that she had been delivered of another child twelve months after this, a midwife having been employed at first, but, from the tedious nature of the case, that a Surgeon had been called in. Too much time had been wasted before application had been made to this gentleman, and the patient sank after the child had been brought into the world.

Dr. Short, of Madras, sent a report as to the frequency of criminal abortion in India. In 1863, 27 individuals were condemned for being concerned in such crimes, which, considering the amount of cases that escape detection, shows how common it must be. He detailed the symptoms which followed abortion, being simply those of recent delivery in a more or less mitigated degree, and then proceeded to enumerate the substances employed for procuring the premature expulsion of the fœtus. These were, first, bamboo leaves pounded in a mortar, the juice of which is said to be extremely powerful, generally causing the immature ovum to be expelled in from two to three days. The juice of the *Euphorbium Tirucali*, when applied to the os by means of a rag on the point of a stick, is also said to insure this in from twelve to twenty-four hours. Other species of the same genus are employed in like manner, and for a similar purpose; so also is the *Caloptris gigantea*. The root of the *Plumbago Zeylanica* is employed with a like intention, both locally and through the stomach; when applied in the former manner, the root is often shaved down to a taper point, and so introduced into the os uteri. In one case which came under this gentleman's notice, the base of the uterus was perforated in three places, as a result of the local application of the hard roots or the impregnated cloth upon a stick.

Mr. Hunt, of King's College, sent a report of the post-mortem examination of a new-born infant which had suffered from peritonitis as a *fœtus in utero*. The adhesions were both recent and of some standing, so that the meconium could not be expressed except with very great difficulty, owing to the bands of lymph which surrounded the intestines.

Dr. Boulton sent a report of a case of paraplegia occurring in a pregnant woman. The subject, aged 38, was stout and healthy, and was quite well when she applied to the reporter about the sixth month of her pregnancy. Gradually she became affected, her limbs became unable to support her, and she went on from bad to worse; her memory went, but her tongue remained unaffected. She had suffered from no fits, but as the symptoms became exacerbated, her knees became somewhat stiff. Various medicines were prescribed—strychnine among others—but she did not improve. Different Physicians were called in, who diagnosed her complaint as white softening of the brain and spinal cord. About the eighth month, she was delivered, got over her confinement, but soon forgot all about it, the child being dead. At the date of the report she was rather better, but had never recovered the complete use of her limbs, nor got over her defective memory.

The business of the annual meeting then commenced.

The Report of the Auditors of the accounts of the Treasurer for the year ending December 31, 1866, was read, from which it appeared that the balance in the hands of the Treasurer was £96 7s. 9d., and that during the year the sum of £50 had been invested in the funds in the names of the Trustees of the Society. The balance-sheet, read by the Secretary, showed that the Society had received during the year £580 2s. as subscriptions from Fellows, and £51 2s. 1d. as proceeds of the sale of the *Transactions* of the Society.

Dr. Braxton Hicks, after congratulating the Society on its increasing prosperity, moved—

"That the report now read be received and adopted."

Dr. Playfair seconded the resolution, which was carried unanimously.

Dr. Hall Davis said he had great pleasure in moving the next resolution, because he felt confident that it would be warmly responded to by the Fellows of the Society. Amidst the steadily increasing prosperity and usefulness of the Obstetrical Society of London, he said, we must admit that our *Transactions* have been greatly enriched by contributions

of its Fellows during the last two years; and we must acknowledge that our retiring President has given us important aid in this respect. We have also to bear in mind that during his presidency the first Obstetrical Congress, so happily suggested and carried out, has, thanks to his wise direction, assisted by the ready and unwearied exertions of our Secretaries and other officers of our Society, been successfully inaugurated. And another result has been, that this, the eighth gestation of our Society, has, at its full maturity, terminated in the happy delivery of healthy twins, in the shape of two very interesting volumes. In vacating that chair, which he has filled so worthily, with such ability and kindliness, our President will, I am sure, carry with him into his honourable retirement from that position our best wishes for his health and happiness, with the hope that he may long continue to the Society the benefits of his good judgment and experience. With grateful acknowledgments to our retiring Secretary, Dr. Meadows, and to our retiring Treasurer, Dr. Graily Hewitt, I will conclude with the following resolution.

"That the best thanks of the Society be and are hereby given to the President and officers of the Society for their services during the past year."

Dr. Routh seconded the resolution, which was carried unanimously.

Dr. Barnes and Dr. Meadows respectively returned thanks.

The List of Donations of volumes and specimens during the past year was read.

Officers.—The following gentlemen were elected officers of the Society for the year 1867:—*Honorary President:* Sir Charles Locock, Bart., M.D. *President:* John Hall Davis, M.D., F.R.C.P. *Vice-Presidents:* F. S. Haden, Esq.; A. Hall, M.D. (Brighton); Graily Hewitt, M.D.; Braxton Hicks, M.D., F.R.S.; W. O. Priestley, M.D.; J. G. Wilson, M.D. (Glasgow). *Treasurer:* Alfred Meadows, M.D. *Honorary Secretaries:* Gustavus C. P. Murray, M.D.; and Henry Gervis, M.D. *Honorary Librarian:* J. R. Traer, Esq. *Other Members of Council:* R. Barnes, M.D.; J. S. Corry, M.D. (Belfast); F. C. Cory, M.D.; J. L. Earle, M.D. (Birmingham); H. E. Eastlake, F.K. and Q.C.P.; R. Greenhalgh, M.D.; C. Holman, M.D. (Reigate); W. Leishman, M.D. (Glasgow); W. Playfair, M.D.; T. Pollock, M.D.; Tyler Smith, M.D.; E. J. Tilt, M.D.; T. Bryant, Esq.; J. F. Mitchell, Esq.; A. Napper, Esq. (Cranley); E. Newton, Esq.; J. Oldham, Esq. (Brighton); and William Squire, Esq.

The President then delivered the annual address, of which the following is an abstract:—He congratulated the Fellows upon another year, prosperous even beyond the Society's high standard of prosperity. Against 31 Fellows lost by death or resignation, 65 new Fellows had been elected. The Society now numbered 536 Fellows and 25 honorary Fellows—a greater number than had ever before been attained. The losses by death included Robert Hardey, of Hull; W. J. French, of Wilton; John Mackinlay, of Isleworth; P. P. W. Sydenham, of Islip; R. B. Walters, of London; Edmund Guest, of Chelsea; Andrew Sisson, of Reigate; Francis Bennett, of Gateshead; William Quarrell, and W. Middleton, of Leamington. The finances were in a sound condition; £50 had been added to the funded property, which now amounts to £1012 19s. 6d.; and the expenses of the exhibition of instruments and the catalogue, of which every Fellow would receive a copy, as well as of the *Transactions*, had been paid. The President then sketched the history of the exhibition, and referred to some of its more striking uses. It illustrated both the history of obstetrics and what might be called comparative midwifery. Instruments, the tangible and visible symbols of the thoughts of their authors, had this advantage over books; they spoke a universal language, and needed no translator. Nothing could be more curious or more interesting than the picture presented by the display side by side of the instruments used in different countries. Parturition could not differ so widely in different countries. Why then should the means of aiding parturition be so varied? This could be explained in part by the traditional influence of different teachers, who had guided their disciples along particular roads. Yet these roads generally conveyed to the same goal. This comparison of the means adopted by different persons to attain the same end would tend powerfully to dispel the prejudices clinging to different schools, and to make each seek in the rest materials for self-improvement. This exhibition had not only diffused a more just mutual appreciation of the knowledge and practice of different professors, but it was certain to be productive of improvement in obstetric practice both at home and abroad. The example set by the Obstetrical Society would probably be followed by exhibitions of instruments used in other branches of Surgery. The President then invited attention to the work before them. The Society had been requested by Dr. Farr, of the Registrar-General's Department, to aid in collecting information as to the modes of treating new-born infants, with a view to determining the causes of the present excessive mortality amongst infants. The most singular diversities exist in the management of children, not alone in different countries, but even in different parts of England. There must be some general physiological laws that ought to be universally respected, but which were certainly in some cases disregarded out of heedless submission to inherited customs. The Council had resolved to undertake the investigation, and the aid of every Fellow would be requested. Another point suggested for combined inquiry was the reciprocal influence of pregnancy and epidemic disease. Since the foundation of the Society, two opportunities of collecting observations upon a large scale had occurred. There had been an epidemic of small-pox in 1863, and last year an epidemic of cholera. What was the influence of small-pox, cholera, scarlatina, typhoid, typhus, relapsing fever, upon the course of pregnancy, as in causing abortion, premature labour, the death of the embryo? What was the influence of these diseases upon the course of labour, upon women in the puerperal state? What is the susceptibility of pregnant or puerperal women to be attacked? In what manner do these diseases act? What is the resultant mortality? These and other cognate questions might receive important elucidation if we could collect from all our Fellows the histories of any cases of pregnancy and labour complicated with zymotic disease which had come under their observation. The President next adverted to the question how far a learned society might usefully seek to guide Professional and public opinion by expressing a collective judgment upon controverted points in theory or practice. He thought such decisions could rarely be pronounced without danger of lending authority to error. It was extremely difficult to isolate a scientific question in Medicine from its natural or artificial complications, to reduce it to the terms of a definite proposition that could be submitted to the suffrages of a body of men. Besides, Medicine was but a progressive science. Doctrines were ever changing; but we were all more or less under the thraldom of the present doctrines. To commit ourselves to an absolute opinion must either subject us to the contumely of seeing our decision reversed, when appeal was made to a more advanced tribunal, or, to the extent of what authority we had, the spirit of fresh inquiry was discouraged. It was, therefore, wiser to abandon the attempt. The last word upon any Medical topic would not be uttered in our time; but this reasoning, he said, did not apply to the exercise of the function of deciding upon questions of ethics. Medical ethics formed but a branch, or rather an application, of those immutable laws of justice which had held wholesome sway over mankind of all ages. All associations formed for good purposes had been made to enforce respect for these laws. He thought a Medical society would ill fulfil its duty if it shrank from upholding in their integrity those rules of honourable conduct by the scrupulous observance of which we could alone deserve and acquire the confidence of the world. In retiring he was impelled by a deep sense of gratitude to acknowledge that whatever success had attended his presidency was largely due to the generous confidence and ungrudging co-operation of the Council, and especially to their admirable Secretaries, and to the kindly support or forbearance of every member of the Society. At the conclusion of the address Dr. Tilt moved a vote of thanks to Dr. Barnes for his valuable address, which was carried by acclamation.

Munificent Bequests.—The Rev. John Spence, a minister of Kinnaird, has remembered and munificently contributed by will to several charities, Medical and general; amongst the former the Dundee Royal Infirmary will receive £1000, the Perth Infirmary £1000. This benevolent gentleman also bequeaths about £12,000 for the purpose of providing as many bursaries as the funds will support, in promotion of education at the Universities of St. Andrews and Edinburgh, of such deserving students as should be selected by his trustees, and not of less amount than £50 per annum each.

NEW INVENTIONS.

LIQUOR CARBONIS DETERGENS, AND SAPO EJUSDEM.

We have often taken occasion to speak of the benefit derived from antiseptic preparations in the treatment of various derangements of skin and mucous membrane. They are remedies sanctioned by ancient experience, but which modern science enables us to understand the *modus operandi* of, whilst it furnishes them also in more abundant, simple, and convenient forms. We have more than once called attention to the value of such remedies in that very annoying condition, *pruritus vulvæ*, caused, as it usually is, and especially during pregnancy, by unhealthy secretions from the cervix uteri; also in *chronic eczema;* and there are few maladies not dangerous to life which cause more suffering than these two. We are glad, therefore, to have a new form of antiseptic for local use, in the *liquor carbonis detergens*, an alcoholic solution of coal tar, containing, we presume, the carbolic, phenic, and other acids, with dark tarry matter, and differing from carbolic acid as the liquor cinchonæ does from quinine. It readily mixes with water, forming a permanent emulsion, and in various strengths is available as a mouth wash, a gargle, an injection for fetid uterine discharges, cancer, retained placenta, etc., gonorrhœa in the female, foul ulcers, sloughing sores, and all maladies depending on, or complicated by parasitic beings: lice, fungi, etc., etc. It is also used in the sick room as a disinfectant, and is combined with soap. The latter may be highly useful for Medical men who dress offensive wounds, or perform *post mortem* examinations, as well as for toilet use by persons whose smell, like that of Gorgonius in Horace's satires, is a little too much like that of the goat. Anonymous letters often reach our office, praying for a remedy for foul breath or perspiration. Here is one.

MEDICAL NEWS.

Royal College of Surgeons of England.—The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Court of Examiners on the 14th inst., and when eligible will be admitted to the Pass Examination:—

Messrs. H. W. Diver, T. J. Pickburn, H. C. Hopkins,, F. L. Thorne, George Wilks, and D. K. Robertson, students of St. Bartholomew's Hospital; Phillip Thompson, Ratcliffe Nuttall, Charles Ogden, Thomas Wilson, and J. A. Giddings, of the Manchester School; T. J. Gittens, C. E. Wing, J. O. O'Brien, and J. T. Garlike, of Guy's Hospital; C. E. Gamble and C. J. Rhodes, of the Leeds School; George Payne and F. A. Helsdon, of the Middlesex Hospital; T. C. Bailey and R. L. Edgeworth, of the Dublin School; J. W. Pratt and J. G. Anderson, of St. Mary's Hospital; John Cascaden and Titus Crooker, of Toronto; Julian Willis, of King's College; Frederic Smith, of the London Hospital; J. E. Kenyon, of St. George's Hospital; Edwin Peacock, of Birmingham; and E. F. Chinery, of Edinburgh.

The following candidates passed their examinations on the 16th inst., viz.:—

Messrs. F. M. Wallis, G. T. Willan, F. W. Laslett, R. A. Painter, and A. W. G. Atkins, students of Guy's Hospital; G. S. Walker, H. R. Moullin, W. H. Hubert, and W. E. Ledgard, of St. George's Hospital; J. J. Roy, H. D. Shelton, J. O. Sankey, and W. A. S. Blue, of St. Bartholomew's Hospital; R. D. Fox and C. W. Calthorp, of the Charing-cross Hospital; J. A. Williams and E. J. Barrick, of Toronto; W. R. Davies and J. B. Beavan, of University College; T. M. Watt and W. A. Walker, of Belfast; G. W. Tacon, of the London Hospital; W. H. Aston, of St. Thomas's Hospital; and Oliver Penfold, of King's College.

The following passed on the 17th inst.;—

C. A. Nason, of Guy's Hospital; J. L. Davis, of Charing-cross Hospital; C. T. Hadelsey, of the London Hospital; Henry Wintle, of Bristol; Henry Hemingway, of Leeds; and James C. O. Grady, of Dublin.

It is stated that out of the eighty-five candidates who presented themselves for examination, no less than twenty-four failed to acquit themselves to the satisfaction of the Court of Examiners, and were consequently referred back to their anatomical and physiological studies for three months.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 3, 1867:—

Edward Nettleship (King's College), Kettering, Northamptonshire.

On Thursday, January 10:—

William Edward Williams (St. Bartholomew's), Llanhilleth, Monmouthshire; Thomas Edward Stainthorpe (Middlesex), Hexam Abbey; Henry Summerhayes (St. Thomas's), Ealing, Middlesex.

The following gentlemen also on the same day passed their First Examination:—

Walter Hart, King's College Hospital; John Chisholm McDonald, Westminster Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Atkinson, F. P., M.B., has been appointed Senior Resident Surgeon to the Lying-in Hospital and Dispensary for the Diseases of Women and Children, Birmingham.

Bennett, W. Ford, M.R.C.S., L.S.A., has been appointed Senior Resident Surgeon to St. Pancras Workhouse and Infirmary.

Buck, Mr. A. H., has been appointed House-Surgeon to the Charing-cross Hospital.

Mason, F., F.R.C.S.E., has been elected Assistant-Surgeon to Westminster Hospital.

Moore, Mr., has been appointed Surgeon to St. Luke's Hospital, in the place of Mr. Luke.

Powell, W., L.S.A., has been appointed Resident Medical Officer to the Charing-cross Hospital.

Seaton, Daniel, M.R.C.S., L.A.S., Oakham, Rutland, has been appointed Surgeon to the County Gaol.

Woodhouse, Thomas James, M.D. London, F.R.C.S., has been appointed Assistant-Surgeon to the 1st Surrey Artillery Volunteer Corps.

BIRTHS.

Bell.—On January 13, at Rochester, the wife of Dr. J. V. Bell, F.R.C.S.E., of a daughter.

Gray.—On December 29, at Rugeley, the wife of F. J. Gray, L.S.A., of a daughter.

Hooker.—On January 12, at Kew, the wife of Dr. Hooker, F.R.S., of a son.

McClintock.—On January 13, at 21, Merrion-square North, Dublin, the wife of A. H. McClintock, M.D., of a daughter.

Nicholas.—On January 15, at 16, King-street, Portman-square, the wife of E. Nicholas, L.S.A., of a daughter.

Oliver.—On December 30, at Stockton-on-Tees, the wife of W. H. Oliver, L.R.C.P. Edin., of a son.

Worthington.—On January 9, at 2, Keene-terrace, West Worthing, the wife of Dr. Worthington, of a son.

MARRIAGES.

Andrews—Crawford.—On January 16, at St. Mary Abbotts, Kensington, A. B. Andrews, M.R.C.S.E., of Westgate, Canterbury, to Caroline Eliza Newton, eldest daughter of W. S. Crawford, Esq., of Bombay and Wynaad, India.

Watson—Turner.—On January 15, at Christ Church, Cheltenham, Dr. Forbes Watson, of the India Office, to Finnella, only daughter of the late B. Turner, Esq., of Calcutta. No cards.

DEATHS.

Bellis, B., M.R.C.S.E., at Kidwells-park, Maidenhead, on January 9, aged 60.

Cottam, R., M.R.C.S.E., of Leeds, on January 6, aged 38.

Haslehurst, T., F.R.C.S.E, of Claverley, near Bridgnorth, on January 10, aged 66.

Marsden, W., M.D., at 65, Lincoln's-inn-fields, on January 16, aged 70.

Tallent, E., M.R.C.S.E., at Great Horkesley-park, near Colchester, on January 6, aged 66.

Thompson, F. F., M.R.C.S.E., of Tenbury, at Cleobury Mortimer, on January 10, aged 51.

Ussher.—On January 15, at 2, Craven-terrace, the infant child of Henry and Jane Harriett Isabella Ussher.

Wilson, J., M.D. of Great Malvern, at Ilkley Wells, Yorkshire, on January 8.

VACANCIES.

Bedford Infirmary.—Dispenser.

St. Mary's Hospital.—Assistant-Surgeon.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Leeds Township.—The First District is vacant; area 689; population 22,042; salary £120 per annum.

Manchester Township.—Mr. T. J. Webster, Assistant Medical Officer for Bridge-street Workhouse, resigned: salary £100 per annum, apartments, and £40 per annum for rations.

Nottingham Union.—The First District is vacant; area 900; population 32,645; salary £120 per annum; no fees.

APPOINTMENTS.

Cardiff Union.—Alfred Sheen, M.R.C.S.E., M.D. St. And., to the South Cardiff District.

Derby Union.—Charles A. Greaves, M.B. Lond., M.R.C.S.E., L.S.A., to the Workhouse.

Dulverton Union.—George R. Norris, M.R.C.S.E., L.S.A., to the Second District.

Exeter Incorporation.—John Woodman, M.R.C.S.E., L.S.A., L.M., to the Eastern District.

Melton Mowbray Union.—Thomas Leah, M.R.C.S.E., L.S.A., to the First Melton Mowbray District. Nathaniel Whitchurch, M.R.C.S.E., L.S.A., to the Asfordby District.

Thame Union.—Matthew H Humphreys, M.R.C.S.E., L.S.A., to the Long Crendon District.

Recognition of Medical Services.—The Board of Works of St. Giles's have recently presented their Medical Officer of Health, Dr. George Buchanan, with a purse containing a hundred guineas, with a vote of thanks, for his exertions during the late cholera epidemic.

Army Medical Service.—We are informed that the delay in the promulgation of the long-promised warrant has arisen from financial difficulties. It is promised for April 1. The day is suggestive.

St. Peter's *v.* St. Mary's.—It is asserted that Mr. Walter Coulson, in deference to the opinion of his colleagues at St. Mary's Hospital, has resigned his office of Assistant-Surgeon there, but has presented himself for re-election to fill the vacancy thus created in the staff of that institution.

Royal College of Surgeons.—It is stated that some of the improvements in the mode of conducting the examinations of candidates for the diploma of membership of this institution will come into operation at the next Pass or Surgical and Pathological Examination, on the 19th inst., when the candidates will be required to exhibit their knowledge of the application of splints and bandages. The Primary or Anatomical and Physiological Examination for the present year commences this day (Saturday).

The Pharmacy Act.—A deputation from the Pharmaceutical Society of Great Britain, consisting of Mr. Sandford (President), Mr. Hills (Vice-President), Mr. Morson, Mr. Waugh, Mr. Edwards, Mr. Orridge, Mr. Curleigh, Members of Council, Mr. Flux, solicitor, and Mr. Bremridge, secretary, had an interview with the Earl of Belmore at the Home-Office on Wednesday, in reference to an extension of the Pharmacy Act.

A Fact for the Anthropologists.—The Victoria Cross has been conferred for the first time on a negro, Private Samuel Hodge, of the 4th West India Regiment.

Mrs. Vyse, the criminal lunatic, has received a free pardon, and returned to her family in a sane condition. She was confined at Fisherton House Asylum, near Salisbury.

Westminster Hospital.—On the 16th instant, Mr. Francis Mason was elected Assistant-Surgeon to the Westminster Hospital, in succession to Mr. Heath, who has joined the Surgical staff of University College Hospital. The appointment is creditable to all parties. The Professors of King's College must see with pleasure that vacant offices in other schools are filled by men of promise whom they have educated; and the staff of the Westminster Hospital may be congratulated on the acquisition or a new colleague, who has won golden opinions by his talents in society, and whose Professional education, under the best auspices, gives promise of a most useful and brilliant Surgical career.

Presentation to Dr. Burton, of Walsall.—The Staffordshire Freemasons have presented Dr. Burton with a magnificent testimonial, of the value of 100 guineas, consisting of a massive silver soup tureen and two side dishes with covers, also of silver, manufactured by Messrs. Elkington, Mason, and Co., of Birmingham, expressly for the occasion, and engraved with the following inscription:—"Presented by the Freemasons of Staffordshire to John Burton, Esq., M.D., Past Deputy Provincial Grand Master, in recognition of his valuable services to the craft, and as an expression of their esteem and fraternal regard.—Jan. 7, 1867." The above was accompanied with a magnificently illuminated address.

Dr. Mackinnon.—It is difficult to over-estimate the good which an able Surgeon may do when settled abroad, or in one of our colonies, not merely in the way of his Profession, but by knitting closer the bonds between old England and her dependencies. Such good the new Assistant-Professor of Military Surgery at Netley has done, if we may judge by the following extract from the *Auckland Herald* of October 3, 1866:—"In the passenger list of those who leave to-day by the steamer *Auckland* for Sydney, will be seen the name of Dr. Mackinnon, of the 57th Regiment, who, during his stay in this city and province, has won the respect and esteem of the settlers. Dr. Mackinnon's Professional advice—and as a Medical man he had no superior in Auckland—was ever at the service of all who asked it, and, where needed, given gratuitously. Dr. Mackinnon leaves the colony, we understand, to accept a staff appointment at home, but wherever he goes he will carry with him the goodwill of the colonists of Auckland, and his name will be held in kind remembrance at many a colonial hearth. Few men belonging to the service, who have been quartered so short a time in the province, have made so many real friends."

The Accident in the Regent's-park.—Effects of Cold on the Nervous System.—Whoever has seen the dead bodies that have been taken out of the water in the Regent's-park, and the symptoms presented by the survivors, has witnessed something quite out of the ordinary range of Medical experience. Up to 12 o'clock on Thursday, forty-eight persons had been brought to the Marylebone Workhouse—fifteen alive, of whom one died (the others were removed on Wednesday to their own homes), and thirty-three dead. The man who died after his admission appeared to die with symptoms analogous to those of apnœa, or what is called asphyxia, or to those produced by opium. The breathing ceased, and could not be restored by any of the means employed, yet the heart continued feebly beating, and did not cease absolutely till nearly half an hour after the cessation of the breathing. The symptoms presented by those who recovered were also of the narcotic order—great excitement and delirium, with groans and screams indicative of extreme suffering from cold. The state of the pupil was not noticed. One patient still appeared to imagine himself in the water, and kept on striking out with his arms as if swimming; and several others could only be kept in bed by main force. The treatment was conducted by Dr. Randall, who lavished all the attention that skill and humanity could suggest, and who was ably seconded by Mr. Fuller, the Resident Medical Officer; and the remedies employed gave singular relief to the sufferers. Four attendants were told off to each patient—two to rub the legs and two the arms and chest with strips of flannel wrung out of hot water; and this was the chief and most grateful remedy. Tea and coffee were relished; but the patients, singularly enough, could not be got to swallow brandy-and-water—on the contrary, they clinched their teeth and spit it out. The dead bodies lay in several apartments on the ground-floor; all looked as if life had been suddenly and at once stopped; the arms were all elevated and bent at the elbow—just in the attitude usual to skaters; the eyes half open, pupils natural, and surface of the skin red, or purplish-red, sometimes livid, but not pale. The glimpses which many persons will have obtained of the inside of a workhouse will give a rather favourable impression of the cleanliness, comfort, liberal organisation, and Medical skill provided for the inmates. Mr. Obrè deserves great credit for his conduct on the site of the accident. One of the victims was Mr. Davies, pupil of Dr. Hardwicke, the Deputy Coroner.

The Cattle Plague Returns.—Statistical Office of the Veterinary Department, Privy Council Office, January 10, 1867. During the week ending January 5 ten attacks are reported to have occurred in Great Britain, being an increase of one on the previous return. No fresh outbreaks of the disease took place, and the number in the week preceding was three. Ten healthy cattle were slaughtered from having been in contact with infected animals. The attacks reported are for the following Petty Sessional Divison, viz.: (Yorkshire, East Riding) South Holderness, two cows, two heifers, and six calves; these animals were all killed by order of the Inspector. Statistical Office of the Veterinary Department, Privy Council Office, January 17, 1867. Three attacks of cattle plague are reported to have occurred in Great Britain during the week ending January 12, being a decrease of seven on the previous return. No fresh outbreaks of the disease took place in this or in the week preceding. Twenty-eight healthy cattle were slaughtered from having been in contact with infected animals. The attacks reported are for the following Petty Sessional Division, viz.: (Yorkshire, East Riding) South Holderness, one steer, one cow, and one calf; these animals were all killed by order of the Inspector. The number of animals attacked since the commencement is 253,820, being one in every nineteen of the estimated ordinary stock of cattle; and out of every 1000 attacks, whose results have been reported, 862 animals perished.—William Clode.

Two men were accidentally suffocated at some chemical works at Bow on Monday last. They had to do some work in a tank containing sulphide of ammonia, and were killed by sulphuretted hydrogen. A coroner's jury inquiring into the cause of death added to their verdict of accidental death a censure upon the foreman of the works for allowing the deceased to go into the tank before it had been ascertained that it was clear of gas.

METHYLATED MEDICINES.—It may not perhaps be so well known to our readers as it should be, that the law passed in the last session of Parliament for preventing the unrestricted use of methylated spirit in the preparation of medicines came into operation on the 1st inst. The object of this important act of the Legislature is to prevent the use of methylated spirit in the production of any spirituous compound or mixture which could be used either as a beverage or internally as a medicine. The Act states that "if any person shall use methylated spirit, or any derivative thereof, in the manufacture, composition, or preparation of any article as aforesaid, or shall sell or have in his possession any such article in the manufacture, composition, or preparation whereof any methylated spirit, or any derivative thereof, shall have been used, he shall forfeit the sum of £100, and such article shall be forfeited, together with the vessels or packages containing the same." Her Majesty's Commissioners of Inland Revenue, in a correspondence published in the *Transactions of the Pharmaceutical Society*, have gone so far as to prohibit the use of methylated spirit in the preparation of medicines for internal use even for cattle; it will, however, be allowed in the manufacture of preparations for external application, and of course may be used for burning in spirit-lamps.

THE *Builder* attributes the death of Mr. Alexander Smith, the poet, to bad drainage.

TRICHINIASIS is said to be prevalent in Germany. Russia has prohibited the importation of German swine.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Ignoramus.—The Esq., M.D., is more usual, but we doubt whether it is more dignified.

A Military Surgeon.—Dr. Jackson died in 1827, aged 76. His work on the "Formation, Discipline, and Economy of Armies" passed through three editions. It is a most valuable work, showing the author to have been a man of enlarged practical views.

The Western Morning News of January 15 has a capital letter by "E. S." on the absurdity of requiring religious tests from Surgeons. It is, it says, absurd to suppose that Medical men can find time to proselytise.

Mr. Henry Lee, F.R.C.S.—A correspondent calls our attention to the fact that Mr. Henry Lee passed the first examination for the Fellowship of the Royal College of Surgeons in 1844, and is senior to some gentlemen whose names have been brought forward in reference to the next Collegiate election.

Veritas asks several questions. "1. In what relation does hydropathy stand to allopathy?" or, in other words, "Is hydropathy (so used as an art *per se*) a legitimate branch of orthodox Medicine?" We must begin by saying that we do not recognise the word *allopathy*. It is never used by Physicians to designate their art, and has no foundation in reason or experience. It signifies, according to Hahnemann, the practice of healing, or attempting to heal, one disease by setting up another. Such a term may, perhaps, be colourably justifiable, but not really so, with regard to the use of counter-irritants, but with none others. A Physician removes causes, supplies appropriate food, and puts the patient in a condition to recover; but this is not allopathy. Hydropathy is a branch of therapeutics. The application of water in various forms is used by Physicians, and we should think that an orthodox Physician might use hydropathic appliances to any extent, provided that he did not *quack* them, or use them as a universal remedy to the neglect of other remedies. "2. Is it proper, discreet, or even honourable, for a professed Allopathic Practitioner to meet in consultation a Homœopathic Practitioner as regards site and erection of a hydropathic establishment?" Again protesting against the use of the word *allopathic* (which nobody does profess), we consider such a meeting improper and indiscreet. As to the word honourable, we think that a Physician would be deterred from such a meeting by a sense of what is loyal and honourable to his brethren.

Mr. Elliott.—An interesting account of the Hospital and school of St. George's has just appeared; it is by Dr. Page, the Senior Physician.

W. T., M.D.—The Medical Directories for the present year were published on the 1st inst., and can be obtained of Messrs. Churchill. The alterations in your address and qualifications have been made.

An Old Member.—On inquiry at the College, it is stated that the list of successful candidates will be published next week.

Jasper Buddle, M.D.—You will find papers on the state of our mercantile marine, and especially on the re-appearance of scurvy in Britain and Ireland, in vol. xix. of the *Medical Times and Gazette*, p. 76, *et seq.*

M., Med. Assoc.—You will obtain the desired information on reference to the *Medical Times and Gazette* of December 16, 1866. There are 229 members in Lancashire, of which number 29 are Fellows of the College.

A Student, Guy's.—The statement is much exaggerated, as on inquiry we learn that of the 85 candidates who presented themselves, only 51 had been previously rejected, and not 73, as you state. The Pass Examination takes place this day (Saturday).

A Literary Man.—Give up your "brandy and soda," and try the light wines. A New York paper says that "a man in the morning, after he has been drunk with wine, feels as though he had the rheumatism in every hair of his head."

Dr. Mapleton.—Consult Friend's "History of Physic." The Roll of the College of Physicians, by Dr. Munk, may give you the information. We are not aware of any history of the College of Surgeons. The lectures were founded by Arris and Gale; the former gave, prior to 1653, a sum of £300 to the Company of Barbers and Surgeons, afterwards increased to £510, which sum was handed over, on the dissolution of the Company of Surgeons and Barbers, to the Corporation in Lincoln's-inn-fields, or rather the Old Bailey, where the body was first established. Mr. Gale gave property on Snow-hill, afterwards purchased by the City of London for £432. This sum was laid out in the purchase of £689 16s. 5d. 3 per cent. Consuls. The dividends on this, about £20 per annum, are still received by the College, the Council of which institution has greatly augmented the fund. Inquire of Mr. Stone, who some years ago commenced what he called "Contributions towards a History of the Royal College of Surgeons."

"PALL-MALL GAZETTE."—THE CASE OF HUNTER v. SHARPE.

Second List of Subscribers.

	£	s.
Dr. Burrows, F.R.S.	2	2
Dr. P. W. Latham, Cambridge	1	1
Dr. Bond, Cambridge.. ..	1	1
J. Fergusson, Esq.	1	1
Dr. Allbutt, Leeds	1	1
John Churchill, Esq... ..	2	2
Dr. Priestley	2	2
J. R. Morson, Esq.	1	1
G. W. Sandford, Esq.	1	1
M. Carteighe, Esq.	1	1
Anonymous	0	5
Spencer Wells, Esq.	2	2
Dr. Waller Lewis	1	1
W. Martin, Esq., late B.M.S.	0	10
Sir Ranald Martin, C.B. ..	2	2
J. C. Pinching, Esq., Gravesend	1	1
W. Ludlow Roots, Esq., Kingston	2	2
Dr. Gream	2	2
Dr. Herman Weber	1	1
C. H. Cornish, Esq., Taunton	1	1
Messrs. Worthington and Son, Lowestoft	2	2
Prescott Hewett, Esq. ..	2	2
Per the *British Medical Journal*:—		
Dr. Radcliffe	2	2
John Erichsen, Esq.	2	2
Mr. Alderman Salomons, M.P.	2	2

CASE OF JUVENILE CORPULENCY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Allow me to elicit, through your columns, suggestions for my treatment of the following case:—A young lady, aged 16, height about four feet six inches, has for the last ten years been slowly increasing, until her weight has reached nearly thirteen stones. She enjoys good health: her appetite excellent; she takes only an average amount of food; the heart's actions are normal; the countenance is florid. The only indication of functional disease is in the urine; it is generally scanty, and with copious phosphatic deposit. A month ago the patient came into my hands, complaining that she was the object of most disagreeable attraction in the streets. The infrequency of these cases of huge obesity induces me to seek assistance from the Profession at large in the management of this very interesting and critical one. Let it just be added, that the brothers and sister of my patient are very spare in their habit of body.

I am, &c.

January 9. A CONSTANT READER.

SUCTION-CURETTES.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In the "Reports of Hospital Practice in Medicine and Surgery" in your number of the 5th inst., I observe you inadvertently say, in alluding to the "suction-curette," "The Profession is indebted to Mr. Pridgin Teale, jun., of Leeds, for this useful addition to our means of dealing with cataract."

By referring to your number of December 15, 1860, you will find an account of my suction instrument, devised for an operation within the eyeball, spoken of as applicable to other operations than the one named, and having precisely the same arrangement of tubes as the instrument described by Mr. Teale, jun., in 1864 (*Royal Lond. Oph. Hosp. Reports*, vol. iv., part 2); thus proving my just claim for priority of invention, and that I was the first to devise means enabling the Surgeon to act by suction on parts within the eyeball with ease and safety.

The Profession are indebted to Mr. Teale, jun., for having proved that the same suction instrument, with a suitable canula, can be employed for the removal of soft cataract.

I would beg to draw your attention to correspondence on this subject in the *British Medical Journal* of March 3, 10, and 24; and October 6, 13, 20, 27; and November 10, 1866.

I trust my numerous Professional and other engagements will be a sufficient excuse for my delay in writing. I am, &c

Plymouth, January 14. HENRY GREENWAY.

MEDICAL EDUCATION AT OXFORD.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I have read the article in your last number upon Medical education at Oxford with great interest. All those who wish well to our Profession must, I think, be glad to see the efforts which are being made to revive the Faculties of Medicine at our "old Universities." But I cannot agree with you that it would be desirable to establish a hall at Oxford which should be "devoted chiefly to studies which may be of use in Medicine." Such a hall would be open to great objections. Nor can I see that it would be attended by any corresponding benefits.

It is one of the greatest social advantages which our Universities have to offer that they bring together men who belong to different grades of society, and who are intended for different professions; and these advantages, be it observed, depend much more upon the composition of the Colleges than upon that of the University. The society which a man finds within the walls of his own College, and with which he is associated in the familiar intercourse of every-day life, has, generally speaking, much more influence upon his character and conduct than the extra collegiate society. Now these advantages would be almost wholly lost a

ORIGINAL LECTURES.

LECTURES ON CATARACT,

AND THE

MODERN OPERATIONS FOR ITS TREATMENT.

DELIVERED AT

King's College, London,

DURING THE SUMMER SESSION, 1866,

By J. SOELBERG WELLS,

Professor of Ophthalmology in King's College, and Ophthalmic Surgeon to King's College Hospital.

LECTURE V.

(Continued from page 30.)

Removal of the Lens in its Capsule.—This operation has been especially recommended for the following cases:—1. Capsular cataract. 2. Cataract complicated with choroiditis, or irido-choroiditis; for in such cases the eye is extremely irritable, and if portions of lens matter are left behind they are apt to set up very destructive inflammation; moreover, the connexion between the posterior capsule and the hyaloid is apt to be loosened. 3. Retrogressive cataract, in which the lens is somewhat shrivelled. If some of its constituents have undergone fatty or chalky degeneration, considerable portions of lens matter are liable to adhere to the capsule and remain behind when the cataract is removed, setting up more or less severe inflammation and giving rise to dense secondary cataract. 4. Immature cataract, in which there is also danger of lens substance remaining behind.

This operation was originally practised by Richter and Beer, but fell into disuse until it was lately re-introduced by Sperino, Pagenstecher, and Wecker. Pagenstecher performs it in the following manner:—The patient having been placed thoroughly under chloroform, he makes a flap incision (generally downwards) lying throughout its whole extent in the sclerotic, and not in the cornea; at the apex of the flap he leaves a small bridge of conjunctiva standing. He next makes a large iridectomy downwards and outwards, and then divides the conjunctival bridge with a pair of blunt-pointed scissors. If any posterior synechiæ exist, he divides them with a fine silver hook passed between the edge of the pupil and anterior capsule; then, by slight pressure upon the eye, he endeavours to remove the lens in its capsule; but if the hyaloid membrane should be ruptured, and vitreous escape, he passes in a small scoop behind the lower edge of the lens and to its posterior surface, and thus removes it with the capsule. Up to the year 1864 he had operated in this way upon fifty-four cases of cataract of various kinds with marked success. Only two eyes were lost through suppuration, and in a third case there was some iritis dependant upon previous opacity of the vitreous, but the result of this operation was fairly good, the patient being able to read No. 16 with convex 3. In not one of the remaining fifty-one cases was there the slightest iritis. In some of these cases the lens was extracted without the aid of the scoop and without loss of vitreous, the same occurring sometimes even when the scoop was employed; in others more or less vitreous was lost.

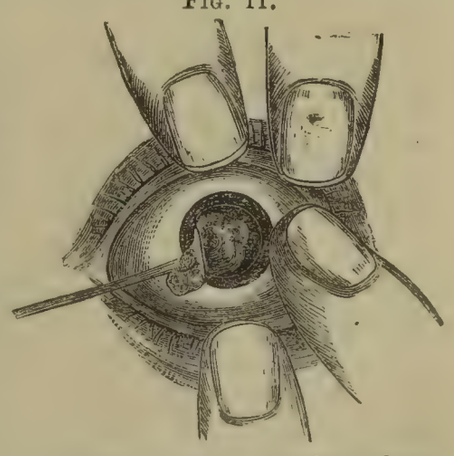
Dr. Wecker has lately favoured me with a description of his mode of operating, which is very similar, except that he does not make his incision so much in the sclerotic as Pagenstecher, and does not leave a conjunctival bridge. A portion of iris having been excised, he passes a curette behind the lens and draws it out in its capsule. When the lens has reached the incision, an assistant, grasping its edge with a Daviel's curette, extracts it. His results have also been very favourable, and he has often succeeded in extracting the lens without any loss of vitreous. The latter accident is almost sure to occur if chloroform is not given, or if the patient is not thoroughly under its influence.

LINEAR EXTRACTION.

Before I describe this mode of operating, let us glance for a moment at its history (a). In 1811, Gibson introduced it as supplementary to the needle operation, in those cases of soft cataract in which the lens (after having been divided) was not absorbed with the desired rapidity or success. He also employed it in capsular and membranaceous cataract. His mode of operating consisted in removing the lens through a small corneal section, which was about three lines in extent, and was situated about one line from the sclerotic. In 1814 Travers, after dividing the capsule, displaced the lens into the anterior chamber, and then removed it through a small corneal section. He, however, subsequently gave up this method, and, making a quarter section of the cornea, divided the capsule with the point of the knife, and, if the lens was sufficiently soft, he let it escape through the section, but if it was too firm for this, he introduced a curette into the anterior chamber, and by its aid removed the lens piecemeal. Both the operations of Gibson and Travers fell into disuse, until about 1851, when Bowman and Graefe, quite independently of each other, reintroduced linear extraction. Von Graefe, having worked out the subject extensively and with great care, states in his first essay upon it(b) that the linear extraction is especially indicated in the cortical cataract of youthful individuals, and also in those cases in which there is so much swelling up of the lens substance (either in consequence of a needle operation or of some injury to the lens) as to threaten the safety of the eye. But he thinks it unsuitable if the lens retains its normal consistence, and still more so, if there is a hardish nucleus. As a general rule, linear extraction is therefore indicated in cases of cortical cataract, occurring between the age of 10 and 30 or even 35. It is also often employed with advantage as supplementary to the needle operation. Linear extraction is to be performed in the following manner. The pupil having been previously well dilated with atropine, and the patient placed under the influence of chloroform, the eyelids are to be kept apart by Weiss' spring speculum, and the eye steadied with a pair of forceps. An incision is then to be made in the cornea (Fig. 10), at its temporal side and about one line from the sclerotic, with a broad, straight iridectomy knife. The point of the knife is to be directed slightly backwards so as to pass straight through the cornea, and not slantingly. When the point has reached the anterior chamber, the handle of the knife is to be laid well back towards the temple, so that the blade may fill out the section and prevent the premature escape of the aqueous humour, which would cause the iris to fall forward upon the knife. Moreover, if the latter is not kept parallel to the iris it may lacerate the capsule. The blade is to be slowly pushed on into the anterior chamber until the incision has attained an extent of from two to two and a half lines, when it is to be as slowly withdrawn, so that the escape of the aqueous humour may not be sudden. As the knife is being withdrawn, the upper edge of the incision is be enlarged by slightly depressing the handle, and the internal incision will thus be rendered equal in size to the external. The same may be repeated downwards. The capsule is then to be divided with the cystotome, and the lens removed. In order to facilitate the exit of the cataract, the convexity of the curette is to be placed against the edge of the cornea (Fig. 11) which causes the section to gape, a slight counter-pressure being at the same time exerted by the forefinger of the left hand, which is to be lightly placed against the inner side of the eyeball. By alternately pressing with the curette and the finger, the soft lens substance will readily exude through the incision. If portions of cortical substance remain behind the iris, the lids are to be closed, and the globe lightly rubbed n a circular direction to bring these flakes into the pupil or anterior chamber, whence they may be readily removed. Or Mr. Bowman's suction-syringe may be employed for this purpose. Should the iris

FIG. 10.

FIG. 11.



(a) For an interesting historical sketch of this operation I must refer the reader to Von Graefe's paper on "Modified Linear Extraction," *Arch. f. Opthalm.* xi. 3.

(b) *Arch. f. Opthalm.* i. 2.

protrude through the incision, it must be gently replaced, but if it has been much bruised by the exit of the lens or the movements of the curette, it will be wiser to excise a portion of it. A light compress bandage is to be applied after the operation, and the pupil should be kept well dilated with atropine.

Von Graefe found that, although occasionally a cataract possessing a firm nucleus may be removed through a linear incision without danger, yet that, as as a rule, this operation is inapplicable when the nucleus is hard, for the iris must then be more or less bruised by the passage of the lens through the narrow section. The scoop may also have to be introduced into the anterior chamber behind the lens, so as to facilitate its removal, and this, of course, adds to the contusion of the iris. Great irritation of the latter is likewise often produced by portions of hardish lens substance remaining behind the iris or in the pupil. Now, as the segment of the iris which corresponds to the incision is the most exposed to bruising, and interferes the most with the ready use of the scoop, we find that this is almost always the starting point of any subsequent iritis. In those cases in which there was a somewhat firm nucleus, Von Graefe was therefore led to modify the linear extraction, and to excise a portion of iris prior to the laceration of the capsule, and then to remove the lens with a broad flat scoop.(c) The stages of this operation were as follows:—1. The incision was made at the edge of the cornea (temporal side), and embraced about a quarter of its circumference. 2. A portion of iris was removed, the size of which did not, however, quite equal the extent of the incision. 3. The capsule was freely divided quite up to the margin of the lens. 4. A scoop was then introduced at the free edge of the lens and gently inserted between the posterior cortical substance and the nucleus, and the cataract lifted into the anterior chamber and extracted. The scoop which he employed for this purpose was shallower, broader, and sharper at the extremity than Daviel's curette. Thus originated the modified linear or scoop extraction — an operation which has now assumed so important a position in Ophthalmic Surgery. By this modification, Von Graefe greatly extended the applicability of the linear extraction, for he was now able to remove through a linear incision cataracts whose cortex was of a pulpy consistence, and the nucleus moderately large and hard, a form of cataract which would otherwise have necessitated the flap extraction. I would here remark that to Von Graefe belongs the credit of having first suggested, in some cases, the combination of an iridectomy with flap extraction, and also of having introduced the modified linear or scoop extraction. The principle of the latter operation is essentially his, whatever changes may be made in the shape of the scoop, and it is worthy of remark that the latest alterations assimilate it more to that originally used by him. Mr. Critchett has already pointed out these facts in his admirable paper upon scoop extraction(d), in which he says:—"Thus there suddenly appeared three new methods of operating for cataract, bearing the name of their several champions—the method of Mooren, Jacobson, and that of Schuft (Waldau); but justice compels me to state that these gentlemen lighted their tapers at the torch of their great master, Professor Von Graefe. Each of these methods had been previously suggested and practised by him, but only in exceptional cases, instead of as a general rule."

Waldau shortly afterwards contrived a different form of scoop, of varying size, which was deeper, broader, and flatter at the bottom than Von Graefe's. Its edges were, moreover, high and thin, so as to bite into the lens, the anterior lip being the highest, and thus facilitating the removal of the cataract by pressing after it. By its aid he proposed to remove even the hard senile cataract. It was soon found, however, that this form of scoop was too large and cumbersome, and its edges too high and sharp, and that it was therefore difficult to introduce it readily behind the lens, more especially in hard senile cataract, in which it may very easily cause displacement of the lens or rupture of the hyaloid membrane. Mr. Bowman and Mr. Critchett have since devised some forms of scoop which are far better, and in all cases preferable to Waldau's. The scoop operation, as performed at Moorfields, has proved remarkably successful in the hands of some of our English Ophthalmic Surgeons, more especially in those of Messrs. Bowman and Critchett, who have worked out the subject most thoroughly, and have done the most to bring this operation to perfection. As my description of it must be necessarily brief, I would refer the reader to their admirable articles upon this subject in the *Royal London Ophthalmic Hospital Reports*, vol. iv. p. 4.

(c) *Archiv. f. Ophthalm.*, v. 1.

(d) *Royal London Ophthalmic Hospital Reports*, iv. 4, 319.

ORIGINAL COMMUNICATIONS.

ON DR. JOHNSON'S THEORY OF CHOLERA.

By W. MOXON, M.D.

(Continued from page 58.)

Annesley, whose claim will not be disputed, says: "The lungs were generally shrunk, collapsed, filled with black blood, heavier than natural, and of a fleshy hepatised bruised appearance. The heart and large venous trunks were frequently distended by thick black blood." His cases are carefully detailed, and fully bear out these assertions; one of them is so striking that I may be excused for quoting it:—"In order to ascertain the precise appearance of the blood in both ventricles of the heart and in the aorta itself, I tied the aorta, the vena cava immediately below the bifurcation, and removed the heart and lungs from the body, the carotid and cervical arteries with the veins having been previously secured. The following appearances were observed. The right auricle, ventricle, and pulmonary arteries were, as usual, filled with black blood, and the left auricle, ventricle, and aorta descendens *were likewise filled with black blood.*" (The italics are Annesley's).

Searle says: "The internal organs were much gorged with blood, especially the lungs."

Kennedy gives the appearance as described by Mr. Scot:—"The lungs were frequently even found in a natural state. Much more generally they have been found either gorged with dark blood so as to have lost their characteristic appearance, and have assumed that of liver or spleen, or they have been found to be in the opposite state—that is, collapsed into an extremely small bulk, and lying in the hollow on each side of the spine, leaving the cavity of the thorax nearly empty. The right auricle and ventricle being gorged with blood is nothing peculiar, but some dissections have shown the left cavities to be filled with dark or black blood, which we may reckon is a morbid appearance more peculiar to it."

Orton says: "The internal organs in general were found much gorged with blood; this was particularly remarked in the veins of the mesentery and stomach, and in the lungs. The heart contained black blood throughout."

Christie says: "Dark-coloured blood in the veins, and sometimes on the left side of the heart."

Jamieson says: Heart and great vessels are stuffed with clotted blood, and the lungs were congested, collapsed, and particularly heavy.

Bell says: The lungs are congested, and in appearance almost of a fleshy structure, and, when cut into freely, give out the same grumous black blood.

Twining says: "The cavities of the heart are usually distended with black blood; the lungs generally exhibit degrees of venous congestion which at parts is much increased by gravitation."

Dr. Copland says: "When the cold stage proves fatal, the lungs are commonly found collapsed, condensed, sometimes remarkably shrunken, and always loaded with black blood of an oily or ropy consistency."

Dr. Wilks says: "The lungs are congested, and the posterior parts approaching a state of inflammation. The heart contains clots, as in other cases."

Dr. Gairdner says: "Although the lungs and right side of the heart are frequently loaded with blood to a considerable extent, the liver, spleen, and kidneys are in most cases paler than usual in other affections."

Dr. Budd says: "When death occurs speedily in the cold stage, they (the lungs) are found healthy or simply congested." . . "In other cases, in those chiefly that prove fatal during collapse, the ventricles contain dark fluid or grumous blood."

Dr. Parkes says, in his summary: "The most common appearances in the lungs are the presence of blood in the large vessels chiefly or solely, and deficient crepitation, arising from a more or less complete absence of air and blood, and from the approximation, from some unknown cause, of the molecules of the pulmonary substance. In other cases, there is more blood

in the minute structure, a corresponding dark colour of the lung, and a variable amount of frothy serum; the quantity of frothy serum bears an inverse ratio to the degree of collapse."

The same author also says, in describing the liver: "There was occasionally some blood in the larger branches, both of the vena portæ and hepatic vein; but the minute texture was, in almost every instance, empty of blood." I wish to direct particular attention to this description of the liver by Dr. Parkes; the bearing and force of it will be presently seen. Dr. Parkes also describes the spleen as "contracted, and containing very little blood."

These are not all the authors whom Dr. Johnson arrays at the commencement of his book. Some of those authors do not enter into the morbid anatomy of cholera, and some I have not had leisure to refer to. Perhaps Dr. Johnson would kindly supply the deficiency. I will only further remark that I have given the account of every observer I have referred to—no selection has been made.

Now, after such an experience, I may be excused for expressing surprise at Dr. Johnson's assertion that, "with respect to the extremely anæmic state of the lung when death has occurred during the stage of collapse, there is an entire agreement amongst those authors who have most accurately described the post-mortem appearances." That assertion shrinks to very small compass and dwindles to very little force, if it only claims to refer to the one or two authors whom Dr. Johnson may elect to be called most accurate, while in the meantime the views of such one or two authors suit his theory; but the names I have given cannot be treated so. If those authors are not to be trusted for accurate description, where are the foundations of that pathological anatomy which is the strength and pride of Medicine in our day. Surely it would rather be true to say that "with respect to the" highly engorged "state of the lung when death has occurred during the stage of collapse, there is an entire agreement among those authors who have (not to make invidious comparisons) described the *post-mortem* appearances." And this will appear as the more a universally true statement, when I have presently shown that the one exception is an exception rather in appearance than in reality. I fully admit the importance of the apparent exception. Dr. Parkes's descriptions are given with great care and accuracy; but that very care and accuracy which makes his descriptions important will defeat the attempt to divert or convert those descriptions to the support of our author's theory. For if we take Dr. Parkes's own account, we find that it varies from Dr. Johnson's quotation in very important particulars. And this would indeed be suspected, because it is always a dubious procedure to use a man's observations that one may draw from them a conclusion different from that he draws from them. For either the original observer did see, or he did not see, conclusions which his follower draws. Now, is it not more fair to suppose that the original observer, when he came to his own conclusion rather than the conclusion of the follower who would improve upon it—that he came to his own conclusion because it was more compatible with all the facts which he did see and his follower did not see? On the other hand, is it not unfair to suppose that the original observer came to his own conclusion because he was wanting in the genius to see the true reading of his own observations? And, indeed, a little study of Dr. Parkes's book and comparison of it with our author's account shows that this natural suspicion is well founded. Let us first look at what Dr. Parkes says about the state of the lung. Here he gives at once reason for the discrepancy which he confesses to exist between his own account and that of other observers. In substance he states that, wishing to be more precise in the description of the lung, he was not content to do as others had done, and merely to cut the lung open and call it congested if much blood came from the section; he would see where the blood is, whether in the vessels or in the texture. He therefore emptied the large vessels, and then, weighing first the entire organs, he made incisions through them at about half-inch intervals, he washed and drained them, and, weighing them a second time, judged the amount of blood in the tissue by the loss of weight which had resulted from the washing and draining. Now, this was an ingenious device, and may prove of great value when generally employed; but it is manifestly needful that we use caution in comparing results so obtained with results obtained by the rougher process in ordinary use. Plainly, we must see that before refusing the term "congested" to the lungs in cholera because they do not satisfy that test we must see whether the lungs, which in other diseases are commonly called congested, may not equally fail to answer that test. The term "extremely anæmic" is a comparative term, or, rather, an extra-superlative term based on comparison of the lungs to which it is applied, with the lungs in other conditions; but when we see that the mode of estimating is not the same in the contrasted cases, we see that there is, in fact, no comparison at all, and that the terms used are, therefore, utterly unwarranted. Again, if we refer to Dr. Parkes's description of the liver, we shall get a further illustration of the risk I have pointed out, and yet another significant instance of our author's mode of dealing with facts. Who would suppose that, having given Dr. Parkes's description of the lung as deficient in blood, our author should tacitly turn his back on Dr. Parkes's equally distinct statement that the liver and spleen are quite anæmic, and quote other authors to state that whilst the lungs are anæmic the other organs are hyperæmic—Dr. Parkes using the same peculiar means of estimating the lung, the liver, and the spleen? Surely, if we take the statement of a certain observer about one viscus, it is only common fairness to take the statement of the same observer about the other viscera—at least, not to ignore it and state the exact opposite from some other observer. And all this by far the more when that author professedly uses the same peculiar means in arriving at his conclusions in regard of both viscera. We now see why the original observer drew his own conclusion rather than his follower's—because, when he found the proper texture of the viscera of the general system in the same state of anæmia as the proper texture of the lung, it was plainly impossible to found any theory upon the *peculiar* anæmia of the lung texture. Dr. Johnson was forced, in order to find his foundation, to forsake his old guide to the state of the lung and take a new guide to the state of the other viscera.

So much for the state of the pulmonary texture. Let us now turn to the condition of the great pulmonary vessels. Dr. Parkes says, "On cutting through the roots of the lungs *a quantity of blood usually escaped from the divided vessels, and particularly from the pulmonary artery.*" I wish I could copy the diagram in which Dr. Johnson represents this to his readers' vision. The pulmonary veins are put as mere streaks, while the arteries are on a monster scale. Now, this diagram is most utterly opposed to the above statement of Dr. Parkes. If Dr. Parkes had said that Brown and Jones are tall men, and particularly Jones, would Dr. Johnson, in drawing a diagram of them, make Jones a big giant and Brown a little pigmy dwarf? The word tall is first applied to both, and then said to apply *particularly* to the one, but that does not make the other short. So when blood comes in quantity from the divided pulmonary veins and arteries, particularly the arteries, it *does come in quantity from the veins.* I am glad to point this out, because my own experience coincides with this statement of Dr. Parkes, that blood comes in quantity from the pulmonary veins. Indeed, the quantity of blood which Dr. Parkes describes as escaping from the vessels of the root of the lung would prove that both of these vessels—vein as well as artery—must have been very full. The capacity of the pulmonary vessels in the lung and its roots (that is, of those larger vessels which yield their blood when the roots are cut) is not great—I should say not greater than an ounce for each side—and yet two pints came in one case, one pint in another, twenty-six ounces in a third, and generally about four or five ounces. Now, no one could get four or five ounces into these pulmonary arteries only, and it would be no easy task to get that quantity into both veins and arteries of the roots of the lungs without using an injecting syringe, which would drive the blood into vessels so small that they never would have allowed it to run out. In truth, as the capacity of either side of the heart is but nine or ten ounces, and that of the great pulmonary vessels at the utmost three ounces, it is difficult to imagine where all the forty ounces can have come from, even allowing both cavities of the heart to have been distended to the utmost and to have yielded up their whole contents at the time of section. However that may be, it cannot certainly have come from the pulmonary arteries. In short, then, it appears that Dr. Parkes's descriptions and statements concur with those of other observers in affirming that *both sets* of pulmonary vessels are very full of blood, and therefore the excuse for such a diagram as our author gives us explodes and vanishes. Indeed, my own experience would better conform with the diagram if these vessels were put into more possible proportions, but the vein made the larger. Lastly, as concerns the state of the left heart, it appears to me to be surprising that Dr Johnson should not perceive that the

state of the left heart explains the absence of blood in it. If the left heart is completely and firmly contracted, it cannot have any blood in it; in completely and firmly contracting, it would drive all the blood out. Could the heart be full of blood and yet *firmly and completely* contracted? If not, what goes of whatever part of Dr. Johnson's theory there may be which rests on this fact of frequent emptiness of the left heart while the said left heart is completely and firmly contracted?

To report progress. I have shown, then—

1. That Dr. Johnson, in support of his theory, intensifies his own descriptions.

2. That all authors practically agree in describing the lung as congested.

3. That the author who seems to be an exception uses peculiar means of arriving at his conclusion; and that Dr. Johnson rejects the same author's identical conclusion about other viscera, though obtained through the same means.

4. That the diagram of the state of the pulmonary veins is contrary to all authors, especially to Dr. Parkes (the author quoted).

5. That Dr. Johnson's account of the empty state of the left heart explains itself.

These are the facts as they stand, and I submit that they entirely take away the foundation of Dr. Johnson's theory of cholera.

In my next and last communication I will endeavour to show that the loss of liquid from the blood probably gives to choleraic collapse its distinguishing peculiarities.

A SCIENTIFIC INQUIRY INTO SOME OF THE CAUSES ALLEGED TO PRODUCE ASIATIC CHOLERA.

By the Rev. SAMUEL HAUGHTON, M.D., F.R.S.,
Fellow of Trinity College, Dublin, and of the College of Physicians, Ireland.

THE oldest and best general classification of diseases is that which has come down to us in the writings of Hippocrates, as interpreted by the Commentaries of Galen. According to this classification, all diseases are either *pandemic* or *sporadic*; the pandemic diseases being divided into the *endemic* and *epidemic*—thus:—

Diseases are { Sporadic. . . I. *Sporadic.* ; Pandemic. { . II. *Endemic.* ; . III. *Epidemic.* }

I. *Sporadic* diseases are those which present no common type, do not reside in particular localities, and do not affect large numbers of individuals simultaneously; as for example, *pleurisy*, *cancer*, *leprosy*. Hippocrates, in treating of sporadic disease in his "Book on the Diet necessary in Acute Diseases," makes the following remarkable statement, which is fully borne out by modern statistics:—"Whenever the country is perfectly free from any common form of pestilential epidemic disease, exhibiting a common type, but there are present sporadic diseases, differing from each other, more persons die of these diseases than of the epidemics when they occur." (a)

The *pandemic* diseases, as the name implies, are those which affect large numbers of individuals simultaneously, and exhibit a common type, or train of symptoms; and they are divided into the *endemic* and *epidemic*.

II. *Endemic* diseases reside habitually in certain places, and affect the inhabitants in large numbers, and with a common train of symptoms. The treatise of Hippocrates on the influence of "Air, Water, and Locality," is a masterly exposition of the causes tending to produce such diseases, which he frequently calls "domestic," from their constant residence in certain places. As examples of such endemic disease, may be mentioned *ague*, *enteric typhus* (most unclassically called *pythogenic*), *Asiatic cholera*, *yellow fever*. It will be observed that no disease can properly be called *endemic*, without naming the locality in which it habitually resides; for if it leaves its natural home, and travels to other lands, it is called *epidemic* in countries where it is a stranger, although it is truly *endemic* to its own locality. Thus, of the examples already cited:—

1. *Ague* is endemic on the *sea coast of China*.

2. *Enteric typhus*, the *pythogene* or "dirt-begotten" fever, is endemic in the lanes of *Dublin*.

3. *Asiatic cholera*, as its name imports, is *endemic* in certain regions of Asia, especially the Delta of the Brahmapootra and Ganges, where the complex conditions of decaying vegetable matter, moisture, and heat, necessary to produce it, exist in combination at certain seasons of the year.

4. *Yellow fever*, in like manner, is *endemic* in the *West Indies*, where the unknown, but doubtless definite, conditions for its manufacture exist in abundance.

III. *Epidemic* diseases are those which suddenly invade a country to which they are strangers, affecting numbers of individuals with a common type of symptoms, and leaving the country which they have attacked after a certain interval of time. *Epidemic* diseases may be, and often are, the truly *endemic* diseases of other countries, which, finding at certain times suitable conditions for their existence in countries different from their own, and finding also suitable modes of conveyance from country to country, leave their own natural home and carry with them death to regions where their existence as endemic diseases is quite unknown.

I propose, in the following brief series of papers, to examine the question of the spread of Asiatic cholera during 1866 in Ireland, and to apply to the consideration of the question a few of the elementary laws of inductive logic which have led to such valuable results in the physical sciences, but which seem to me to have been too much overlooked by some modern Physicians in their frequently wild guesses at the causes of the production and the spread of cholera, typhus, and other diseases presenting a similarity in the mode of their propagation.

Before commencing the discussion of the causes that brought the Asiatic cholera from Calcutta and spread it over certain localities of the British islands in 1866, it may be worth while to recall the opinions of Galen as to the causes that necessarily produce diseases of every kind.

In the preface to his Commentary on the Epidemics of Hippocrates, Galen says:—

"There are three causes that beget diseases:—1st. Things that we eat and drink. 2nd. Things that we do to ourselves. 3rd. Things that fall upon us from without. From each of these common diseases are wont to be produced, and especially from the constitution of the air that surrounds us." (b)

Those who believe that cholera is, in most cases, to be attributed to defective or noxious water supply, will adopt the first of these causes; those who believe in the *Contact Theory*, and that it is an essential condition that the sufferer shall have placed himself, consciously or not, in contact with the cholera poison produced by the sick, will adopt the second cause; while the large class who attribute the cholera to "blue mist," "pestilential epidemic constitution of the season," "telluric influence," "terrene agencies," "electricity," "magnetism," "ozone," and so forth, will unanimously choose the third of Galen's causes, as affording the most occult reason for phenomena, of the real causes of which they are ashamed to confess their complete ignorance. The Galenic causes of disease afford us a convenient means of classifying the theories of cholera, which may be summarised as follows:—

1. The water supply theory.
2. The contact theory.
3. The "Will of God" theory.

I am obliged to sum up the discordant theories of cholera, which agree only in attributing it to an *occult* cause, under the general name of the "Will of God" theory, which has, from the earliest times, afforded an excuse for neglecting our own duty by attributing any misfortune of a general nature that befals a country or people directly to the hand of God.

In ancient times, processions to the temples of the Gods were the only recognised mode of dealing with a pestilence; and in our own country even now, the prayers read in church during a pestilence are often considered as a sufficient excuse for a culpable neglect of sanitary measures and quarantine regulations.

It will be found convenient to examine first the theories of cholera which attribute it to some general cause, capable of affecting simultaneously whole nations and large surfaces of the globe. Some of these theories are not deserving of refutation, because they merely assert, in a dogmatic and ignorant way, that cholera is produced by something not specified, such

(a) Opera Galeni (Kühn), vol. xv. p. 429.

(b) Opera Galeni (Kühn), xvii., A. 2.

as "pestilential constitution," "telluric agency," etc. This is equivalent to John Locke's famous proposition,

A Fetisch is a Fetisch,
Cholera is Cholera;

which propositions may be multiplied to infinity, without adding to our knowledge. Other theorists, of the same class, specify something definite in the air, or earth, that produces the pestilence, such as "blue fog," "absence of ozone," "magnetic storms," etc. These theories deserve the most careful inquiry, for in the present state of our knowledge of cholera, we are not entitled to deny the possibility of the presence of any asserted physical condition being necessary to the production of the disease, and we are therefore bound to examine into the alleged connexion of cholera with these various physical agencies.

It will be useful to examine, in the following order, the physical agencies that may assist, or that have been alleged to assist, in the spread of cholera during its frequent appearances in remote parts of the globe as an epidemic disease:—

1. Astronomical causes;
2. Meteorological causes;
3. Terrestrial causes.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

CHARING-CROSS HOSPITAL.

CASES OF LAMENESS AND DEFORMITY.

(Under the care of Mr. BARWELL.)

THERE is no joint of the body whose restoration after deformity from disease presents such difficulties as the hip, and the chief obstacles lie less around the joint itself than in the acquired malposture of the pelvis on the spine. When on account of hip inflammation the femur has been long held in adduction (the position which produces shortening), the diseased side of the pelvis is tilted up, and the muscles passing from it to the trunk (chest and spine) become shortened. If a patient be placed supine on a table so that the loins, back, and rump lie level on the board, the affected thigh will be flexed. If the knee be pressed down so as to make it (like the sound hip) lie on the table, the loins will bend up more and more, and will curve towards the affected side; this is produced by contracture of the psoas, partly also of the iliacus. If the patient be examined erect, incurvation and lateral bend of the spine will be very evident, and unless the case be recent these deformities will not disappear even in the recumbent posture.

February 3, 1864.—Louisa T., aged 16, came under my care with catarrhal ophthalmia. The patient limped very much, and on questioning her I found that she had had severe hip disease for some years, but during the last four had been able to walk with difficulty and lameness. There were marks of old abscess around the right hip; the parts were much deformed, but the bone was not dislocated. There was slight mobility in the joint. The femur was much adducted, so that the fold at the groin was sharp and deep. In compensation the right side of the pelvis was very much drawn up, so that the shortening amounted to $3\frac{1}{4}$ inches. The loins, therefore, were much contracted, the spine bent both sideways and forwards, and even when the patient lay prone the curve did not disappear nor even sensibly diminish. Since the notion had been suggested to her, the girl was most anxious that something should be done to diminish her lameness, but being aware from former experience that it was nearly useless to interfere with the hip itself unless the malposture of the spine were previously corrected, I prescribed certain preliminaries destined to produce such effect. As in the posture of standing the right side of the pelvis was tilted upwards, I desired to counteract the effect of such action on the spine by making the patient, while sitting, assume a contrary posture. For this purpose a seat sloping from left to right was used, the slope being about one inch in four. At first the time of using it was to be short, but gradually increased. Besides this a bandage, something, but not quite, like that described in my paper(a) read before the Medical and Chirurgical Society, was used. Certain other excercises, too long here to describe, were also resorted to.

March 19.—Considerable alteration has been produced in the condition of the spine. When the girl is standing, the same deformity of course continues since the cause remains; but it disappears greatly or entirely when she lies down or the sloping seat is reversed. Chloroform was administered, and the joint adhesions broken down, first by flexing the limb completely against the abdomen, then abducting it, subsequently straightening it. The thigh and pelvis were then placed in the same position on a splint previously moulded.

23rd.—The pain, which was never severe, has subsided; but passive motion is not yet bearable. My extension splint(b) was found comfortable, and was adopted to forestall tendency to retraction.

30th.—For the last four days passive motion has been used with the splint applied, and extension maintained, for such movement was thus applied much more easily. This is very frequently the case.

April 8.—Patient to get up; splint discontinued: to continue the exercise on the sloping seat; passes motion daily; limb easy and more mobile.

June 10.—The limb has become much more flexible, and comparatively little distortion remains. With a shoe whose sole is half an inch higher than the other, the lump is barely perceptible, even to one aware of its existence.

(a) Vide *Medical Times and Gazette*, January 23, 1866.

A CASE OF CONGENITAL VARUS FOLLOWED BY TETANUS.

Hester E., aged $3\frac{1}{2}$, born with varus of the right foot, came under my care Nov. 8, 1865. The case was very bad, the foot being literally doubled up. On the 10th, chloroform having been fully administered, I took the heel in my left hand and the front half of the foot in my right, and unfolded the mediotarsal bend and straightened out the limb. I think that in doing this the plantar fascia was torn; at all events, a strong retentive cord stood out resistent for a time, and then disappeared. No doubt the abductor hallucis formed part of this cord, and that muscle became stretched, but the edge was too sharp to be entirely muscular. The foot was replaced in a previously moulded splint.

13th.—There has been too much tenderness to allow any further treatment at present. The edge of the plantar fascia might perhaps, when so very tight, be cut, since it will not yield like muscular fibre, and its incision produces none of the evil effects of cutting tendons. To-day my appliances, with a spring representing the peroneus longus, was applied.

27th.—The dressing has been renewed once, and the foot is much better. Spring for the peroneus brevis also applied.

December 18.—Very much better. The sole now comes pretty well to the ground, but the front half of the foot still turns in. Applied an additional spring representing the peroneus brevis.

January 30.—This patient has been under observation since the last date. She is now able to walk well, the use of one foot differing but slightly with that of the other.

Although distortion of so small a member as a toe appears at first sight but an insignificant malady, yet it frequently produces extreme lameness. The condition is by no means confined to the poorer classes of society. On the contrary, it is very prevalent among the richer and fairer, making quadrilles but sufferance and waltzes tribulation. The toe most ordinarily affected is the second. It is a malady easily to be cured, if not of too old a date. But in these smaller members with multiplicity of tendons it is very important that the knife should not be used. Tenotomy either at the fingers or toes always produces lameness and clumsiness of action, and may be followed—has, indeed, been—followed by tetanus.

Mary A. B., aged 18, came to me at the Charing-cross Hospital, July 27, 1865, complaining of lameness produced by a painful toe. On examination of the left foot, the second toe was found to be extremely distorted; the first phalanx was bent up so as to lie at right angles with the metatarsal bone, and the first phalangeal joint is bent acutely. The malposture thus produced is the following:—The first phalanx lies above those of the other toes, especially the joint, upon the sharply bent angle of which a painful corn has formed. The other parts of the toe pass almost perpendicularly down between the first and third toes, so that its extreme tip, with the nail lying below the level of the other toes, presses upon the ground. This end is much inflamed, and another pain-

(b) "Diseases of Joints," p. 266.

ful corn has been developed upon it. The end of the first toe, much adducted, passes in front of the second joint of the distorted one, and comes in contact with the third toe. The whole deformity is probably due to forced abduction of the great toe produced by narrow-toed shoes. The foot was very painful, and always rendered her more or less lame, and at times quite prevented her walking.

2nd.—Chloroform was administered, and when its action was fully established, the toe was taken between the fingers and thumb, straightened, and then bound with a narrow band upon a straight, well-padded metal splint. In a few hours pain came on, and the splint was removed on the third day. The following apparatus was applied:—A long, rather narrow piece of plaister was placed with its middle on the back of the first phalanx. Its continuations on either side, passing round the cross under the ball of the toes, run to each side of the foot, and cross again at the instep. This piece of plaister was so arranged as to keep the first phalanx well down. Another and narrower strap was placed under the last phalanges, and made to run over the end and dorsum, and then to lie loosely (non-adherent) on the instep. A third long piece was split from one end to within a couple of inches of the other. The fork of the split part of the Y was placed on the back of the toe, the two branches twisted round and round the terminal phalanges and the preceding strip of plaister. The unsplit part of the stalk of the Y was left to lie (unadherent) on the instep. To these pieces of plaister, representing the two extensor tendons of the toe, were fastened caoutchouc strips, whose other ends were secured, with the desirable tension, at the back of the foot. Thus the first phalanx, being kept down while the others were raised in a mode to substitute the lost power, the position of the toe became normal, or nearly so.

After eight days the dressing was renewed. At the time it was remarked as singular that the corn on the first joint came away with the plaister, and left a red surface of new skin beneath. The treatment was continued for rather more than three weeks.

On July 28 the toe was left to itself, except that broader toed boots were rigidly enjoined, and she was recommended to place a piece of wool over the back of the first phalanx and on the palmar face of the adjoining toes in such way as to keep that portion down.

On September 27, two months after cessation of treatment, the position of the toe remained perfect.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0

Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.

Post-office Orders and Drafts on Army or Navy Agents, should be made in favour of Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d.	A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d.	A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, JANUARY 26, 1867.

CONTAGIOUS DISEASES PREVENTION ACT.

No. II.

In our last paper we gave an outline of the new Bill; let us now see it in operation. Practically, the working of this Act, as far as the discovery and treatment of the affected women are concerned, has not been attended with the difficulties which were apprehended. The plan pursued is sufficiently simple. An inspector visits a Military or Naval Hospital, obtains the number of cases of venereal disease, and a list of the names of the fresh admissions; thereupon he sees the affected men, and obtains from them the name of the individual from whom, or at any rate the house where, the disease was contracted. The superintendent goes to that house, and informs the landlord or proprietor that he is harbouring women believed to be diseased. The affected persons, or those suspected of being so, are, nine times out of ten, at once indicated; and the women, as a rule, make no objection—so far from it, they are only too willing to be cured, when they discover that the necessary treatment does not involve a temporary starvation. The visiting Surgeon receives a fee of 5s. for every Medical examination. So far, then, the Act may be worked. But has it been attended up to the present time with satisfactory results? We fear not. People will tell you, perhaps, that it is working well, but those who ought to know do not say that. One would have imagined that the Government had obtained sufficient information, from the experience of the old Act, to have formed a good approximate idea of the Hospital accommodation that would be required. Yet this will probably be the cause of the break-down in our attempt to lessen the spread of these evils. At Portsmouth the number of beds set apart is quite inadequate; these are already filled, and known cases of disease cannot, therefore, receive treatment. The Government has added a building to the Civil Hospital, containing sixty beds, fifty of which, being completed, are already occupied. The Hospital authorities receive £30, per bed, per annum, from the Government. This sum does not, we believe, actually defray all the expenses, and at Chatham £40 has been allowed. At Plymouth, again, the same want of accommodation exists; but we believe there will be 140 beds available by July next and forty more ready to be made so if required, so that we may expect the earliest and best results from that quarter. Of course those who *do* obtain treatment and cure are individually benefited; but the intention of the framers of the Act is baulked if it be limited to this. If we diminish the number of diseased females in a given district, while the amount of prostitution remains the same, the result is pretty obvious. Soldiers and sailors are gregarious animals. Either the diseased women at large will extend their favours over a larger number of persons, or the women of neighbouring towns will make temporary inroads into the district. As the Act only takes in certain places, the contaminated stream can be maintained. Exeter may keep up the supply of Plymouth, Southampton that of Portsmouth, and so on.

However, the measure is probably a tentative one, and can be extended hereafter if required, so that this difficulty can be overcome. But the inadequate accommodation is a great defect. At the beginning, the Government may make up its mind that the requirements in this respect will strain their powers. Once a clear headway has been made, it will be much easier and less costly to maintain the advantage which has been gained.

Then, again, there is another point of a very important nature. This point involves a question of scientific interest, and, practically, does not lack a pecuniary interest as well. Is syphilis a disease contagious during one, and that a limited, stage of its existence? Do the secondary and constitutional lesions of syphilis possess contagious properties; and if so, to what extent is the disease spread by this means, and what is the nature of the syphilitic disease induced? Uterine leucorrhœa is so common among syphilitic women, that lesions of the uterus may be regarded as one of the most common constitutional manifestations of that virus. We have instituted some inquiries on these points, and the information we gathered was strongly corroborative of the modern view—viz., that syphilis does not repeat itself—one attack exercising a protective influence against subsequent ones. The young prostitute, unhappily, pays her heavy toll to syphilis at the commencement of her career, and it thus happens that they suffer during the first year out of all proportion to what they do subsequently. The larger number of women at present under treatment at Portsmouth are labouring under vaginal

or uterine discharges without any other symptom. If this affection be a syphilitic leucorrhœa, it is clear that local treatment is inadequate to cure the disease, however much it may temporarily remove a symptom. If it be proved, what many French authors assert, that the larger number of syphilitic ulcers are contracted from secondary, and not primary, lesions, then it is palpably absurd to regard a woman without any discoverable primary lesion as harmless, and it is perfectly futile to discharge a patient from Medical observation on the healing of the primary ulcer. We must, then, treat the patients suffering from secondary symptoms as rigorously as those exhibiting the primary manifestation. This investigation into the causation of syphilis requires to be conducted very conscientiously by men of experience. It ought to be determined whether or not secondary syphilis be contagious, the extent to which it is so, and the nature of the syphilitic manifestations which make it so? These are points which a little care, experience, and an unbiassed mind, ought to settle. If A, B, and C all independently asserted that a woman D was the source of their primary disease, and it turned out, on examination of D, that she was suffering from secondary and not primary syphilis, we have gained a practical basis for further inquiries.

But to do this you must have a man experienced in the forms of venereal disease and their detection, and this naturally suggests that a Medical man should be remunerated sufficiently to make it an object of careful study.

The mean duration of the cases treated in Portsmouth Hospital is, we are told, about thirty days; but it is questionable whether they are really cured in that time, because the same women have been sometimes taken to Hospital subsequently, and it is said that some of the women discharged as cured have been shortly afterwards charged with infecting their soldier or sailor paramours.

It is very questionable whether the present plan of certified Hospitals will work well. Instead of hiring buildings, or appropriating Government buildings for Lock Hospitals, the Government has adopted the plan of subsidising Civil Hospitals. As these are necessarily limited to the requirements of the towns in which they are placed, they afford insufficient accommodation, and we find that the Civil Hospital is now so overshadowed by its Lock establishment that the very character of the Hospital is quite altered. Again, the *onus* of treating these patients has fallen upon the honorary Surgeons of the Hospital, who have not only to discharge duties of a new and laborious kind without any remuneration, but to subject themselves in so doing to the inspection and *surveillance* of a Government inspector. Some of the Surgeons naturally feel that this is to subvert the Hospital from what it was designed to be at its construction, and to subject them to the restraint and inspection of Government for State purposes. The Hospital and its officers are no longer instruments for strictly charitable ends, but for Government ones. This was held to be an undignified and unfair proceeding to honorary officers giving their services gratuitously, and consequently some Surgeons resigned their Hospital appointments rather than submit to it. We must say we sympathise with them in this view. It is a bad thing to mix up charitable with Government institutions. If the Government requires the unpaid services of the honorary Surgeons of a civil Hospital, these officers must yield their labours out of patriotism, and from charitable motives, and then it is rather too much to expect them to submit to those inspections and restraints which might fairly be imposed upon paid officials.

It is confessedly a difficult and expensive undertaking. One of two plans might be adopted. 1st. To make use of Government buildings—such as huts, barracks, or, best of all, one of the large Government hulks—as Lock Hospitals, and to appoint and pay a Government staff of Medical officers at once; or, 2ndly. To give a definite sum to a civil Hospital for the purpose of providing a Resident Medical Officer, to be approved of by the Government, who would undertake the Medical charge of the venereal patients, and relieve the Honorary Surgeons of the labours altogether. As we we have said, £30 per bed is not remunerative; but the Government authorities have, at their own expense, added to the Portsmouth Hospital the new buildings required, with an understanding that, in the event of their not requiring the new wards, these are to become the property of the Hospital authorities. It is therefore not to be expected that the Government will forego the use of the building they have erected at considerable expense. As the Hospital accommodation is so inadequate, there is no reason they should; but we nevertheless believe this plan to have been a mistake. The amalgamation of a Government with a civil institution does not work well. Already, we hear, has some conflict of opinion arisen between the three executive elements—viz., the Hospital authorities, the Government inspector, and the Admiralty—as to the Hospital space required for each patient. Then, there are the magistrates, the Visiting-Surgeon, and the police agents, to complicate matters still further, and the police are strongly in favour of a separate Government establishment.

The accommodation required at Portsmouth will probably amount to 200 beds. Of course, if the Act answers, this will be only a temporary requirement. For the future, we think that the Government should have Lock Hospitals of their own, apart from the civil Hospital.

THE MERCANTILE NAVY.

The present hygienic state of the mercantile navy of this country is just now exciting considerable attention, but not more than it demands when we consider that it is to this service we should mainly look for assistance in the event of a protracted war. After the very elaborate and valuable letters which have appeared in the *Times* from Dr. William Domett Stone, who has kept this matter prominently before the public, and the reports now appearing in our contemporaries, we think it wholly unnecessary to go into details, or to expatiate upon the many grievances which our seamen suffer. We refer our readers to the documents just named in corroboration of the assertions that have been made from time to time by Drs. Barnes and Ward (of the *Dreadnought*), Norman Chevers (of Calcutta), and Dickson (of her Majesty's Customs) respecting the deterioration of the mercantile marine.

There is, however, one very significant fact mentioned by Dr. Stone which is itself of sufficient importance to deserve attention. We allude to his statement that "in the French and Russian mercantile navies scurvy seldom occurs, owing probably to the general use of the common acidulated wine of France as a drink for seamen." We are told that it is given in preference to lime-juice for the following, among other, reasons:—1. That it is beyond doubt, as an anti-scorbutic, equal to the best lime-juice. 2. That sailors never object to take it. 3. That the dose being the same as lime or lemon-juice and the article cheaper, shipowners very naturally prefer it. For these reasons we would commend it to English shipowners, and we are of opinion that if the wine should be found to possess the virtues ascribed to it, it is likely one day to supersede lime-juice.

We have reason to believe that the communications mentioned above have had the effect of drawing the attention of the Board of Trade to the importance of reconsidering the existing laws, and of amending the Merchant Shipping Act; and we are informed that it is the intention of Government, in the ensuing session, to do something towards ameliorating the condition of merchant seamen. It is more than probable that inspectors will be appointed—notwithstanding the objections that have been raised by the local marine boards, with whom such appointments appear to rest—to examine the

quality of lime-juice shipped, and to institute an investigation into any death from scurvy that may have happened during a voyage. With respect to licensing certain persons at the various ports in the United Kingdom to vend lime-juice, we have heard, on good authority, that Sir Stafford Northcote, the President of the Board of Trade, Mr. Farrer, and others are opposed to such a step as adverse to the principles of free trade. Now, inasmuch as the laws affecting the commercial marine are necessarily exceptional, being in every way antagonistic to so-called free trade, and therefore totally different to those of other bodies, we are of opinion that a point might here be stretched; and as it is one upon which Dr. Domett Stone dwells, we trust that the authorities will see the force of his argument, and will adopt the suggestion, which we feel confident would be the means of effectually "stamping-out" scurvy.

We quite concur with Dr. Norman Chevers, who has stated, in a very able essay on "The Means of Preserving the Health of Seamen," published in the *Indian Annals of Medical Science*, that the present high mortality must continue so long as shipowners make the first consideration the ship, then the cargo, then, it may be, the passengers, then the live-stock; last of all, the crew, who are berthed in places not much wanted, and, probably, not fit for the storage of valuable cargo. Captain Henry Toynbee says, "The seamen must be screwed into the smallest possible space in the worst part of the ship for supporting human life—where dry goods could not be stowed." On behalf of our poor sailors, then, we exhort those reformers who have taken the matter in hand not to flag in their exertions until something practical has been effected.

FELSTEAD GRAMMAR SCHOOL, NEAR CHELMSFORD, ESSEX.

An advertisement has apppeared in our columns of this excellent establishment, and we venture to call attention to it, as it seems worthy the especial notice of members of the Medical Profession. The constitution of the school, which we believe is of Tudor date, is peculiar, the masters being prohibited from deriving benefit from the board and residence of the pupils. A certain fixed sum is paid for tuition, and an *ad valorem* charge made for board, etc. The teachers' salaries are paid out of the *property* of the establishment, which is sufficient to insure a staff of competent and, in many cases, distinguished masters, so that all the advantages of the great schools are to be had at Felstead at less than half the cost.

The trustees have lately sanctioned an increase in the "capitation" fee, and thus have been enabled to establish valuable scholarships—some of small amount to be enjoyed during the school course; others of greater value tenable in the ordinary way afterwards, and they possess this rare and admirable characteristic—that the holder of them need not necessarily go to Oxford or Cambridge, but may embark in any other channel towards the attainment of his position in life, and still be helped by the prize he has gained. Thus, a young man at Sandhurst or Haileybury, or one preparing for the Medical Profession or the Civil Service, may be assisted for two or three years to the extent of 60*l.*, 70*l.*, or 80*l.* a year, should he be so fortunate as to gain one of these exhibitions. We have seen the place, and the new buildings; the former is healthy in the extreme, the latter are magnificent, replete with comfort and convenience of every kind. We have also made inquiry into another most important matter, and we have reason to think that the moral tone in the school is of the highest order. In these days it is interesting to notice that over the principal doorway leading to the *old* dormitories—it should surely occupy a similar place in the *new*—the following admirable text is written, and has existed from the beginning:—"*Nil fœdum dictu visuve hæc limina tangat, intra quæ puer est.*"

THE WEEK.

THE COLD WEATHER.

An intermediate week of milder weather coming between the exceedingly low temperature (25·2°) of the first and (26·0°) of the third week in the present year, has somewhat diminished the deaths recorded in the Registrar-General's most recent return as compared with the very large number registered in the preceding week. The rate of mortality is, however, still greatly above the average, and contrasting the deaths in the fortnight ending January 5 with those registered in the last fortnight, there is found to be an excess of 732 deaths "fairly referable to the cold" in the latter period. More than half the extra deaths were of persons over sixty years of age, in whose bodies the fire of life had burnt too low to afford the extra heat necessary as a protection against the inclement weather. The deaths resulting from the Regent's-park catastrophe are not yet registered. The temperature at Greenwich only registered above the freezing point on one day (Wednesday) last week, and the highest reading in the water of the Thames was 34·3 on Sunday, the 13th inst. Several deaths were recorded in the week as accelerated by the coldness of the weather.

CHOLERA IN THE UNITED STATES.

The following particulars of deaths by cholera in the principal towns and cities of the United States during the months of July, August, September, and October last, are derived from an authentic source:—

Cities and towns.	Population, 1860.	Deaths from cholera.
New York	814,270	1,189
Philadelphia	565,500	834
Richmond	37,900	164
Norfolk	14,600	107
Savannah	22,200	231
New Orleans	170,760	132
Vicksburg	4,500	210
Memphis	22,600	899
Louisville	69,700	152
Cincinnati	161,000	1,848
St. Louis	160,700	3,532
Chicago	109,200	978
Nashville	16,900	782
Other cities and towns	1,268,730	533
Total	3,438,560	11,591

The ratio of deaths to population shows how severely some of the American cities have been visited. Thus the death-rate per 1000 was in Vicksburg, 46·7; Nashville, 46·3; Memphis, 39·8; St. Louis, 21·9; Cincinnati, 11·4; Chicago, 8·9; Norfolk (Virginia), 7·3; Richmond, 4·3; Louisville, 2·2; New York, 1·5; Philadelphia, 1·5; and New Orleans, ·8. Taking these cities in the aggregate, the death-rate was 5·1 per 1000. Out of a strength of 54,302 men, the army of the United States lost 1087 (574 white and 513 coloured) by cholera, which is equivalent to a death-rate of 20 per 1000.

THE LINCOLN COUNTY HOSPITAL.

We have received a report of a meeting of the governors of this institution, which has lately, rightly or wrongly, attained an unenviable degree of notoriety amongst provincial Medical charities. Amidst the conflict of opinion expressed at the meeting, one thing appears evident—that the Hospital is not in a flourishing condition, and that the support it receives is not adequate to enable it to furnish all the Medical and Surgical relief required by the large county whose name it bears. Of late years its receipts seem to have diminished, and its expenditure increased until the treasurer's accounts show a considerable deficit, notwithstanding an encroachment on funded property. It was proposed to meet this falling off by diminishing the number of beds and lowering the diet-scale of the patients, which, it is alleged, has been unneces-

sarily and wastefully liberal. Not having the Lincoln diet tables before us, we can express no opinion as to them, but on Medical grounds we object to the argument of one of the governors, the Hon. A. L. Melville, who urged as a reason against liberal supply of meat to the sick that they could not obtain it when they returned home to their daily labour. A diet that may be just sufficient to enable an agricultural labourer to perform his daily task would be utterly insufficient to carry the same man through a compound fracture, or to restore him from the effects of a major Surgical operation or a severe attack of pneumonia. The present rate of expenditure may be excessive, but this is not a valid argument for its curtailment. The proposition for diminishing the number of beds was, after discussion, abandoned, and a guarantee fund formed for maintaining the Hospital, in this respect, at its original standard. The drainage of the institution has been pronounced by Mr. Lawson, the civil engineer, satisfactory, and it is alleged that its failure, which has been recently made the subject of comment, has been due to the blocking up of the drains with old poultices and rags—a sufficiently damaging comment on the internal management. The great point, however, of debate was the system of nursing, and in whom should be vested the chief authority within the Hospital walls. A Ladies' Committee seem to claim for the head nurse or lady superintendent the chief power, and in this they are supported by a section of the governors. Another section claim that the principal authority should be vested in the Resident Medical Officer—in both cases subject to the control of a Weekly Board. This question, we should have thought, admitted but of one solution. In an institution for the treatment of the sick it is almost self-evident that the chief power should be in the hands of the Medical Superintendent, at least as far as regards all the ends for which a Hospital exists. No properly qualified Medical man would submit, to use the phrase of Lord Monson, the chairman of the meeting, to be under petticoat government in aught that related to the management of the sick under his charge. We are fully alive to the great advantages that have been obtained in several Hospitals from the acceptance of the system of nursing by educated and trained gentlewomen, and we hope that the Lincoln Hospital may yet reap all the good which such a system can confer. But Medical authority in a Hospital must be paramount, or it is nothing; and although the lady superintendent should have full power to control all matters of domestic economy and household management, the resident Surgeon or Physician must not be exposed to even the best-intentioned interference, if he is to be held responsible for the patients committed to his care.

DEATH BY DROWNING AND DEATH BY COLD.

The curious aspects of the Regent's-park sufferers have excited a good deal of attention, and as many of our readers may not be well acquainted with the post-mortem appearances in the two forms of death cited above, we propose saying something on the subject.

In death by drowning, the appearance of the victim will vary greatly according to the time when he expired, and the time the body has remained in the water. Death by syncope may happen from shock, fright, etc., in water, as it may occur elsewhere, but the mere fact of death occurring in this situation does not constitute death by drowning. When, again, the body is completely and instantaneously submerged, the appearances are not so strongly marked as when the individual has struggled for a time at or near the surface of the water.

Should the body be recovered immediately after death, the surface will most likely be found to be pale, as it usually is in any form of sudden death, but, if exposed to the action of the cold water for any length of time, it gradually reddens. In most cases the *cutis anserina* is met with. The body also presents the peculiarity, if it has remained for any length of time in the water, of having no accumulation of dark blood on one portion of its surface, all being alike reddened. If early removed and laid on the ground, it follows the usual law of presenting sugillations on its most dependent portions. Froth of a light foamy character is usually seen at the lips and nostrils of those who have struggled near the surface and have been removed after death; but when the sufferer immediately sinks beneath the surface, and the body remains several days in the water, this froth is not met with. Internally, the whole venous system is congested; the lungs contain a certain amount of water, which can be squeezed from their cut surfaces, causing them to assume an œdematous character; and the right side of the heart is gorged with dark blood, the left being comparatively empty.

Death by cold is of much rarer occurrence in this country, and the post-mortem appearances are barely known. The best and most recent account of them will be found in a paper by Professor Ogston, of Aberdeen, in Casper's *Vierteljahrschrift* for 1864. When death results from cold the process of dying is slow, the individual appearing to sink from asthenia. The surface generally presents red patches, usually corresponding with some of the protuberances of the body, as on the knees and elbows; the rest of the surface may be markedly pale. The scalp and lining membranes of the skull, as well as the brain, are usually pale, as are in most cases all the abdominal viscera. Almost the whole of the blood in the body would seem to be collected in the heart and the great vessels attached to it, all of these frequently containing fibrinous clots. The blood, except where in mass, usually presents an arterial hue, and whenever exposed for a short period invariably assumes a bright colour.

The sufferers in the Regent's-park catastrophe appear to have perished, so far as we could make out from a superficial inspection, in various ways. Some with foam on their lips had undoubtedly died of drowning. Some, again, seem to have died from shock, whilst a considerable number seem to have first succumbed to the effects of the cold while clinging to the ice, and, when unable to retain their hold longer, to have quietly sunk to the bottom. A detailed account of the post-mortem appearances, in a number of selected cases, of those who had perished in this sad affair, would be of the greatest possible scientific interest.

THE MEDICAL ARRANGEMENTS IN THE NOTTINGHAM UNION.

The Medical arrangements in this union appear to be far from satisfactory, and the Medical men to whom the care of the poor is entrusted are dissatisfied with their position. They have a salary of 120*l.* a year each, but are bound to have no private practice. Consequently, what with hard work, small pay, and no prospects, the situations are seldom long held by the same individual. An effort is therefore being made to subdivide the two great districts into seven, and to throw open the appointments to the city Practitioners. We think that the latter plan is certainly the better one, both for patients and Medical men, enabling the former to obtain more speedy relief, and the latter to gradually make their way into more lucrative practice.

THE ANATOMICAL PREPARATIONS AT THE COLLEGE OF SURGEONS.

We had recently an opportunity of examining the dissections submitted to the candidates for the primary examination, and anything more beautiful and better calculated to test accuracy of anatomical knowledge and teaching we have never seen. The recent specimens were very well and plainly got out, but what were formerly termed "pickles" were masterpieces of workmanship; none of the miserable ancient preparations in bottles which we remember to have seen at one time, and which would take a conjuror almost to say what they were,

far less a nervous examinee. The specimens are in many cases injected, of very brilliant colours, and the nerves, tendons, fasciæ, etc., most carefully cleaned and whitened. Students seem to have a terrible bugbear in what is termed an "out-of-the-way section," or a "window," or a "side view;" but these should be always, as far as possible, shown them by their teachers, or they should be taught more "topographically," so as to know and recognise any tissue or structure from whatever point of view shown them. It is not to be supposed that every section can be shown in the dissecting-room, but this might be done from time to time on a "class subject." The preparations to which we allude are set in moulds of plaster of Paris; these are sunk in flat pans, and a sheet of glass over all. Indeed, the array of preparations we saw would, in our estimation, give a student courage rather than dismay him, from the plain and evident manner in which the different structures are displayed. The credit of these dissections is due to Dr. Pettigrew and Mr. Moseley.

THE "GINGERBEER" CASE.

A curious case came on for trial the other day. A husband and wife in a small way of business at Westminster, among other articles dealt in ginger-beer; on one occasion, being overtaken by thirst, the wife opened one of the bottles, and drank, but was immediately assailed with "a burning sensation" in the throat. Very properly she screamed out, but only after finishing the bottle; then took an emetic, but finding this insufficient, applied at the Westminster Hospital for relief, where Mr. Oxley, the House-Surgeon, succeeded in ordering something to give her ease, but, notwithstanding this, she was forced to take to bed, and when she presented herself in court the other day declared "she was not the same person she had been." In consequence of the fearful results produced by the bottle, it was said to have been broken by the husband, and found to contain a putrid mass, the stench of which (after her previous suffering) nearly killed the wife. The bottle is said to have been shown to Mr. Oxley, who found that it contained candle grease and burnt lucifer matches, which Mr. Oxley very properly said might produce nausea, but not pain. Notwithstanding the counter evidence, the unfortunate Mr. Batey, who supplied the ginger-beer, was mulcted in £5. Now, on this very wonderful case we shall make a few remarks, looking at it from a technical point of view. In the first place we should say that, judging from the newspaper reports, it was not clearly proved that the bottle containing the nasty stuff had been supplied by Batey; nor, secondly, that the bottle from which the woman drank was the one shown to Mr. Oxley; nor, thirdly, most assuredly that the drinking of the ginger-beer gave rise to the symptoms complained of. The only common poison we know which is likely to have produced that instant burning sensation in Mrs. Redman's throat is corrosive sublimate, or some preparation of copper, certainly not candle-grease, however rancid. But how could the corrosive sublimate, or copper, have got there? To answer this question we looked over Mr. Batey's manufactory, and we found that, although our visit was altogether unexpected, everything was in a highly satisfactory condition. The materials of the ginger-beer were all good—the ginger, the sugar (loaf), and the tartaric acid. The acid solution comes in contact with no metallic bodies except when flowing into the bottle; and in the whole manufacture we must say that cleanliness is most scrupulously attended to, the hand never once being directly applied to the ginger-beer. We cannot detail the whole process, but impurities are carefully guarded against, and every drop is passed through muslin. All of these guarantees may, however, prove useless if the bottles into which the beer is filled be dirty. This, however, is provided for by a careful soaking, washing, and examination by an iron instrument; and, *above all, by the fact that if any beer be returned two-thirds of its value are paid for by the servants employed in its bottling.* After taking all these facts into consideration, we do not hesitate to express our wonder at the verdict.

A GOOD EXAMPLE.

The Paris correspondent of the *Times* states that some time since M. Jean Dollfus, one of the most eminent manufacturers of Mulhouse, and who employs 1100 women, had his attention drawn to the extraordinary mortality among their newborn children, more than 40 per cent. having died in a few weeks. It was found that this excessive mortality arose from want of care, as the mothers, having nothing but their wages, were obliged to resume work, and were consequently unable to give due attention to their infants. M. Dollfus, therefore, determined to keep every woman, not only during confinement, but for six weeks after, on full wages, with an indispensable condition that she should do no work whatever except in taking care of her child. In the course of four years the mortality among the children was reduced from 40 to 25 per cent. The success of this experiment led to the formation of an association of eight of the leading firms of Mulhouse, and a modified scheme was resolved upon, with the view of forming a mutual relief society among the women themselves. A set of rules was drawn up applicable to the women working in the eight establishments, whereby, in order to form a fund sufficient to give during six weeks succour equal to their average wages, all the women, married or otherwise, employed in the factories, and between 18 and 45 years of age, engaged to pay 15 centimes a fortnight, and the masters as much for each of the women employed by them. On confinement, should the infant die, the relief is continued at least three weeks after delivery. During their illness they are visited by Doctors, and a commission, composed of masters, foremen, and workmen, is charged to see that all regulations are strictly complied with. This is a most excellent plan, and one whose advantages are so self-evident that there ought to be many copies of it in work here. There are very few large manufacturing towns in England where the mortality of infants and young children does not come near to 50 per cent., and nobody can doubt that an immense proportion of such mortality could be entirely prevented by the formation of mutual societies such as that at Mulhouse.

FROM ABROAD.—THE PARIS CENSUS OF 1866—THE FRENCH AND GERMAN SCHOOLS OF MEDICINE CONTRASTED.

From the census taken in 1866 it results that the town of Paris numbered 1,825,274 souls, as against 1,696,141 in 1861, and the Department of the Seine 2,150,916 souls, against 1,953,660. Between 1856 and 1861 the proportion of increase had been 13 per cent., or 2·60 per annum, while between 1861 and 1865 it was but 10 per cent., or 2·02 per annum. An interesting calculation has been made as to the superficial area of Paris relatively to its actual and possible population. In the nine most crowded arrondissements 938,170 inhabitants occupy 1880 hectares (an hectare is 2·4736 acres)—an amount of space which, now that so many openings (*percements*) have been practised through the centre of the town, may be considered as sufficient in a sanitary point of view. In the other 11 arrondissements 887,104 inhabitants are distributed over 5922 hectares. If the inhabitants of these eleven arrondissements were in the same condition as regards space as the nine before referred to, the territory occupied by them would contain 2,955,235 souls; whence it results that the territorial superficies of Paris as it now is would suffice for the accommodation of more than 3,500,000 souls. As regards old Paris, the proportion of increase during the five years has only been 1 per cent., while it has been raised in the annexed zone to 21 per cent. This is justly regarded as one of the happiest results of the *percements* which have been executed in all directions of the capital,

a principal object of which has been to disgorge the centre, which had reached a maximum of density, in order to divert the population to the periphery. Between October 1, 1865, and September 30, 1866, 3614 new houses were constructed in Paris, while 2256 forced or voluntary demolitions took place. These last destroyed 16,515 domiciles (*logements*), while the constructions provided 20,311 domiciles, being a gain of 3796 in the year. Between 1861 and 1866, 55,127 new domiciles have been provided in Paris, the increase of inhabitants amounting to 132·139. At 2·5 inhabitants per domicile, this increase has absorbed 52,855 domiciles, the remaining 2272, in all probability being exclusively devoted to trade and commerce. In fine, if to the 367,369 domiciles which existed already in Paris we add the 3796 of 1865-66, we have a total of 641,165. The number of domiciles below 250 fr., and quite exempt from taxation, have increased by 4475, and those which are partially exempt by 6962. The total increase of houses in the entire Department since 1852 amounts to 61,025.

Our able contemporary the *Boston Medical and Surgical Journal*, treating of the present state of the Paris Medical School, after adverting to its former celebrity, observes :—

"This was only a quarter of a century or less ago, but what position does it hold now? The earnest students of other countries no longer visit it exclusively; or even first or second, to complete their general studies, or to perfect themselves in any special branch of our art, nor is French now the universal or most important language of science, as it once was. The very names which then commanded such world-wide respect are now almost memories associated with the past, and are no longer the representatives of the Medicine of to-day.

"What is the cause of this decadence? Why is it that the *Wiener Schule* holds at this moment the place then occupied by the *Ecole de Médecine?* The great masters in Paris have not died out and left their places to be filled by smaller men in Vienna, for, with one or two exceptions, the roll of French professors bears the same distinguished names that it did twenty-five years ago. Other causes have wrought the change. Gradually the philosophic German mind, so sceptical and irreverent as to accept no dogmas unchallenged, and so patient and industrious in following the suggestions of Nature to their very source, began to make itself heard. This influence, at first felt in small things and expressed in special directions, soon became an acknowledged power, as the careful observations of devoted students, men who cared for nothing else in life than their studies, who had no higher ambition than their scientific reputation, who knew no other pleasure than was to be found in the laboratory or hospital, and who never aspired to become rich, became known. Such men as these were called together, as their names and works attracted attention, and formed the Vienna School—a body of special students, in no way men of brilliant genius, but keen observers and accomplished teachers. It is this devotion to study in special directions as the prime object of their lives, science before wealth, which has made German Medicine what it is. It has given us Rokitansky, Virchow, and Förster in Pathology; Wünderlich, Oppolzer, Skoda, and Frerichs in Medicine; Hyrtl in Anatomy; Brücke and Ludwig in Physiology; Jäger, Graefe, Donders, Arlt, Hebra, Zeissl, and Scanzoni in special departments; Liebig, Lehmann, and Scherer in Analytical Chemistry; and many other distinguished instructors who might be mentioned. It has made a knowledge of the German language a necessity to all who would know anything of the modern advances in science, and draws our students to Vienna and Berlin as the great Schools of Medicine.

"In the meantime Paris has been living chiefly on the reputation of her past greatness, and the slight progress she has made has seemed complete stagnation by the side of the vast advance of her indefatigable Saxon neighbours. She is at last awaking to the fact that her present state is not equal to her former splendour, and is taking steps to recover her lost position in the scientific world. She is beginning her reformation in earnest. It is workers she wants, not great names, and if she can secure the former she may in time make herself again a leader in Medicine."

New Specialty.—We hear that it is in contemplation to establish "a Hip Hospital," for the treatment of morbus coxæ. We commend the ingenuity of the promoters.

THE

ADMIRALTY SCHEME FOR RECRUITING THE NAVAL MEDICAL SERVICE.

(*From a Correspondent.*)

As it is a matter that may reflect discredit upon our Profession, we recur to a statement noticed in our columns last Saturday —that the Admiralty is about to institute a system of *bounty to Medical recruits* by making a weekly allowance to students of three years' standing willing to accept the insulting appellation of *Medical cadets* during the last year of their career at the Medical schools, under bond of two sureties in £100 each and a personal penalty of £250, that, after becoming registered Practitioners of Medicine, they shall serve not less than ten years in the Royal Navy, and, in the event of failing to obtain their legal registration so as to qualify them to treat her Majesty's loyal defenders, they shall further undertake to return the said sum of £104 sterling into her Majesty's Treasury. When it is said to cost the Government over £100 to train a soldier recruit, it is by no means complimentary to our Profession, even in its humblest walks, to find that the Government rates the marketable value of our youths at this mean figure; nor does it display a great amount of common sense in those who conceive that a loan of £104 in weekly instalments through a year, with no risk to the lender, since it is to be repaid by exaction in the event of the unfortunate falling under a still more bitter tooth than original poverty—viz., Professional incapacity—shall be fair premium for the sale of the first ten years of a young man's freedom made, in his behalf, during his Professional minority, by the intervention of two interested guardians or sureties.

We regard this offer as in every way undignified and unworthy of its high parentage, because if the Government of a free nation finds it needful to engage Medical men, it should do so at the rated value of their labour, and not by harsh pre-emption before they are capable of doing Professional work; nor do we doubt that the scheme must fail, from the very principle on which it is based as much as from its inherent defects in details.

Instead of the glittering shilling put into the hand of the half-drunken country lad, scarce able to clutch that pledge of his servitude, it is but a weightier coin offered to a half-educated helpless youth, to bind him for ten years before the prospects of his Profession can be fairly understood by himself. In this proposal we see clearly announced the measure by which the Admiralty would estimate our Profession.

If it be inquired of what stamp the influx of officers thus allured to the Royal Navy will be, we may say that we fear that, through their career, they will never possess that straightforwardness which marks such men as the late Director-General, Mr. Alexander, wished to attach to the army, because they must have undergone, previous to entry, a year's drilling in the art of concealing their obligations and future engagements from those around them; and we should expect that when fulfilling those engagements the sense of their obligations will tend to produce that submissiveness to extra-professional authority which the Admiralty seems to prefer to surgical skill; we may anticipate, also, that the fact of their obligations being widely known will not serve to ameliorate the social position of the class, nor to secure for its representations on behalf of the sick that attention which gives the highest value to the Medical Profession.

On these grounds we sincerely trust that we shall not find a project so unpromising put forth, as it can only tend to render the Naval service less respected than it is at present in our schools.

In every way the army plan of taking by competitive examination the best of those legally qualified candidates that offer, and educating to the required standard before entrusting them with Medical duties is preferable, especially as it does

*

not commence with derogatory bonds such as are acceptable only under the pressure of consenting poverty, and we should be pleased to see established a similar mode of introduction to the navy, with such new regulations as will secure the affections of the rising generation in a degree unknown in the present state of affairs.

MR. MASSINGHAM'S CASE.

*** Mr. Massingham has received the following letter from the Poor-law Board. The Board acquit Mr. Massingham of all blame until he was summoned by the daughter of Mrs. Ferrey on the morning of her death. Although they censure Mr. Massingham for not going immediately, they admit, as an explanation, the state of his health at the time. This, added to his previously high character as a parochial Medical officer, has induced the Board to pass over the matter with this expression of their opinion. We think the Board has arrived at a wise and just conclusion :—

(copy.)

"Poor-law Board, Whitehall, Jan. 22, 1867.

"Sir,—I am directed by the Poor-law Board to inform you that they have received from their inspector, Dr. Markham, his report on the inquiry, which he recently held, into your conduct as Medical officer in the case of Mrs. Ferrey, deceased, together with a copy of the evidence given by the witnesses examined at the inquiry.

"The facts of this case, as disclosed by the evidence, are as follows:—The deceased was confined on Wednesday, the 2nd inst., about eleven o'clock in the morning, and was attended by an experienced midwife. An order for your attendance was obtained from the relieving officer about six o'clock in the evening of that day, and was delivered to you between the hours of six and seven ; but, from the description which you received as to the state of the deceased at that time, you did not visit her, but gave some medicine which you considered proper for the case, and promised to call on the following morning. On the following morning, about half-past six, the husband of the deceased found she was not so well, and the nurse, Mrs. Fox, applied to you to visit her, arriving at your house about half past eight o'clock. She was not seen by you, but only by Mrs. Massingham, to whom you stated, on being told that you were wanted, that you could not see any one for half an hour, and Mrs. Fox went away. About twenty minutes after ten o'clock on the same morning, the daughter of the deceased came to you and represented that her mother was dying, but under the impression, as you allege, that she was the daughter of some other person, who was a private patient, and with the particulars of whose case you were acquainted, you disregarded the girl's representation as to her mother's condition. A few minutes later, however, Mrs. Grimms, who was sent after the girl to prevent any mistake, also arrived at your house and told you that Mrs. Ferry was dying. On receiving this message, you replied that you were going your rounds and 'would see her first.' It appears, however, that you did not do so, but visited another patient suffering from consumption, and, having been taken ill while there, you returned home without having visited the deceased. About eleven o'clock you sent your son to visit her, and, having examined her, he returned to you and informed you that she was dying from disease of the lungs and heart. Mrs. Ferrey died about half-past twelve o'clock.

"With regard to your proceedings on the Wednesday, when the order from the relieving officer was brought to you, the Board direct me to inform you that, looking to the fact that the order did not state the case to be urgent, and to the representations made to you as to the then state of the deceased, the Board are of opinion that you are not censurable for not having visited her on that evening. The Board, however, cannot avoid remarking that a Medical officer necessarily incurs great responsibility in prescribing for a patient in the condition of the deceased, without previously seeing her.

"Mrs. Fox, who came to your house on the Thursday morning, states that she mentioned to your wife the name of the person from whom she came, and, although she does not appear to have been urgent in pressing for your attendance, the Board consider that probability is in favour of her statement that she mentioned the name of the deceased as the person requiring your attendance. It does not appear, however, that Mrs. Massingham communicated this to you. When, however, the daughter arrived at twenty minutes after ten o'clock, and urgently represented the state of her mother, you ought, in the opinion of the Board, to have ascertained, by proper inquiry, on whose behalf she applied, instead of carelessly assuming her to be another person, and failing, by such assumption, to make certain of the case for which your assistance was required. The subsequent arrival of Mrs. Grimms removed all doubt on this point, and the Board consider that you are open to grave censure for not having at once visited the deceased after you were distinctly informed of her illness, occurring, as it did, after the poor woman's confinement the day before.

"The Board observe that you were yourself suffering from indisposition at the time, and this fact, coupled with the high character which you have hitherto enjoyed in the discharge of your duties as Medical officer, renders it unnecessary for the Board to do more than express their opinion of your conduct on this occasion. The Board have only to add that it is inconsistent with your duty as a Medical officer, and with the regulations of this Board, that you should depute to your son the duties devolving upon you as Medical officer. When, for any sufficient reason, you are unable to attend personally in any case, you should obtain the attendance of your duly appointed substitute. "I am, &c.

"(Signed) Ralph A. Earle, Secretary."

REVIEWS.

On Inhalation as a means of Local Treatment of the Organs of Respiration, by Atomised Fluids and Gases. By Hermann Beigel, M.D., L.R.C.P.L., Assistant-Physician to the Metropolitan Free Hospital. Member of the Imperial Leopoldino-Carolina Academy of Natural Philosophy, of the Pathological Society of London, etc. With woodcuts. London: R. Hardwicke. 1866.

So long as the science and art of Medicine have existed Physicians have desired, and in many ways attempted, to treat diseases of the lungs directly, by remedies applied at once to the tissues affected, instead of circuitously, through the stomach and circulation. And in some degree this is effected by thorough changes of climate. But, even so far back as the days of Hippocrates, efforts have also been made to obtain the local action of remedies on the organs of respiration by means of fumigations, and the inhalation of medicated vapours, or by blowing powdered medicaments into the larynx. Some years ago attempts in this direction were made, at some Continental spas, by causing the patients to inhale an atmosphere saturated with mineral water, but as the mineral water was for that purpose turned into steam, the prepared atmosphere was not in reality medicated, but only loaded with simple watery vapour. In 1849 Auphan, of Euzet-les-Bains, adopted the plan of discharging a jet of mineral water against the wall of the "inhalation-saloon," and so really charged the atmosphere with the spray, or, as it was termed, the "atomised" or "pulverised" water ; and soon after, Sales-Giron invented a portable apparatus for reducing fluids to a fine spray or mist, which could be inhaled. In 1858 he exhibited his apparatus before the Académie de Médicine of Paris, and described the results obtained by its use. No little sensation was thereby excited, and for some years a war was carried on as to whether the "atomised" fluids really ever reached the lungs, many authorities declaring that they never passed the larynx. In 1862 the Academy ordered a thorough investigation to be made into the matter, and a valuable report was presented by Poggiale, which proved beyond all doubt that atomised or pulverised fluids do enter the channels of respiration ; and foremost among the supporters of the new system of medication may be named Trousseau, who observed that "the spray may even penetrate too much, much too much, and therefore great caution is necessary in its application," instances not being wanting in which too free an application of atomised fluids had excited bilateral pleuro-pneumonia.

To us it may seem strange that the penetration of the spray should have been denied, as we have fully recognised the existence of millstone-maker's phthisis, grinder's asthma, coal-miner's black lungs, and other diseases caused by working in an atmosphere laden with different kinds of dust.

Various kinds of inhalation apparatus have since been

invented; those of Drs. Bergson and Siegle being the most portable and simple, especially the forms of them now produced by Messrs. Krohne and Seseman, and by their means inhalation has been somewhat largely used in the treatment of disease. Dr. Beigel being one of those who have had considerable experience of the application of atomised fluids, now tells us how and where to employ them, what medicaments may be used, and what have been the effects of their use. His book is plain, practical, and calculated to be of much service. Part I., on "Inhalation in General," contains first, "historical remarks" on the subject, then a chapter is devoted to the question, "do the atomised fluids pass the larynx and trachea and penetrate into the lungs?" and in the following chapters he gives a "description of apparatus," notes "points to be observed in inhalation," discusses "what quantity of the atomised fluids reach the larynx, trachea, and lungs," tells us what medicaments have been used, describes the "immediate effects of the inhalation," speaks of "arrangements for inhalation of atomised fluids in Hospitals and Dispensaries," and of the "inhalation of volatile chemicals, gases," &c., and of oxygen gas. Part II. treats of "Inhalation Applied to Special Diseases," and the different chapters contain numerous cases in which it has been "used in diseases of the larynx and trachea," and "of the bronchi and lungs."

The book is well worth reading, and the cases show Dr. Beigel to be a careful and trustworthy observer. In his conclusion he observes that "with a very few exceptions the cases are such as have been cured or very much improved by inhalation," but that "it was by no means his intention to show that such results will always be obtained by the administration of atomised fluids," only to prove that it is a valuable additional means of treatment. He adds—"He who expects wonders from it will soon be disappointed; he who recommends it as an infallible one will prove a false prophet; but an unprejudiced application of the atomiser will lead to the conviction that the invention of Sales-Girons has been a most valuable addition to therapeutics." We think that few will lay down Dr. Beigel's work without feeling at least inclined to give the atomiser a trial.

Dr. Hermann Beigel deserves a compliment on the mastery he has obtained over a foreign language. It is only here and there that some stiffness of style, some curious expression, or some peculiar involvement of the sentences reminds one that the book is not written by an Englishman; but in such places one *is* led to wish that Dr. H. Beigel could have submitted his manuscript to the revision of some judicious and experienced English literary friend.

On Malignant Cholera: its Origin, Pathology, Treatment, and Mode of Prevention. With the Occupations of 5568 Males over 20 Years of Age that died in London in 1849, 1853, 1854, and 1866. With an Appendix on Cattle Plague as compared with Cholera and other Human Maladies: its History, Pathology, Treatment, and Future Prevention. A Letter on Homœopathy: its False Inferences and Hollow Assumptions. With an Essay on the Present State of the Medical and Veterinary Professions in this Country. By Edwards Crisp, M.D., M.R.C.S., L.A.C., late Physician to the Metropolitan Dispensary, etc., etc., etc. Hardwicke. 1866. Pp. 135.

A long title, which compels us to abstain from copying all the author's distinctions. But it saves us a little trouble, inasmuch as it displays pretty fully the contents of the volume. There is very much in it which will repay perusal. The essay on cholera is a reprint of a paper read at the Medical Society of London in 1849. Dr. Crisp condemns the castor-oil treatment as a "mischievous mode of practice," and makes some very good remarks upon some of the manifest shortcomings in recent sanitary legislation. The cattle plague appendix consists of a series of letters to the Lords of the Privy Council.

Defects of Sight and Hearing: their Nature, Causes, Prevention, and General Management. By T. Wharton Jones, F.R.S., F.R.C.S., Professor of Ophthalmic Medicine and Surgery in University College, London; Ophthalmic Surgeon to the Hospital; late Fullerian Professor of Physiology in the Royal Institution of Great Britain, etc. Second edition.

Mr. Jones believes that "much of the defective sight and blindness which we meet with is the result of disease, either preventible altogether, or at least curable if taken in time." It has, therefore, occurred to him "that a small volume containing some guiding principles relative to the care and preservation of the sight would be useful." With this opinion we are quite disposed to agree. A few simple directions, devoid of technical terms, as to the general hygiene and management of the eyes, would doubtless be of great service to a very large class whose daily occupations are trying to vision. For this purpose the seventh chapter, which treats very briefly of the choice and arrangement of light, the use of tinted glasses, and other subjects of much practical importance, might have been considerably expanded with great advantage. But we cannot see the utility of discussing in a popular manner such defects and diseases as hypermetropy, mydriasis, uniocular polyopy, photopsy and chroopsy, amaurosis, glaucoma, etc., etc. The victims of such complaints will certainly waste time, and will probably aggravate the disease, by reading about them. In such cases Professional advice is absolutely necessary, and ought to be sought for without delay.

PROVINCIAL CORRESPONDENCE.

BIRMINGHAM.

January, 1867.

The Lying-in Hospital in this town has recently been the scene of an unseemly quarrel between the General Committee, and lady visitors, and the Medical Officers. It has, I am sorry to say, resulted in a wholesale resignation of the latter, several of whom have been connected with the institution many years. The real cause of the altercation is not yet known, but an investigation which is being made promises to explain all relating thereunto. Rumour says that the ladies are not wholly blameless in the matter; whether they deserve this imputation or not is a question. Gallantry, however, forbids our belief in this, until the charge is fully established. What the lady visitors have to do with matters purely Medical is to me rather enigmatical.

Investigations with the sphygmograph—by the bye, what an atrocious name it is!—are still going on at the Queen's Hospital, with interesting results. However useful this complex instrument may be in Hospital practice, yet the time it takes in manipulating it will prevent its ever becoming a favourite method of diagnosis with the general, and often too busy, Practitioner.

There has been a case of ovariotomy at the same Hospital, during the past fortnight. The patient is doing well. There has been no bad symptom, and she is likely to make a good recovery.

The health of Birmingham, at the present time, is good. The mortality, as has been shown by statistical tables, published in the London papers lately, is less than that of other towns. This speaks favourably for the salubrious situation of the midland metropolis. Much of the healthiness of Birmingham, no doubt, depends on its capital system of drainage, and the excellency of the sanitary machinery for the prevention and removal of the foci of contagious diseases. Small-pox has during the last twelve months been somewhat prevalent, but deaths from it have been inconsiderable. Cases of scarlet fever have been pretty numerous, but the mortality not great. The remedy found most efficacious for it has been free administration of large doses of carbonate of ammonia. Scarlatina anginosa, of the three principal varieties, has been the most rife. Birmingham, with the exception of two or three indubitable cases, has escaped that dire disease, Asiatic cholera. Many cases of spurious or English cholera of a severe kind, have been met with, but which, as a rule, have recovered.

The West Bromwich Board of Guardians have lately made their ignorance stupidly conspicuous in refusing to allow the bodies of their dead paupers to be removed to the Medical schools for dissection. This is another instance of the want of common sense which guardians of the poor usually display in matters relating to science, especially the science of anatomy. Fortunately, subjects for dissection can be got in sufficiency from other quarters, so that students need not frame any excuse for not knowing their anatomy.

There is a new feature in connection with the teaching of anatomy at Queen's College which proves highly advantageous to the student. I allude to the mounting of the soft parts in

plaster of Paris, by which means they can be kept any length of time. It is hoped that, ere long, there will be a large and varied collection of them in the museum of the College.

Clitoridectomy has not found much favour here at present, and, unless its originator and partisans advance more cogent and sounder pathological reasons for its performance, I prophesy it will soon become analogous to those operations which are pronounced by the Faculty unjustifiable and useless—I might even say criminal. Verily, this is the age of the knife!

Much has been said and written of late about special Hospitals and those who uphold them. I am sorry to say that Birmingham has not escaped the infection. There is a Hospital or Infirmary—not always in the most open thoroughfare—for nearly every disease under the sun. I do not mean that each has a regular Medical staff—far from it; this is the extraordinary feature I wish to point out. Several of the Hospitals have only one Surgeon, who, I suspect, acts in many other capacities. If they are not swept away soon, or lopped off as excrescences—which they really are—there will be no occupation for the General Hospitals. Now, there is a class of diseases for which a special Hospital might be established with some show of reason; I mean a Hospital for skin diseases. I believe such an institution would be very useful, and supply a want which has been long felt and recognised by the public. To supply such a one merely requires the meeting and co-operation of a few able and intellectual men, together with the support and material aid of some of the rich inhabitants of the town, and which would ensure for it a full measure of success; of this I feel confident. But I do protest against those special Hospitals, which are intended solely for the peculiar aggrandisement and benefit of those who open them, or for whom they are opened.

Homœopathy is not so rampant as of yore; yet it vaunteth itself still in quiet and secluded places.

SCOTLAND.

Edinburgh, December 24, 1866.

In our last letter, we expressed an opinion that the visitation of cholera would prove a comparatively unimportant and temporary one. This, we are glad to write, has been the case. A few villages in Scotland have, since then, suffered very considerably in proportion to their population, such as Leven and Slateford, but in Edinburgh we have had great reason to congratulate ourselves on the mildness, and at length on the disappearance, of the epidemic. No new case of the disease has occurred since December 4, and on the 15th the Cholera Hospital was closed. An arrangement was made with the managers of the Royal Infirmary to set apart a few beds for the reception of any isolated cases; but, as these have remained unoccupied, we may now safely report a "clean bill" for Edinburgh. In the pages of a contemporary, with taste which we think was questionable, a sweeping charge was repeated of neglect on the part of the clergymen of various religious denominations to visit the inmates of the Hospital during the epidemic. We would not allude to this subject in such a place, were it not for the remarks of the contemporary we refer to. We regret that the statements were made, as, since then, they have been directly and officially contradicted. A more pleasing duty we undertake with the greatest pleasure, and acknowledge the heroism and devotion of the ladies of Edinburgh, who were daily represented in the Hospital, and did much, by their presence and by their kindly and cheering words, to mitigate the sufferings of the unfortunate inmates. The statistics of this epidemic have not been as yet published, but we believe that a report will soon appear, prepared by Dr. Littlejohn, and there can be no doubt it will prove as interesting and valuable as we are entitled to expect from our able Officer of Health.

The removal of the large collection of natural history from the University buildings to the National Museum has caused a considerable increase in the much-required enlargement of college accommodation. To the surprise—certainly, the gratified and delighted wonder—of all, this space has been devoted to the use of the students. An excellent gymnasium has been formed; a large drill hall for the volunteer company of the gallant captain, the Professor of Materia Medica, has been liberally granted; and, to complete the wise and bountiful arrangements of the Senatus, a much-required college refectory has been opened. "Les bonnes pensées viennent d'un bon estomac," seems to have been the guiding motto of the originators of these commendable innovations, and beer and tobacco, sandwiches and cheese, athletic exercises and military drill were all invoked to aid the learned prelections of the lecture-rooms. These arrangements were recently objected to by a minority of the Senatus, many of whom are prominent in condemning various haunts—known as "pumps"—where many students have been in the habit of indulging in libations uncontrolled by academic oversight. This minority seems to have fallen into the common mistake of forgetting that

> "Advice without relief
> Is like mustard without beef."

The question was discussed at a recent meeting of the Senatus, and a veto passed against the use of the obnoxious weed—which was always a questionable academic indulgence—but beer, with certain proper restrictions, has been allowed to remain on the bill of fare.

We have to congratulate the Professor of Materia Medica on an undoubted honour which has been conferred on him by his election to the office of Honorary President of the Associated Societies of the University. The post is retained for two years, and the principal duty is the delivery of an inaugural address, which, however, Dr. Christison's numerous engagements will prevent his doing until the second year of his office. His principal opponent was the Rev. Charles Kingsley, who was defeated by a majority of 90 votes.

At the last meeting of the Medico-Chirurgical Society, the principal business was the election of office-bearers. Dr. Moir was re-elected President, and the other offices were also, for the most part, refilled by last year's occupants. Dr. Patrick Watson read a very elaborate paper, containing details of twelve cases of excision of the knee-joint in which the results were extremely successful.

Our Royal Society does not often furnish pabulum wherewith to interest those specially connected with Medical science. At the meeting of Monday, December 17, two papers were contributed by Medical gentlemen, and both contained matter which may be worthy of a short notice. The first of these papers was read by Dr. Stark, the excellent Scotch coadjutor of Dr. Farr, and treated of the influence of marriage on the death-rates of men and women at different ages in Scotland. The important result of the paper, and one which has hitherto been entirely overlooked, was that bachelors and spinsters enjoyed a much shorter existence than their more fortunate brothers and sisters in wedlock. Dr. Stark clearly showed that the death-rate of bachelors between 20 and 25 was double that of married men at these ages. This disparity lessened as the age advanced, but still, at all times, it was in favour of the married. From 20 years of age to the extreme of longevity, the mean age of married men was 60·2, that of bachelors was 47·4 years. Among women, the spinster had the advantage over the wife between the ages of 15 and 30, and again of 40 and 45; at all other periods the married life was the more valuable (statistically). Dr. Stark did not rest contented with these curious and valuable results, but argued therefrom that celibacy is inimical to health and longevity. To this conclusion, we think, many good grounds of objection might be raised, resting principally on the trite remark that the "post hoc" does not include the "propter." Indeed, there are many causes which may, with greater reason than celibacy, be looked upon as the real agents in producing the higher death-rate of the unmarried. Take the period between 20 and 25 years, when Dr. Stark says the death-rate of bachelors was exactly double that of married men. It can well be urged that at this age the majority of people marry who have health and means to permit them to do so; those who cannot may, some of them, be afterwards able, but the majority will consist of men either of ruined bodily health, or without means and without ability, who will maintain during the remainder of their lives a hard struggle for existence—the influence of which on the death-rate is obvious. Phthisis, also, has many of its victims at this period, and almost all of these will be necessarily unmarried. Unless it can be shown that these classes would have their lives prolonged by entering on matrimony, Dr. Stark's conclusion must be held as worthless; his results are, however, worthy of careful consideration.

The second paper was one contributed by Dr. Fraser on the physiology of the Calabar bean. It will be remembered that this gentleman drew the attention of physiologists, at home and abroad, to the curious actions of Calabar bean by the discovery, some years ago, of its valuable effects on the iris and

on vision. This paper was a continuation of the investigation then published, and appears generally to confirm Dr. Fraser's previous results, while it has considerably increased their number. This substance, according to Dr. Fraser, may act on frogs in three different methods. A very large dose destroys the action of the heart and of the spinal cord, and kills the animal without appearing to affect the nervous system in any other way. A moderate dose depresses the activity of the cardiac and spinal functions, and then paralyses the endorgans of the motor nerves. A small fatal dose acts in very much the same way as the former, with the addition of increasing the tactile sensibility of the frog. In mammals, death is generally produced by a combination of syncope with asphyxia, and the symptoms of the one or other preponderate according to the dose. The motor nerves were invariably found active after death, but evidence was obtained of a more or less marked implication of the sympathetic system. Dr. Fraser considers the cardiac action of Calabar bean to be an exception to the general operation of cardiac vegetable poisons, excepting, possibly, nerium oleander, as the heart ceases to contract in diastole. The conclusions of Dr. Fraser's research, which we believe included upwards of 200 experiments, were very numerous as to the minor details of the action of Calabar bean. Enough has been said to show the extent of his investigation.

IRELAND.

DUBLIN, January 16, 1867.

I AM happy to be able to announce that the formation of the Irish Branch of the British Medical Association is proceeding most prosperously. Upwards of two hundred new members have already been enrolled. It can scarcely be doubted that the Dublin meeting will be one of the most numerously attended that has taken place for some time. The Local Committee are already, under the zealous presidency of Dr. Stokes, taking active measures to insure the comfort of their expected visitors, and it is greatly to be desired that as many as possible of our English brethren should avail themselves of so good an opportunity of seeing some of the beauties of the Emerald Isle, and of becoming acquainted with our institutions. We shall thus mutually learn the community of our interests; that in each country is a band of men equally devoted to the advancement of Medical science, to the upholding of the honour of their noble Profession, and to the good of their fellow man. And though we are probably already fully persuaded of this truth, there is nothing like meeting face to face. In the ordinary affairs of life it is better to walk by sight than by faith, and just as the best method of loyalising those of the Irish people—who are at present too ready to be made the dupes of foreign swindlers, who for their own base purposes do not hesitate to disturb the peace and mar the prosperity of the country they treacherously profess to serve—would be that the Queen and her family should frequently show themselves among them, instead of requiring them, as at present, to honour the abstract idea of royalty; so the best method of drawing the Profession at each side of St. George's Channel and the Irish Sea into one united fellowship will be such friendly meetings as, I trust, will be happily inaugurated in August, 1867.

The very severe frost which left us about ten days ago has returned with nearly as great intensity, the thermometer in the heart of the city, in a situation in Trinity College, sheltered from radiation, having fallen on each of the last six nights to 29°, 27°, 22°, 23°, 21°, and 25° respectively; the weather being at the same time clear and brilliant—until last night, when a snow-storm came on, which still continues—and highly attractive to skaters, has led to such marked desertion of lecture and dissecting-rooms that many of the Professors have not yet resumed their courses after the Christmas recess. Nor is this, in my opinion, at all to be regretted. Such a good opportunity for cultivating the useful and invigorating accomplishment of skating rarely occurs in this country, and I think those lecturers deserve to be commended who have added a week to the Christmas vacation, thus allowing their pupils with an easy conscience to take part in those manly and healthful exercises to which the auspicious state of the weather invites them.

On Monday afternoon, however, an accident occurred which called forth the active and beneficent exertions of several members of the Profession. Skating had been carried on successfully during the day by great numbers over the shallow part of the pond of the Royal Zoological Society, in the Phœnix-park, until about 2 o'clock, when the public in crowds incautiously ventured on a portion of the ice over the deep water nearest to the city, which had been roped off and marked "dangerous." A number of ladies and gentlemen collecting in one group were suddenly precipitated into the water, and were rescued only by the strenuous efforts of Mr. Carter and the men in the employment of the Society, nobly aided by Police-constable 58 D (Michael Travers), Mr. R. T. Forster (of Lincoln's-inn), Mr. Stephen Creaghe, Mr. William Barlow, and Mr. Edward Cooper. On being removed from the water, the sufferers were conveyed to the Superintendent's house, when it was found that five ladies and three gentlemen required Medical treatment. These were promptly attended by the Rev. Professor Haughton, M.D., Professor M'Dowel, Drs. A. W. Foot, Wade, A. L. Owen, Percival, and Greene, and were soon pronounced out of danger.

I called yesterday at the office of Dr. Burke, the active and efficient Medical Registrar, and was glad to learn that no death from cholera has occurred in the Dublin district since December 28 last.

At a meeting of the Royal Irish Academy held on Monday evening, the 14th inst., Lord Talbot de Malahide, President, in the chair, a paper on "Meteorology" was read by Professor Hennessy, F.R.S. Remarking that the annual and diurnal changes of temperature were the causes of phenomena, the learned Professor showed that most meteorologists confined their attention almost entirely to the annual changes, a method which he considered to be in some measure erroneous. He believed that the diurnal changes were of equal, if not of paramount, importance. His results were obtained from meteorological observations made in different parts of the world at local hours, reduced afterwards to mean Greenwich time. Acting on this principle, he had himself, at great labour, taking 2 p.m. as the hour of maximum and 4 a.m. as that of minimum heat, constructed a series of synthermal lines, charts of which he exhibited to the Academy. It is by an application of somewhat similar methods to the daily discussion of meteorological facts, that forecasts of the weather are most likely to be established on a secure basis.

GENERAL CORRESPONDENCE.

DR. RICHARDSON'S SUBSUTURE INCISION.

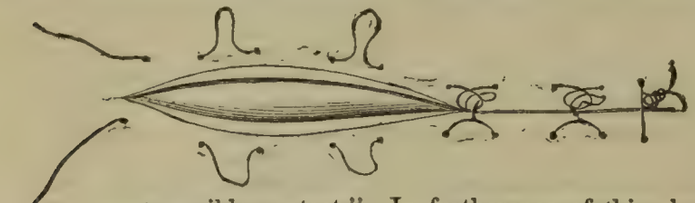
LETTER FROM MR. FREDERICK CHURCHILL.

[To the Editor of the Medical Times and Gazette.

SIR,—I have had much pleasure in perusing Dr. Richardson's proposed new "method of removing pendulous, external, and superficial tumours in loose skin" with "no deep attachment" as described in the *Medical Times and Gazette* of January 5, 1867. The treatment of incised wounds, with the endeavour in all cases to obtain primary union throughout the greater extent of the incision, is one of those departments of Surgery which has not received that attention from the Profession its obvious importance demands. Having recently devoted some little attention to the subject, I trust you will allow me space for the following remarks on Dr. Richardson's paper. The tumours to which this method of treatment might be applicable are exceedingly limited, and in all cases might, in the eye of the Surgeon, be called bloodless, seeing that they are merely skin deep. Fatty tumours, though so loosely attached, could not be subjected to this treatment, because in so many cases they have prolongations into the deep fascia and muscular septa which are connected with the superficial tumour by thin bands of fibro-areolar tissue, all of which must be carefully dissected out, to avoid a recurrence of the tumour. The Surgeon could never be sure beforehand that the tumour is not thus deeply connected. A fibrous tumour is as a rule too firmly attached to allow of the skin being approximated under its base. Epithelial and cutaneous growths could alone be operated upon in this way. But there are few situations where the skin would be sufficiently lax to allow of this operation being judiciously performed. In fact the practicability of such treatment is opposed to one of the established principles of Surgery, for I find in Druitt's "Vade Mecum," p. 725, the following statement:—"In extirpating wens or fatty or fibrous tumours, however large, it is a general rule not to remove any of the skin." That is to say, it has been practically found that the skin, however redundant it may at first appear, will by contraction and absorption

speedily resume its normal condition. On these grounds, therefore, it must be manifestly dangerous to remove such an amount of skin as would completely encapsule the tumour. One of the most direct obstacles to primary union is "dragging" upon the sutures, besides the far more important danger of mortification and gangrene resulting therefrom. Even were this method applicable by the "underclosure of skin previously to the application of the knife," another of the most important points in the attempt to obtain primary union would be opposed—viz., that the lips of the wound, instead of being accurately adjusted by the coaptation of homologous textures, must lie parallel and uppermost, exposed to the surface similar to the part of the pedicle which projects beyond the clamp in ovariotomy, and for the same reason I think it would run a very great risk of sphacelation, especially if "the shoemaker's stitch" be adopted. The only parts in Dr. Richardson's method which, as far as I can see, will be in accurate apposition, must be the remains of the capsule or cyst which surrounded the tumour, and as this is more or less membranous, primary adhesion is very improbable.

Mr. Syme says—"It will be found much more successful in practice to close the lips of the wound only partially, or not at all, for ten or twelve hours, until the bloody and serous oozing shall have ceased, and then to place them in the most



exact possible contact." In furtherance of this object, I beg to propose that after the removal of all tumours, etc., a suture of the following plan should be used:—Let each flap be separately stitched with an in-and-out continuous wire, at corresponding and equal distances. As each stitch is made an assistant should catch it with a blunt hook, to prevent it being "drawn home," and thus a set of loops is prepared at right angles to the course of the suture. One or two of the loops may be now hooked together, and the patient put to bed till reaction has taken place; by this means any fresh bleeding points may be taken up without materially disturbing the wound. When the oozing has ceased the remaining loops may be accurately fastened together, to be readily unhooked if required. This form of suture I have ventured to call the "hook and eye" suture. I do not think it has been proved that the mere exposure of a wound till the bleeding points have been secured, has ever been productive of bad consequences. On the contrary, I have rarely seen small superficial tumours removed in which partial or complete primary union did not result. As the nutrient vessels chiefly come from the base of the tumour, I think Dr. Richardson's method would run great risk of hæmorrhage into the internal cavity. I have thus endeavoured to take up the different points of Dr. Richardson's paper, and if I have not been able to agree with him, I would take this opportunity of thanking him for directing the attention of the Profession to such an important department of Surgery.

I may state, in conclusion, that having used Dr. Richardson's spray-producer in the removal of wens of the scalp, etc., I can bear testimony to its great efficiency, not only as a local anæsthetic, but as in no way interfering with the processes of primary union.

I am, &c. Frederick Churchill.

Edinburgh University, January 7.

A PROTEST AND A CHALLENGE.

Letter from Dr. G. Johnson.

[To the Editor of the Medical Times and Gazette.]

Sir,—I trust that I have shown myself not intolerant of criticism, of which I have certainly had my full share during the last year. I have before expressed to you my determination not to occupy your space with a reply to Dr. Moxon's criticism of my theory of cholera, and I have given my reasons for this decision, which remains unaltered. I find, however, that some readers of Dr. Moxon's papers are of opinion that a protest should be made against the tone and style of criticism in which he indulges—a tone and style characteristic rather of a cross-examination in a criminal court than of a scientific inquiry. I am reminded, too, that at the very commencement of Dr. Moxon's first paper (*Medical Times and Gazette*, October 20, 1866) a personal charge is brought against me which ought no longer to be left unnoticed. Dr. Moxon there says:—"Dr. Johnson proceeds forthwith to comment on the inertness of mind, the indolence, and the pride of his Professional brethren, which he regards as the only remaining obstacles to the triumph of his true interpretation of the chief symptoms of cholera."

I now call upon Dr. Moxon, who professes to be very precise and accurate in the use of language, to reproduce from my published writings any expressions which will justify him in having made that statement. I am, &c.

Savile-row, January 22. George Johnson.

PAROCHIAL LIBERALITY.

[To the Editor of the Medical Times and Gazette.]

Sir, — You have noticed from time to time the remunerations given by parochial authorities to their Medical officers during the last visitation of cholera. I beg to call your attention to a case which has lately come under my observation, and which I think you will consider worthy a place in your columns.

The Governors of the Poor of St. Margaret's and St. John's, Westminster, on hearing that cholera was at hand, conferred with their indoor Medical officer, and instructed him to organise a scheme suitable to the emergency. I have been informed that he succeeded in establishing a Hospital in the heart of the parish, supplied it with every necessary appurtenance, appointed a Resident Surgeon at £7 a week, nurses, medicine, and so forth; that to meet the wants of the outdoor poor who could be visited and treated at their own homes, or could come to the Doctor's residence for advice and medicines, arrangements were made with the regular outdoor Medical officers, who received 2*l.* a day for many weeks in consideration of the extra services required of them. During the whole of this time—I believe nearly three months—the indoor officer to whom I have already referred had the entire responsibility upon him, was in daily attendance—often more than daily—at his Hospital, into which nearly 100 cases were brought. And all this in addition to his regular duty at the workhouse itself. Let me add that this gentleman, well known and respected in his Profession, and who has been nearly half a century in the parish service, who exhibited energy far beyond his years, and deprived himself of his usual autumn holiday, in order to devote himself the more closely to that duty which he thought of before his health, and valued more highly than his life—this gentleman, at the end of his close and unwearied work, has been rewarded (?)—will it be credited?—with the sum of "twenty pounds." Comment on such treatment is superfluous.

I am, &c., Vigilans.

THE COMMISSIONERS OF LUNACY AND MR. BAKER BROWN.

Letter from Mr. Charles Palmer Phillips.

[To the Editor of the Medical Times and Gazette.]

Sir,—The Commissioners in Lunacy having observed in the *Times* of the 15th ult. a paragraph relating to the London Surgical Home, it became their duty to communicate upon the subject of it with the founder and Senior Surgeon of that institution. I forward herewith a copy of the correspondence. As the matter is of considerable public importance, the Commissioners hope that you will be able to give the letters a place in your journal. I am, &c.

Charles Palmer Phillips, Secretary.

Office of Commissioners in Lunacy,
19, Whitehall-place, S.W., Jan. 23.

(copy.)

"Office of Commissioners in Lunacy, 19, Whitehall-place, S.W., January 3, 1867.

"Sir,—I am directed to transmit for your perusal the enclosed copy of a paragraph which appeared in the *Times* newspaper of the 15th ult., and to inform you that the House-Surgeon

of the London Surgical Home, having attended a meeting of this Board on Monday last to explain that paragraph, then substantially admitted to the Commissioners present the reception into the Home of females of unsound mind.

"The Commissioners will now be glad to hear from yourself, as Senior Surgeon of the Home, whether there is any and what mistake in the paragraph, or on the part of the House-Surgeon, as to the objects of the Home, and, if any mistake has arisen, whether you have taken, or intend immediately to take, any and what steps to disabuse the public mind upon the subject of this apparent violation of the lunacy law.

"I am, &c.

(Signed) "Charles Palmer Phillips, Secretary.

"I. Baker Brown, Esq."

The paragraph in the *Times* newspaper above referred to, and in that newspaper headed "The London Surgical Home," contained the following passage:—

"A peculiar feature of the Home is, that in addition to the ordinary maladies which come under the head of Surgical diseases, women are received who are of unsound mind, provided that their infirmities are not hereditary, or of a long duration, previous to their application for admission. In it the great experiment is being made, for the first time, of endeavouring to cure mental diseases by Surgical operations."

"136, Harley-street, Cavendish-square, W.,
January 5, 1867.

"Sir,—In answer to your communication dated the 3rd instant, I beg to state that the article in the *Times* newspaper to which you refer was written by a gentleman, a perfect stranger to me, who came on the part of the *Times* newspaper, was shown over the Home and supplied with all the papers by the secretary. And I never saw the article until it appeared in print the next morning: was very much vexed at the mistake therein, and instantly took such steps to insure correction as I thought would be sufficient. I have been daily waiting to see my hopes realised, and am now most willing to take any steps the Commissioners may advise to disabuse the public mind upon the subject of any apparent violation of the lunacy law.

"I shall be very happy to wait upon the Commissioners to offer any further explanation, if they think it necessary.

"I remain, &c.

(Signed) "I. B. Brown.

"Charles Palmer Phillips, Esq."

"Office of Commissioners in Lunacy, 19, Whitehall-place, S.W., January 8, 1867.

"Sir,—The Commissioners, observing with pleasure your sense of the gravity of the mistake in the *Times*' article of the 15th ult. upon the London Surgical Home, direct me to acknowledge their receipt of your letter of the 5th inst., and at once to obtain from yourself, as Senior Surgeon of that institution, a plain and direct contradiction of its being open for the reception of females of unsound mind. The Commissioners doubt not that, in possession of such an authoritative contradiction, they will be able themselves to procure for it that necessary publicity which you have hitherto failed to get.

"I am, &c.

(Signed) "Charles Palmer Phillips, Secretary.

"I. Baker Brown, Esq., the London Surgical Home."

"136, Harley-street, Cavendish-square, W.,
January 10, 1867.

"Sir,—I have no hesitation at once in stating, as Senior Surgeon and founder of the London Surgical Home, that the institution is not open for the reception of females of unsound mind, and in no papers or advertisements issued or published by authority has it ever been stated so. During last year one patient, a servant of ——, was taken in as suffering from hysteria. I immediately discovered she was of unsound mind, and as quickly as possible had her removed to Hanwell Asylum.

"I am, &c.

(Signed) "I. B. Brown.

"Charles Palmer Phillips, Esq."

Professor Hamilton has presented to the Pathological Society of New York the heart of a patient, aged forty-four years, with bullet imbedded in the apex, which had been lodged there from a musket wound received when he was fourteen years old. Six weeks after the injury he returned to work. He was married in 1845. His last illness was ascribed to cold. The ball was surrounded by atheromatous deposit. The heart was dilated, but not hypertrophied.

REPORTS OF SOCIETIES.

THE HARVEIAN SOCIETY.

Thursday, January 17.

This Society met in the Stafford Rooms, Tichbourne-street, Dr. Pollock, Vice-President, in the chair.

Dr. Drysdale first directed the attention of the meeting to the frequent coincidence of slow pulse and low bodily temperature, narrating as illustrations of this two very good cases. Some conversation followed previous to the main business of the evening in the shape of a very good paper by Mr. W. Adams on the treatment of hip-joint disease. He pointed out that there were two kinds of the disease—one usually met with in children from 4 to 15, having a scrofulous taint; the other in more advanced life as the result of some injury to the joint, or from rheumatism; that the original site was not known, but that certain dissections led him to believe that it was in the round ligament. He divided the disease into four stages, the first being characterised by pain near the knee of a most excruciating character, but immediately relieved by rest. He disapproves of antiphlogistic treatment, and tries to keep up the patient's strength. He uses a splint moulded to the hip, or extension by means of a weight, sometimes the long splint; all seem to give relief. His moulded splint he only places from the waist to below the knee, and uses it at all periods of the disease. He allows the patient to walk about when he can do so, even on crutches, and he uses no local treatment beyond rest. Extension by weights he strongly recommends, as does Mr. Marsh in *St. Bartholomew's Hospital Reports*. He tries to improve the constitution by good food, gives no mercury, recommends the use of iron and cod-liver oil with hypophosphite of lime, and gives a good deal of wine. He opens any abscesses by a valvular incision when it is evident that they will not disperse.

Dr. Anderson thought that local treatment and the use of mercury were too much decried.

Mr. Owen doubted the advisability of using a splint at first, as well as the propriety of exhibiting stimulants in all cases.

Mr. Holthouse thought the diagnosis of hip-joint disease much easier than Mr. Adams did, the pain on movement and pressure being so well marked, and the power of movement so limited; thought that too much wine should not be given; that rest was the great thing; that the best local application was a hot poultice; that a long splint may pain the joint by pressing on it; that extension was the best remedy, and that this was best accomplished by an elastic band; and that dislocation was very uncommon, since shortening generally took place by absorption.

Dr. Drysdale entirely agreed with the propriety of the constitutional treatment, but thought that much wine was calculated to do harm.

Mr. Weeden Cooke avoids all local treatment; has always seen shortening of the limb, and that counter-irritation really means irritation when used over the hip-joint.

The Leamington sewage case has been brought to a point by the granting on Thursday, by Vice-Chancellor Sir W. P. Wood, of a sequestration against the property and effects of the Leamington Local Board of Health for breach of the injunction restraining the board from discharging the sewage of the town into the river Leam so as to occasion a nuisance to the plaintiff, Mr. Heath, who is the owner of property on the banks of the river below the town of Leamington. The case has been before the court upon several occasions during the last two years, and the operation of the injunction has been from time to time postponed in order to give time and opportunity for taking some steps towards filtering or deodorising the sewage before pouring it into the river. The steps taken by the Board having proved unsuccessful, his Honour now granted a sequestration in the terms of that awarded against the Banbury Local Board of Health in January, 1866, observing that if the defendants were unable to discharge the sewage of Leamington into the river without creating a nuisance, they could not be allowed to pour it in at all, as they had no more right to discharge it into the river to the injury of the plaintiff and his property than into his drawing-room.

OBITUARY.

DR. BRINTON, F.R.S., M.D. LOND., F.R.C.P.

It is with sincere regret that we announce the death of Dr. Brinton. After a few days only of apparently serious illness, and after a still shorter confinement to his bed, he died, at the early age of 43. His death, like the recent deaths of Dr. Barlow and Dr. Jeaffreson, has come upon us as a kind of surprise. Always active and energetic in the business of life, and active and energetic in his Professional duties to the last, few persons probably supposed that he had for some considerable time past been labouring under symptoms of visceral disease, and that he knew that his life was held on a precarious tenure. Intimate friends, however, and colleagues have known that for three or four years at least his health has been failing. During the greater part of the year 1864, and we believe even in the year 1863, the debility of ill-health obliged him to avail himself largely of the assistance of his colleagues at St. Thomas's Hospital in the performance of his clinical duties. In November, 1864, he suddenly threw up his appointments of Physician and of Lecturer on Physiology at St. Thomas's, apparently from caprice, and certainly to the inconvenience of the school, but compelled to it, no doubt, by the consciousness of failing strength. From that time onwards, there have been, to those who knew him, obvious indications of progressive deterioration of health. In the course of the last autumn he went for his usual holiday, and returned from it in no degree benefited. Indeed, there was a manifest change for the worse. Still, there was never any cause for the apprehension of immediate danger, until (during the late cold weather) that exacerbation of his malady took place, from the effects of which he died on the 17th of this month. The symptoms under which he laboured during his long period of ill-health, were nausea and sickness, with hepatic enlargement, and an occasional albuminous condition of the urine—symptoms which led to the suspicion of the presence of amyloid degeneration of internal organs.

The announcement of his death will scarcely perhaps excite more surprise than the announcement of the age at which he died; for his name has been so long before the Profession as an ardent worker, so long before the public as a successful Practitioner, that he might well have been supposed to have passed that prime of life, which he had barely attained.

Dr. Brinton has been the very type of a successful man; from the first, all his efforts were directed to the attainment of practice, and his efforts were crowned with complete success. For several years past, while other men of equal ability and of equal skill have been fighting the uphill fight, he has been basking in the sunshine of popularity, and been toiling day and night in the performance of those duties which an overwhelming practice entails. As a Physician he was acute in diagnosis, a great believer in the efficacy of Medical treatment, and gifted with a marked power of acquiring the confidence of those by whom he was consulted. In this respect Nature had been kind to him. His personal appearance was prepossessing. Of middle height, he had an open, handsome countenance, kind manner, and clear, business-like, unembarrassing method of making his inquiries and explorations into his patient's symptoms.

Dr. Brinton, however, although his main object was to become a leader among Practitioners, was something more than a mere Practitioner; he was a man of pre-eminent ability, and of great and varied attainments, a man of science, and a man with great capacity and fondness for work.

He was an excellent linguist, and an admirable draughtsman. As a lecturer he had perhaps scarcely a rival in London; he was (without perhaps having the appearance or manner of a great orator) remarkably fluent, and even eloquent in speech; he had the power of expressing his meaning clearly, and of impressing it on the minds of his hearers by always apt and generally humorous illustrations. His power as a lecturer on physiology was, moreover, greatly aided by his artistic skill, which was largely employed to explain and illustrate his verbal descriptions. It should be added that the matter, as well as the manner, of his lectures were for the most part excellent. His writing was scarcely equal to his oratory. Nevertheless, he wrote with facility and correctness, and often with elegance. But his writing was occasionally disfigured by mannerisms, and his language involved. He was, however, far above the average of writers on Medicine. His scientific taste and aptitude were considerable; he was well read in all those branches of science which were connected with Medicine, and formed his own conclusions from what he read; but as an original investigator he has not left any mark behind him. Nevertheless, he has thrown valuable light on that branch of physiology with which his clinical labours have been chiefly associated — namely, the physiology of digestion.

Somewhere about five-and-twenty years ago Dr. Brinton commenced his career at King's College as a pupil under that distinguished band of teachers whose names have now become classical—Watson and Fergusson, Todd, and Bowman, and Simon. He attained in that school the highest honours it had to bestow; and he became there subsequently Demonstrator of Anatomy and Medical Tutor. While still holding these posts, he obtained, on the secession of Dr. Peacock, the Physicianship to the Royal Free Hospital, which he retained until his appointment, in the year 1860, to the equivalent post at St. Thomas's. About fourteen years ago he first became connected with St. Thomas's Hospital as Lecturer on Forensic Medicine, and in three years afterwards was associated with Mr. Grainger in the Chair of Physiology. He performed the duties of both these lectureships up to the year 1860, at which date he was appointed simultaneously Physician to the Hospital and (owing to Mr. Grainger's retirement) sole Physiological Lecturer. His connexion with the Hospital ceased in 1864. Dr. Brinton's writings are numerous and valuable. His first great work was a translation of Valentin's "Physiology," with notes. In 1857 he published a short work on "Ulcer of the Stomach," which was followed in a couple of years by a larger work (which included the last) on "Diseases of the Stomach." This, which has recently attained the honour of a second edition, was followed erelong by a volume entitled "On Food and Digestion: an Introduction to Dietetics." To these writings in great measure must be traced his success in practice. He wrote also many shorter papers on physiological and other subjects; some contained in Todd's "Cyclopædia of Anatomy and Physiology," some in the *Transactions of the Royal Society*, and many in the *Pathological Transactions*, and in the various periodicals and reviews. He was a lover of the Alps, and generally passed his autumn holiday in pedestrian excursions amongst "Peaks, Passes, and Glaciers."

The enumeration of the above many labours in which Dr. Brinton was engaged, and accomplished in a short life, is a sufficient proof of his possession of the many admirable qualities which in the foregoing memoir have been attributed to him. That he was a perfect man it will be seen that the writer of the memoir by no means pretends to maintain; but that he was a man towering above the average, both by his abilities and by his energy, few will deny. His premature death will be a source of grief, not only to the friends who loved him, and to the many who looked to him for Professional advice and aid, but to all those who admire success and the force of character by which success is attained and secured, or who looked for further scientific work from that hand in the vigour of its maturity which now lies cold and lifeless.

We have only to add that Dr. Brinton was born at Kidderminster in the year 1823, was educated at Birmingham and at King's College, London, and married, in the year 1854, Mary, daughter of Frederick D. Danvers, Esq., of the Duchy of Lancaster, and leaves six children. He died on Thursday, January 17, from chronic disease of the kidneys, followed by uræmia.

WILLIAM MARSDEN, M.D.

(From a Correspondent.)

In our last impression we announced the death of this well-known member of the Profession. The circumstances of his career were so singular, and its results are so remarkable, as to justify a biographical record of more than ordinary consideration. It would, however, be unwise, and perhaps unbecoming, to do more than indicate the genius of his life. Born in Sheffield, in the year 1796, the future Dr. Marsden does not appear to have possessed any hereditary advantages, as they are termed, of birth or fortune; nor, in respect to education, does there seem to have been any course of discipline calculated to develope natural endowments. Whatever gifts Nature bestowed she also nurtured. A mental ordeal, rather than culture, of this kind may not be adapted to make a man to order, as it were, after a particular pattern, just to occupy a given position in life; but it was eminently fitted to educe originality, and to throw a young man on his own resources, to follow the bent of his native inclination and capacity.

Such was young William Marsden, when first he surveyed "the wide, wide world." The scene was London, not with its present seething population—it was a colder place then—London with more than its present Corporate restrictions and Professional exclusiveness. He soon found it desirable—nay, absolutely necessary, to strike out a path for himself. It was then (1827), and under these circumstances, that he conceived the design, happy in itself, unhappy in what he underwent, of founding a Hospital which should place him at more than arm's length of his contemporaries; and, acting on the principle that "discretion is the better part of valour," he established a small institution in Greville-street, Hatton-garden, for the Medical relief of the destitute sick on their own application. But, for obvious reasons, it did alarm the metropolitan Hospitals of those days. Besides, it was founded on a Christian principle, and, indeed, suggested by the well-known fact of seeing a girl destitute and dying on a door-step on a winter's midnight, she having been unsuccessful in obtaining admission to any London Hospital. The principle asserted was simply this, in its various forms of expression: that charity cannot be paid in kind; that what is given with the right hand the left should never know; that subscription to a Hospital has no claim to remuneration by any kind of patronage; that sickness and destitution should be the only "letter of introduction."

What persecution Dr. Marsden suffered for years, and *how it all suddenly ceased*, will be found recorded in the earlier numbers of a contemporary. It never disturbed his equanimity. What the Royal Free Hospital has done for the public, a fact or two will show. In the first year of its existence (1828) the patients relieved numbered only 926; last year (1866) they amounted to 78,406. In the beginning there were no beds; now, there are always 100 in-patients and upwards, 50 additional beds being occupied according to emergencies. It is believed that the whole number of beds will shortly be in constant use. Moreover, the Hospital, standing on an acre of ground, is a freehold, with building accommodation for another 150 patients in a new wing, omitting the space in the central building. The field for clinical observation and instruction will thus be doubled or trebled.

Of the former Physicians and Surgeons a few are, thank God, alive and doing well; but many are dead, and as we write the grave is closing over the remains of one whose memory is most renowned—Dr. Brinton. It remains for those who have hitherto worked, and will still work in the Hospital, to yet further elevate its Professional character and enlarge the sphere of its usefulness.

Many years elapsed, when the founder of this Hospital thought it advisable to establish another, the Cancer Hospital, with which he has since been more especially identified.

Of the man who accomplished these things—under difficulties which may thus be appreciated—a few words will best convey his individuality. With energy not to be subdued, courage indomitable, self-confidence never shaken, he had the gift of a rare capacity for organising men, and making straight for his object; such was his power of will and intellectual character. Full of worldly wisdom, yet with a deep love of nature; ever kind and hospitable; of simple tastes, playful, sincere, conciliatory, and forgiving—such were his social and moral qualities. The whole constituting William Marsden, will, with what he has achieved, in principle and result, pass into history.

DR. GEORGE ANNE MARTIN.

Dr. Martin, of Ventnor, has left a name amongst provincial Physicians. If it be a good life's work to have made Englishmen acquainted with perhaps the best winter health-resort on their coast; to have written not only a readable, but a valuable, book on the climate, natural history, and geology of a district of one's own country; to have created a flourishing watering-place out of an obscure village; to have obtained the confidence of the public, and to have treated a vast number of patients suffering from one of the most fatal diseases with a high measure of success, to have had the friendship and esteem, not only of patients, but of rivals; and, after thirty years' Professional labour, to leave an unblemished reputation as an able, painstaking, conscientious Physician and a Christian gentleman in the highest sense of that much-abused term,—Dr. Martin, of Ventnor, performed that life's work, and the honour which is due to it belongs to his memory. Dr. Martin, after passing the Hall and College, had graduated at the University of Edinburgh, and was about 30 years of age, when, under the advice of Sir James Clark, he settled at Ventnor in 1837 or 1838. At that time, although the advantages of the Undercliff in the treatment of pulmonary disease had been insisted on by Sir James Clark and writers before him, it was little known to the public, and Ventnor was a mere hamlet. For the first ten years Dr. Martin practised amongst the comparatively poor population with but scanty reward, but he worked well and ungrudgingly, and devoted all his spare time to the composition of his work "On the Climate and Natural History of the Undercliff." This was the first full and complete exposition of the sanitary advantages of the English Nice, and the botanical and geological information which it gave added to the author's reputation as a Physician that of a man of science. We believe that to this day it contains the best description extant of the upper and lower green sands, with lists of their fossils. The book was composed amidst the toils of country practice, and affords good evidence of the energy which distinguished its author. In the preface, when apologising for any overlooked repetitions, he wrote, "The hours they have occupied have been stolen principally from those of rest, and many a rising sun has seen me at work which I have considered a duty." The labour, however, brought its reward. Not only did patients, sent by Sir James Clark and other Physicians in extensive practice, flock to Ventnor, but the book and its author aroused public attention, and from all parts of England invalids sought Dr. Martin's care. Now that he is gone the local papers have been full of evidence how generously and ungrudgingly he dispensed his skill to all comers, and how that skill was valued by his patients, and his advice and assistance sought by his Professional brethren. His practice in pulmonary disease was, we believe, especially extensive, and he was distinguished as a practical stethoscopist. In addition to his Professional labours, he was an active and public-spirited citizen of the little town on which he had conferred such benefits. Kind and generous to the poor, he was the centre around which the better society of the place revolved, whilst his reputation attracted to it wealth and rank. He was not a good Physician only; he was an excellent companion, a good talker, with a fund of wit which showed itself in clever repartee, whilst his honesty and kindliness of heart maintained the influence which his Professional talents acquired for him.

For several years before his death Dr. Martin had been more or less an invalid. He had met with one or two serious accidents, in one of which he had fractured his leg, and in another sustained concussion of the spine. He, however, persevered in his professional avocations until December 28, when he was seized with loss of consciousness whilst sitting in his drawing-room. During the following week he rallied once or twice, and hopes were entertained of his recovery, but there was a relapse on January 5, and he died on Monday, January 7. Dr. Martin was in his 60th year. During the last ten years of his life he had been collecting materials for a second edition of his book, and only two days before his fatal illness he was engaged in meteorological observation. He has died in harness after a useful and successful life—a good representative of the English scientific Practitioner of Medicine.

F. D. FLETCHER, M.R.C.S.

We cannot allow time to go by without paying a slight tribute to the memory of the late Mr. F. D. Fletcher, of Liverpool, who died at Southport, on October 18, 1866, after residing in that place, whither he had been compelled to retire from failing strength, exactly twelve months. Born in the south of England, and inheriting from his father a tendency to pulmonary consumption, it was, perhaps, unfortunate that circumstances led to his practising in a town with the unfavourable climatic conditions of Liverpool. The event that mainly determined him in this choice was his election in 1849 to the House-Surgeoncy to the Royal Infirmary of that place, previously to which he had been House-Surgeon to University College Hospital, where he had received his Professional education. Though the area of his work did not extend much beyond Liverpool, yet his labours for the good of others were so great, and performed under such trying circumstances, as to demand notice. After leaving the Royal Infirmary for the purpose of commencing private practice, he was appointed Lecturer on Anatomy and Physiology at the Medical school attached to that institution. In this capacity he was highly esteemed both by his class and

colleagues. The lectures were not only delivered well and with a clearness and fluency quite characteristic of him, but were also illustrated by many drawings, both in chalk and water-colours, from his own pencil. This circumstance of his spending much time in the production of anatomical drawings in colours to supplement his descriptions is but an illustration of the thoroughness with which everything that he undertook was carried out. Another feature in his character worth mentioning was a conscientious regard for the value of time, and especially for the small intervals between the more pressing engagements of the day, which were not allowed to escape unused. It was only by such a regard that he was able to compress into his short life—for he was but thirty-nine when he died—the amount of work that he did. Thus, in addition to his lectureship and private practice, he was Honorary Surgeon to the dispensaries, secretary to the Medical Society, and one of the editors of, and a main contributor to, the *Liverpool Medico-Chirurgical Journal*. This journal, which lived but two years, contained many of his papers, and those on the "Medical History of Liverpool" are especially well written, and afford good examples of his style. Subsequently he was appointed Surgeon to the Workhouse Hospital and to the Everton Institution for Infectious Diseases. It was in the former of these capacities that the marked excellency, both of his Professional and private qualities, especially manifested itself. His kindly sympathy for the poor patients under his care endeared him to them as much as his thorough and conscientious attention to his duties raised his character in public estimation. In addition to these numerous public and private labours, he contributed for some years the Liverpool correspondence to the *Medical Times and Gazette*, and none who have read his letters, full of valuable information, can have failed to remark how well acquainted their author had made himself with all that was newest and best in Medicine and its collateral subjects. When we say that, over and above all that we have mentioned, Mr. Fletcher, while never neglecting a single Professional engagement, found time for such works as presiding over a Christian association, superintending Bible-classes, preaching in the open air, attending mothers' meetings, giving lectures to the boys on board the *Conway*, etc., we shall have said enough to show that his life, though short, was well filled up. But that which places the greatness—we had almost said the heroism—of these labours in their strongest light, is a consideration of the bodily circumstances under which they were performed. Some years before his death he was attacked with hæmoptysis, and it was under the sense of weariness induced by failing health, and with that feeling of lassitude that always tempts, and nearly always compels, the consumptive invalid to rest, that he struggled on, forcing himself to the performance of these duties until complete prostration obliged him to accept an unwelcome repose. In November, 1864, in the hope of alleviating, if not of arresting, his symptoms, he undertook a voyage to Australia as Surgeon on board the *Royal Standard*, one of the White Star line of ships. His "Notes of a Voyage to Australia" were published in our last volume. On his return to Liverpool, however, at the end of June in the following year, the disease had so far advanced that he was quite unable to resume his duties at the Workhouse, and therefore resigned, and a few months afterwards retired to Southport, which he never left. For months before his death he was unable to speak above a whisper. Though unwilling to encroach on space by further details, we cannot refrain from mentioning one little incident which came under our notice a few days since, and which strikingly manifests the truly Christian character of his benevolence; it is that of a poor woman permanently incapacitated by a chronic ailment, who regularly for two years received 1s. 6d. a week from Mr. Fletcher, who (as well as being a Nonconformist while she was a member of the Established Church) we have good reason to believe had to make a real sacrifice in order to do this good deed. Such an act speaks for itself, and its author will long be remembered for it, and many like it, in the town where he lived and laboured won for him a high position among his brethren. At the Middlesex Hospital he distinguished himself by carrying off all the prizes of his year, and at the Plymouth Institution he was regarded as a most promising lecturer, whilst he was much esteemed by all who had the pleasure of his acquaintance

VINCENT E. NOEL, M.R.C.S.

We are sorry to hear of the decease of a promising young Surgeon, of Plymouth, Vincent E. Noel, M.R.C.S., aged twenty-three years, who died on the 6th ult. after a few days' illness from a severe attack of scarlet fever. By his death the Medical Profession have lost a most valuable member, and had his life been spared his energies and abilities would have

CHARLES EMELIUS ROSS, A.M., M.B. Dub., F.R.C.S.I., Etc.

At Castletown, County Kilkenny, on the 8th inst., Charles Emelius Ross, A.M., M.B. Dub., F.R.C.S.I., etc., departed this life sincerely and deeply regretted by all who knew him. Though a man of great natural talent, and Professionally well qualified, his name or fame did not extend much beyond the limits of the neighbourhood in which he practised; this was no doubt owing to his modest and retiring disposition, for he was a cool and clever Surgeon, and as a Physician his practice was most successful. In the treatment of the typhus fever so prevalent amongst the poorer classes in Ireland, his skill was especially manifest, and his prognosis as to the issue of the attack was almost prophetic.

But far beyond his skill as a Physician was his pure and upright life. During the thirty years that he laboured amongst the poor of his districts, he was never known to refuse a visit or turn away an applicant; and no one but Him who estimates in its full value the cup of cold water, can tell the number of those that received, in addition to his kind Professional attendance, those necessaries of more value than medicines to the poor. During a long and useful life, he was never known to take a fee where he thought the payment pressed; and he has been known in many instances to have returned with thoughtful delicacy the guinea to the child which the poor lady mother had just handed him.

As an artist in oil and water colours he had attained great proficiency, but except his "Illustrations of the Mechanism of Parturition," published some years ago, he has contributed nothing in that way to Medical science. The illness which caused his death was of only a few days' duration; a week before he was seized with colicy pains, which did not appear to indicate any danger until the day previous to his death, when symptoms of inflammation set in, after which he rapidly sank.

PROFESSOR BRESLAU, OF ZURICH.

Though not so well known in England as some other German Physicians, Professor Breslau had a high reputation on the Continent as one of the most scientific obstetricians of the age, and his early death, when only 43 years of age, and in the height of his usefulness, is a subject of universal regret. The circumstances of his illness also add to the melancholy interest with which the news of his death has been received. In the middle of last October he suffered from an inflamed pustule on the index finger of his right hand, believed to be the result of inoculation while examining a patient. A month later he called on a friend, showed the finger which he believed to be well again, and said it might have been a bad case both for finger and hand. He continued in good health till December 20, when he complained of a feverish catarrh, but went about doing his work till the 23rd; but on the 24th he had a rigor, and acute pleuritis with pneumonia followed. On the 27th the poisoned finger again became red, reopened, and the whole forearm was much swollen. Pyæmic fever went on, and on the last day of the old year Breslau died. Besides deposits in lungs and pleura, a large pyæmic abscess was found in the liver. It may be worthy of inquiry whether, in the whole history of pyæmia, a case is recorded where so long a period elapsed between the primary infection and the apparent healing of the sore, and the secondary effects of blood-poisoning. Breslau had been remarkably successful in the removal of large fibroid growths in the uterus; and, after the successful performance of ovariotomy, at Zurich, in 1865, on one of his patients by Mr. Spencer Wells, he himself operated in three cases, one terminating successfully.

Paris Faculty of Medicine.—The Paris Faculty having met to choose three names for presentation to the Minister as candidates for the chair of Surgical Pathology, vacated by the nomination of Professor Gosselin to that of the Surgical Clinic, sent up those of M.M. Broca, Follin, and Verneuil, in the order named.

NEW INVENTIONS.

THE SAUCE.

This compound is, we think, a decided improvement on our old friend, the Worcestershire. It is not so hot, and it seems to have more of the chalot flavour. It is advertised as prepared from a recipe by the late Dr. Southwood Smith. If so, that learned Physician has left good evidence that he was as well acquainted with the *jucunde* as with the other required elements in Galenical composition. We are not aware that *the* sauce is recommended for any particular medicinal virtues, but let any reader prescribe a few drops of it in the next cup of beef-tea he orders for a poor patient, "who has no appetite, and can't take even slops," and we will venture to affirm that he will thenceforth give it a place amongst his valued remedial agents. Happy the patient, and prosperous the Physician,

Whose sauce is a physic;
Whose physic a sauce is!

BEVAN AND FLEMING'S PATENT THERMOTERION.

This is a very useful contrivance, as well as a handsome ornament for a sick-room or nursery. Its use is to keep food warm without lamp, fire, or light of any kind, and without any expense after the first cost of the apparatus. We have tested its value in the sick-room, and we can assert that it answers completely. We have found that it will keep beef-tea or other liquid food hot for eight hours, and warm for several hours longer. The apparatus has the appearance of a handsomely japanned round canister. In its centre is a space, where is deposited the food in a glass vessel expressly provided for the purpose. This is covered by a lid. Outside and surrounding this space is a chamber for holding hot water. This, when the apparatus is used, must be completely filled with boiling water once in ten or twelve hours. The water is introduced through a special opening by means of a funnel, and the aperture is then closed by a tightly-fitting cap. Surrounding the hot-water chamber is another space containing air, which insulates the water, and prevents dissipation or radiation of its heat. As we have already said, we have tried the thermoterion, and we can strongly recommend it as a valuable appliance in nursing the sick and children. It must, we think, in time supersede all contrivances having a similar use which necessitate combustion. The patentees state that the following temperatures are maintained in the apparatus:—First hour, 186°; second, 171°; third, 159°; fourth, 149°; fifth, 141°; sixth, 133°; seventh, 126°; eighth, 119°; ninth, 113°; tenth, 108°.

NEW BOOKS, WITH SHORT CRITIQUES.

Water Supply of London by Means of Natural Filtration of the Waters of the River Thames. By Telford MacNeill. London: Stanford. Pamphlet.

*** A proposal to supply London with Thames water pumped up to the level of the Bagshot Sands, filtered through these, re-collected along with the rainfall of the Godalming district, transmitted to a large reservoir at Norwood, and thence over London.

Dr. Beaney's Vindication. Melbourne: Stephens. Pamphlet.

*** All the pros and cons of this case are now well known to our readers, so that we may be excused from entering into the subject again. Unfortunately, it does not seem that the style which appears to be the favourite one when one Australian Medical man is opposing another has been abandoned in this instance.

Representative Reform. A Letter to Lord Derby. By Edward W. Cox, Recorder of Helston. London: *Law Times* Office. Pamphlet.

*** Our mission is not political. Suffice it to say that the letter advocates the municipal and the scot-and-lot franchises as the best foundation of a new Reform Bill.

On the Physiological Action of the Uterus in Parturition. By Arthur Scott Donkin, M.D. Edin. Newcastle-on-Tyne. Reprint. 1863.

*** A very good paper on the action of the several portions of the uterus with relation to each other. Well worth perusal.

Report of the Metropolitan Board of Works. 1865-66.

*** Contains a vast amount of information as to the sewerage and rebuilding of London, the Bills passed by Parliament for these or similar purposes, the progress of the Thames Embankment, the Fire Brigade, &c.

Bulletin de l'Académie Royale de Médecine de Belgique. September and October, 1866. Bruxelles: Manceaux.
Bulletin of the Royal Belgian Academy of Medicine.

*** The present number of this well-known periodical is almost wholly occupied with the subject of cholera, on which there are five papers The others, which are also very good in their way, are on "Double Pelvic Viscera" and "Animal Vaccination."

Histological Demonstrations, for the Use of the Medical and Veterinary Professions. The Substance of Lectures delivered by George Harley, M.D., F.R.S., University College. Edited by George T. Brown, M.R.C.V.S. London: Longmans. Pp. 248.

*** This neat little volume will prove a great acquisition for the class of students it is intended to suit. It is most beautifully and fully illustrated, and contains descriptions of the structure both of the normal and morbid tissues encountered in the human body, given in very clear and concise language.

The Harveian Oration, 1866. By George E. Paget, M.D. Cantab. Cambridge: Deighton, Bell, and Co. Pp. 449.

*** Worthy of speaker and hearers. Points out and illustrates the mode by which Medicine has been advanced—pure experimentation, as in the case of Harvey—pure experience, as with Sydenham—and the happy application of some previously known fact, as with Jenner and small-pox. Alludes also to recent advances in practice, especially in the management of the insane.

On the Origin of Pyæmia. By Alfred Baker, Esq., Birmingham. Pamphlet. Reprint.

*** Discusses the causation of pyæmia in a very clear style, taking up the theories of Arnott as to its phlebitic origin; its origin in absorption; by thrombosis, embolism, and by parasitic beings in succession.

The Modern Treatment of Pneumonia in Young Children. By G. Stevenson Smith, L.R.C.S.E., etc. Pamphlet. Reprint.

*** Gives the statistics of this disease as treated in the Children's Hospital, Edinburgh. Strongly opposed to bleeding and depressing treatment.

Pavilion Asylums (with a Ground Plan). By C. Lockhart Robertson, M.D. Cantab., Medical Superintendent of the Sussex Lunatic Asylum. Pamphlet. Reprint.

*** Dr. Robertson thinks the pavilion system, now so generally applied to Hospitals, may be employed in the erection of asylums, and gives a plan illustrative of his views.

Catalogue of Obstetrical Instruments exhibited at the Conversazione of the Obstetrical Society, held March 28, 1866. Illustrated. London: Longmans. Pp. 225.

*** A very valuable work, beautifully illustrated by figures of the most important obstetrical instruments, made according to the plans of different inventors. Highly creditable to all concerned in its production.

On Collegiate Education in Relation to the Intercommunity of the Sciences. By David Neilson, M.D. London: Simpkin and Co. Pamphlet.

*** The opening address at Queen's College, Birmingham, session 1866-67. Shows well how one branch of science opens up and explains the others.

The Distinctive Characters of the Principal British Natural Orders of Plants. By William A. Tilden, F.C.S., etc. London: Author.

*** Tables showing how one order of plants may be distinguished from another. Should have been rather more comprehensive.

The Elements: an Investigation of the Forces which Determine the Position and Movements of the Ocean and the Atmosphere. By William Leighton Jordan. Vol. II. London: Longmans and Co.

*** Mr. Jordan continues by applying his doctrine of orbital motion on the part of the earth, the solar system, and the stars to the tides, having formerly dealt with the winds. A very curious speculation.

Matter—Its Ministry to Life in Health and Disease; and Earth—As the Natural Link between Organic and Inorganic Matter. By Thomas Hawkesley, M.D., etc. London: John Churchill and Sons. Pp. 72.

*** Dr. Hawkesley shows the important influence of organic matter on the origin and course of disease, insists on the great value of earth as a purifying agent, praises Moule's earth-closet, and would have it made penal to allow any organic matters to escape into drains. Well worth reading.

MEDICAL NEWS.

Royal College of Surgeons of England.—The following gentlemen, having undergone the necessary Examinations for the Diploma, were admitted members of the College at a meeting of the Court of Examiners on January 22:—

Edward Sainthill Pearse, Barnes (Guy's Hospital); William Betts Giles, Bonchurch, Isle of Wight (Guy's Hospital); William Augustus Parsons, Reading (Birmingham); Thomas Edward Scobell, Plymouth (St. Bartholomew's Hospital); William Turner, Reading (Guy's Hospital); Alfred Stileman Bostock, Horsham (St. Bartholomew's Hospital); Edwin James Fairland, Gloster-street, Queen's-square (Guy's Hospital); William Knighton Stephens, Ilfracombe (St. George's Hospital); John Sanderson Wyman, Alcester, Warwickshire (Birmingham); Charles Donington Batt, Witney, Oxon (St. Bartholomew's Hospital); Roger Portington Goodworth, Hatfield, near Doncaster (London); John Tremearne, St. Ives, Cornwall (St. Bartholomew's Hospital); George Ernest Martindale, Portsoy, Aberdeen (Guy's Hospital); Shirley Woolmer Arundell, Gower-street (Birmingham); Eli James Barrick, M.D. Victoria College, Toronto, and L.R.C.P. Lond., Toronto; Frederick Henry Moses, Denbigh (St. Bartholomew's Hospital); Joseph Arthur Williams, M.D. Victoria College, Toronto, and L.R.C.P. Lond., Toronto; Rowland Heathcote, Manchester; Christopher Jordison, South Ockendon, Essex (Guy's Hospital); Henry Percy Banks, Holt, Norfolk (Guy's Hospital); Robert Shingleton Smith, L.S.A., Charlton Horethorne, Somerset (King's College Hospital); and John Aaron James Timmins, Carmarthen (St. Bartholomew's Hospital).

The following gentlemen were admitted members of the College on January 23:—

Thomas Birch Dyer, L.R.C.P. and L.S.A., Forest-hill (Guy's Hospital); Campbell Orme, Avenue-road, Regent's-park (St. Bartholomew's Hospital); George Sherwin Madeley, Manchester (St. Bartholomew's Hospital); Titus Cummins Crooker M.D. Victoria College, Toronto, Halton, Canada West; Geo. Alfred Thomas, Aberdare, South Wales (St. Bartholomew's

Hospital); George Longbotham, L.S.A., Seaton Carew, near Stockton-on-Tees (Newcastle); John Cascaden, M.D. University of Toronto, St. Thomas's, Canada West; Alfred Lloyd Owen, Dublin (Dublin); Washington Lee, Brisbane, Australia (Westminster Hospital); Wm. Edward Phillips, Guernsey (St. Bartholomew's Hospital); Alfred Thomas Roworth, Holborn-hill (St. Bartholomew's Hospital); John Bott, Bury, Lancashire (Manchester); William Stanger, Nottingham (Guy's Hospital); Frederick Thomas Coates, Euston-road (University College Hospital); William Tuberville Buckle, L.R.C.P. Lond., New Ormond-street (King's College Hospital); William Cooke Hewby, Ripon, Yorkshire (St. George's Hospital); George Joseph Cooper, Lee, Kent (University College Hospital); John Henry Croft, L.S.A., Bury St. Edmunds (Guy's Hospital); George Tobin, Preston, Lancashire (St. Bartholomew's Hospital); John Williams Morris, Llanelly, Carmarthen (Guy's Hospital); George Clements Searle, Chadlington, Oxon. (St. George's Hospital); and Matthew Wardell Chambers, Durham (Westminster Hospital).

Examinations in Arts.—The following are the names of the successful candidates at the recent preliminary examinations for the Fellowship and Membership of the Royal College of Surgeons of England. For the former qualification there were eighteen candidates, of which number sixteen passed—viz.:

C. J. McI. Acheson, R. Argles, J. D. Bush, D. L. Beckingsale, A. Cooper, A. H. G. Doran, W. Furner, C. K. Hitchcock, N. A. R. Harrison, T. Jago, W. J. Page, E. R. Rowland, T. S. Townsend, H. Thompson, H. G. Wigg, and M. A. Wood.

For Membership there were 114, of which number twenty-one failed to acquit themselves to the satisfaction of the Court. The following passed:—

F. Reid, W. Marriott, G. W. Parker, R. T. Morris, A. de F. Reid, J. Tomlins, T. Nixon, T. Mayne, C. Randolph, F. H. Maberley, H. North, C. S. Ticehurst, J. G. U. West, T. F. K. Underwood, F. C. Pearce, R. Wade, H. Reeve, G. A. C. V. Smith, W. B. Wall, C. E. Watson, W. F. Theed, J. L. Hemming, C. J. Wills, A. L. Salmon, A. O. Wilcox, W. H. B Lendall, C. Wood, W. D. Locke, C. J. W. Stocker, H. W. Davies, C. A. Fox, P. W. Hughes, R. Z. Pitts, J. Marshall, A. E. Hansom, W. Makin, C. E. Whitington, F. J. Beresford, O. R. B. Barnes, J. Britten, W. A. Budd, F. W. Butler, J. Clare, E. F. Cooper, T. E. Buckingham, F. J. Davies, E. H. Cable, C. E. Coates, J. A. L. Foulkes, H. Dustan, J. R. Essex, W. E. Farnfield, G. A. Davies, M. Ford, J. W. Daniel, C. Feltham, F. H. Marsland, M. Gillott, A. W. Emms, S. Gill, G. Davies, J. D. Harris, C. L. M. Ircdell, C. T. Jones, G. R. Haward, C. James, H. James, E. Knowles, C. A. Lloyd, J. A. Kite, C. H. Lowe, E. Morris, E. A. Lewis, O. T. Jones, E. J. L. Leslie, R. C. Langworthy, W. Markham, J. Marshall, R. R. Llewellyn, H. W. Kitson, T. H. Peat, H. R. Ker, S. R. Philipps, W. G. G Parker, G. A. Phillips, J. J. Johnson, C. C. Miles, T. W. Parry, F. J. Maisey, D. Duke, F. C. Osborn, M. R. Draper, A. A. Taylor, G. G. Bell, and A. Ritchie.

The examinations, which were conducted by the staff of the Royal College of Preceptors, extended to three days.

Naval Surgeons.—The following Assistant-Surgeons in the Royal Navy passed their Examinations at the Royal College of Surgeons, on the 22nd inst., for Full Surgeons in that department of the public service:—

Richard Carr McClement, of H.M.S. *Wellesley*, Chatham, Diploma of Membership of the College dated June 26, 1857; William Labdon Powell, Member February 3, 1860; Belgrave Nimmis, M.D. St. Andrews, of H.M.S. *Fisgard*, Woolwich. Member April 18, 1861; and William Frederick Ryall, of H.M.S. *Princess Royal*, China, Member May 2, 1861.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Day, W. H., M.D., has been appointed an additional Visiting Physician to the Infirmary for Consumption and Diseases of the Chest, Margaret-street, Cavendish-square.

Moore, J. Daniel, M.D., F.L.S., has been appointed Assistant-Surgeon to the 24th Lancashire Artillery Volunteers.

Pearse, G. E. L., M.R.C.S.E., has been appointed Demonstrator of Anatomy at the Westminster Hospital.

Warden, Dr. Charles, has been appointed Honorary Surgeon to the Birmingham Lying-in Hospital and Dispensary for Diseases of Women and Children.

BIRTHS.

Armstrong.—On January 13, at Peckham House, Peckham, the wife of Dr. Armstrong, of a daughter.

Fay.—On January 20, at Thaxted, Essex, the wife of J. H. Fay, M.R.C.S.E., of a daughter.

Helm.—On January 17, at Rugby, the wife of G. F. Helm, F.R.C.S., of a son, stillborn.

Long.—On January 21, at Wells-next-the-Sea, Norfolk, the wife of F. Long, L.R.C.P., of a daughter.

Mackenzie.—On January 22, at 13, Weymouth-street, W., the wife of Dr. Morell Mackenzie, of a son.

Oxley.—On January 16, at 49, Rodney-street, Liverpool, the wife of M. G. B. Oxley, M.D., of a son.

Peacock.—On December 22, at Trinidad, the wife of G. Peacock, Esq., M.D., Staff Surgeon, of a daughter.

Yeld.—On January 22, at 19, Bridge-street, Sunderland, the wife of Henry John Yeld, M.D., of a daughter.

MARRIAGES.

Brandis—Hasse.—On January 11, at Bonn, Rhenish Prussia, Dr. D. Brandis, of Calcutta, to Ratchen, only daughter of the late Dr. F. R. Hasse, Professor of Church History in the University of Bonn.

Chester—Leach.—On December 20, at Barrackpore, India, A. Chester, F.R.C.S., Royal Horse Artillery, Lucknow, to Charlotte Elizabeth, youngest daughter of the Rev. G. Leach, Vicar of Stackpole, Elidor-cum-St. Petrox, Pembrokeshire.

Sissons—Sissons.—On January 16, at the Parish Church, Sculcoates, Hull, by the Rev. Charles Walsham, Vicar, William Harling Sissons, Esq., Surgeon, of Barton-upon-Humber, Lincolnshire, to Jane Thompson, second daughter of Thos. Sissons, Jun., Esq., of Grosvenor-terrace, Hull.

Tenison—Testelin.—On January 15, at St. Mark's, Notting-hill, E. T. R. Tenison, M.D., late R.N., of No. 9, Keith-terrace, Shepherd's-bush, to Frances Sarah, only daughter of the late M. Testelin, of Calcutta.

DEATHS.

Brinton, W. W., M.D., at 24, Brook-street, Hanover-square, on January 17, aged 43.

Jennings, T., M.R.C.S.E., late of Denbigh-street, Pimlico, on January 17, aged 54.

Lockhart, W., M.D., R.N., of H.M.S. *Helicon*, at Queenstown, on January 17.

Piper, L. A., M.D., F.R.C.S.E., at No. 4, Sussex-villas, Richmond, Surrey (late of the Provisional Battalion, Chatham, and the Military Prison, Fort Clarence), on January 19, aged 81.

VACANCIES.

Birmingham Lying-in Hospital.—A Resident Surgeon.

Durham County Lunatic Asylum.—Assistant Medical Officer.

Farringdon General Dispensary.—Physician.

St. Pancras and Northern Dispensary.—Resident Medical Officer.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Haverfordwest Union.—Mr. Joseph D. Phillips has resigned the Haverfordwest District; area 40,059; population 12,305; salary £69 per annum. Also the Workhouse; salary £15 per annum.

Tenbury Union.—The First District is vacant; area 16,341; population 4320; salary £55 per annum.

APPOINTMENTS.

Farnham Union.—William Davies, M.R.C.S.E., L.S.A., to the Frimley District.

Macclesfield Union.—James Brierley Wood, M.R.C.S.E., L.S.A., for Macclesfield District and the Workhouse.

Newton Abbot Union.—Edward B. Hammond, M.R.C.S.E., L.S.A., to the Eleventh District.

Selby Union.—James W. Caley, L.R.C.P. Edin., M.R.C.S.E., to Townships of North Duffield and Skipwith.

South Molton Union.—George Wight, M.R.C.S. Edin., L.M., to the Eleventh District.

University of Cambridge.—The Professor of Anatomy gives notice, that his Course of Lectures will be continued on Tuesday, January 29, and on the succeeding Tuesdays, Thursdays, and Saturdays during the Term. There will be Anatomical Demonstrations and Examinations on Mondays, Wednesdays, and Fridays, commencing January 30, also Microscopical Demonstrations on alternate Mondays, at 7 p.m., commencing February 4.

The Examiners for the Radcliffe Travelling Fellowship (Henry W. Acland, M.D., George Rolleston, M.D., and Sir Benjamin C. Brodie) have given notice that the next examination will commence on February 5.

St. George's Hospital is shortly to be enlarged, the Marquis of Westminster having given a plot of ground, the site of part of Tattersall's stables and betting rooms, for that purpose.

At a General Meeting of the Ryde Commissioners, holden at the Town Hall, Ryde, on Tuesday, the 13th day of November, 1866, the following resolution was unanimously carried:—"That the thanks of this Board be tendered to Benjamin Barrow, Esq., F.R.C.S., England, for the skill and energy with which he fulfilled the duties of Officer of Health for the town of Ryde during the recent alarm of cholera." The foregoing was ornamentally engrossed on vellum and presented to Mr. Barrow.

Yellow Fever.—The Royal Mail Company's steamship, *La Plata*, which arrived at Southampton last week, had sixty-one cases of this fearful epidemic on board, of which number twenty-three had proved fatal, including the Surgeon of the ship, Dr. David McCheyne Young (L.R.C.P. and L.R.C.S. Ed., 1860). This ship brought, among other news, an account of the trial of Staff Assistant-Surgeon Morris, for "cruelly and wantonly shooting to death," and causing other men to be shot, for their shares in the Jamaica riots. Owing to the illness of the prisoner, after eight days' trial the meeting was adjourned.

PROFESSOR HUXLEY, F.R.S.—At the conclusion of a lecture delivered by this gentleman at the Mechanics' Institution on Tuesday last, a suggestion made by one of his audience, to open a subscription for distressed workmen, was at once adopted, a skull forming the cash-box, into which the generous Professor dropped a sovereign, which was supplemented by sums amounting to 4*l.* 4s. 9d., mostly in coppers.

MEDICAL CHARITIES.—The funds of the Colchester Hospital, and of the Essex Idiot Asylum, have each been augmented by legacies of 100*l.*, under the will of the late Wm. Fisher Hobbes, Esq., of Mark's Hall, Essex. Miss Sarah Brown, of Highbury, has also left 50*l.* to the Idiot Asylum, Redhill. Both these benevolent individuals have left large sums to other institutions not strictly Medical.

CORONERS' SALARIES. — At the Middlesex January Quarter Sessions, on the 17th inst., the Clerk of the Peace read a document from the Secretary of State for the Home Department, fixing the salary of Dr. Lankester, coroner for Central Middlesex, at 1,700*l.* per annum, and that of Mr. Bedford, coroner for Westminster, at 560*l.* per annum.

A MEETING of the students of the London Hospital, to which the members of the staff were invited, was held on Wednesday afternoon to consider the propriety of presenting Mr. Copland with a tangible acknowledgment of the general feeling with regard to his heroic conduct in saving life on the 15th inst. The meeting was well attended by the members of the staff and the students, Dr. Davies kindly acting as President. The unanimous opinion was that such an act ought not to be allowed to pass unnoticed, and it was agreed to appoint a committee to consult with Mr. Copland as to the particular form the acknowledgment should take. The general opinion seemed to incline to a Ross microscope. From the handsome way in which a subscription list was at once started, there can be little doubt that funds will not be wanted for a valuable present.

NEW FREEZING APPARATUS.—Mr. Warner, of Fore-street, has just invented an improved freezing apparatus, the result of some experiments made at the suggestion of Mr. Gay. Mr. Warner is able to freeze large extents of skin rapidly with any ether. He employs a small pair of bellows worked by the foot, and causes a strong current of air to play on the skin at the same time as the ether spray, so as to produce rapid evaporation. This he does by means of two parallel glass tubes placed one above the other, the upper transmitting the air current. He can also modify the amount of ether used at will.

CATTLE PLAGUE INQUIRY.—Statistical Office of the Veterinary Department, Privy Council Office, January 24, 1867.—Eleven attacks of cattle plague are reported to have occurred in Great Britain during the week ending January 19, being an increase of eight on the previous return. No fresh outbreaks of the disease took place in this or in the two preceding weeks. Two healthy cattle were slaughtered from having been in contact with infected animals. The attacks reported are all from one farm in the petty sessional division of South Holderness (Yorkshire, East Riding), and include one cow and ten calves; eight of these animals were killed by order of the inspector, and three died. Of the 70 cattle on this farm at the date of the outbreak there are now not any remaining. The number of animals attacked since the commencement is 253,831, being one in every 19 of the estimated ordinary stock of cattle; and out of every 1000 attacks, whose results have been reported, 862 animals perished. 52,623 cattle in the aggregate have been slaughtered healthy to prevent the spread of the disease.—WILLIAM CLODE.

THE CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST.—At a recent meeting of the governors of this charity, Mr. J. D. Allcroft observed that the expenditure of the institution for drugs during, we suppose, the past year had been £925. He suggested that in future a plan, which had been elsewhere tried with success, should be had recourse to by way of diminishing the sum thus expended. This was that each patient should pay a penny when the medicine was reissued. We presume that the gentleman's suggestion applies only to out-patients, as the plan would scarcely be applicable to in-patients. No doubt the scheme would, to a certain extent, do away with the wasting medicines now so common; but would it not at the same time, to a certain extent, assimilate them to those open surgeries where advice is advertised gratis? Further, we should like to know the quantity and quality of the drugs prescribed by the Medical officers of the Institution.

MIDDLESEX COUNTY LUNATIC ASYLUMS.—At a meeting of Middlesex magistrates last week, it was stated as regarded Hanwell Lunatic Asylum, the cost to the county was £16,944 17s. 6d., to parishes in Middlesex £37,172 13s. 5d., making a total of £54,117 10s. 11d. With respect to Colney Hatch Lunatic Asylum, the cost to the county was £34,693 7s. 1d., to parishes in the county of Middlesex £45,290 4s. 5d., making a total of £79,983 11s. 6d.; other asylums for county patients, £293 7s. 1d.—making a grand total for the charge to the county for lunatics for the past year of £134,394 9s. 6d., being an increase over the charge of the preceding year of £1566 16s. 1d. The number of patients in Hanwell on December 31 last was 1723—viz, 645 males and 1078 females. The number of patients in Colney Hatch Asylum on the same day was 2036—viz., 826 males and 1210 females. The cost per head of lunatics in the asylums had been within 10s. per week, while in private licensed houses it was 14s. and upwards.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—The annual general meeting of this Society was held on Monday, January 7, when the following officers and councillors were elected for the year 1867:—*President:* G. A. Ibbetson, Esq. *Vice-Presidents:* James Parkinson, Esq.; H. J. Barrett, Esq.; R. Hepburn, Esq.; R. H. Moore, Esq.; C. Bromley, Esq.; E. Parkinson, Esq. *Treasurer:* Arnold Rogers, Esq. *Librarian:* J. B. Fletcher, Esq. *Hon. Secretaries:* J. Drew, Esq.; Charles James Fox, Esq. *Hon. Foreign Secretary:* Charles Rogers, Esq. *Council:* R. T. Hulme, Esq.; S. Cartwright, Esq.; J. Saunders, Esq.; W. A. Harrison, Esq.; John Tomes, Esq.; A. Coleman, Esq.; A. J. Woodhouse, Esq.; G. Greyson, Esq.; C. Vasey, Esq.; S. L. Rymer, Esq.; T. R. M. English, Esq.; J. King, Esq.; N. King, Esq.; C. D. Roberts, Esq.; R. Ransom, Esq. It having been on a former occasion proposed to adopt the title of "Fellow," it was finally and almost unanimously agreed at this meeting to retain the title of "Member" of the Society. Mr. Charles James Fox exhibited and read a paper upon "A New Form of Dental Operating Chair," constructed under his direction, especially adapted for the use of Hospitals and Dispensaries, inasmuch as it combined convenience of movement with simplicity, solidity, and cheapness. The retiring President, W. A. N. Cattlin, Esq., having delivered an excellent address, the Society adjourned to February 4.

EXAMINATIONS. — Great alterations have just taken place, not only in the mode of conducting the examinations for membership of the Royal College of Surgeons, but in the style of questions, as will be seen by the subjoined, which were submitted to the candidates at their recent primary or Anatomical and Physiological examination, and at the subsequent oral examination the knowledge of the pupils was tested in microscopic matters. At the pass or Pathological and Surgical examination, in addition to the usual written and oral tests, a great number of morbid preparations were submitted to the candidates, and moreover they had to apply to living subjects the various splints and bandages for dislocations and fractures, in which it is stated they exhibited a very fair amount of knowledge. The following were the Anatomical and Physiological questions:—1. Describe the structure of a single lobule of the liver. Enumerate the constituents of bile; and state the effects it has in digestion. 2. Describe the structure, attachments, and uses of the anterior annular ligament of the wrist-joint. Enumerate the parts passing under it, and mention their relative position. 3. Into what regions is the abdomen divided? State the boundaries of each region, and the structures which are situated within it. 4. Describe the semilunar cartilages of the knee-joint; their structure, form, attachments, uses, and mode of action. 5. Describe the structure and uses of the soft palate and uvula; and mention the means by which their funtions are effected. 6. Describe the arrangement of the muscular coat of the various parts of the alimentary canal, from the commencement of the œsophagus to the anus. Mention the purposes of its varying abundance, and different arrangement at different parts of the canal. The following were the questions on Pathology, Surgical Anatomy, and Surgery, of Candidates for the diploma of Member of the College:—1. What would be the probable symptoms resulting from fracture of the sixth cervical vertebra, accompanied by lesion of the corresponding portion of the spinal cord? What would be the proper treatment in such a case? 2. Describe an ulcer of the leg termed "varicose;" mention its usual site and its causes; explain how the ulceration is induced, and the reasons

for the treatment you may adopt for its cure. 3. With what form of fracture is dislocation of both the bones of the fore-arm backwards at the elbow liable to be confounded? How are these injuries to be distinguished? and how is each to be treated? 4. Describe iritis; the causes, appearances, symptoms, varieties, morbid conditions, and the treatment in different circumstances. 5. What are the natural processes by which incised, lacerated, and severely contused wounds of the scalp are repaired? State the Surgical treatment of each kind of wound. 6. What are the causes producing abscess of the lower part of the rectum? what are its consequences? and what treatment is to be adopted? It was stated by the President that if four out of the six questions were answered very well, it would be considered satisfactory.

Small-pox in Islington.—Extract from Dr. Ballard's Report for December on the Sanitary Condition of St. Mary, Islington:—"I have before pointed out how much—in common with other Health Officers—I have to contend against in combating this disease, in consequence of the neglect of vaccination among the poor, and also of re-vaccination, as well as of the lack of the necessary appliances for destroying the virus as it attaches itself to persons' clothing, bedding, etc. To disinfect houses where the contents of a room and the clothing, bedding, etc., of the occupants are reeking with infection, you cannot fail to perceive is merely labour thrown away. I meet with a similar obstacle in respect to scarlet fever and typhus. I beg most respectfully, but earnestly, to submit this subject to your consideration. Cholera has happily left us, but its place has been occupied by diseases more decidedly contagious and equally destructive. During the four months of July, August, September, and October we lost 65 of our population from cholera; during November and December we have lost 67 from small-pox, scarlatina, and fever. During the prevalence of cholera—an unusual disease—we combated its spread effectually by the means pointed out by science and experience. Common diseases, such as those I have mentioned, are better understood, and the means of preventing their extension well known to scientific men; and yet one epidemic outbreak after another sweeps over us until the susceptibility of the population is exhausted. I think you must see that more remains to be done than has hitherto been attempted. To take small-pox alone, what science and experience indicate by way of checking its diffusion is this:—1. That every person—not protected by a former attack—should be thoroughly protected by a good and effectual vaccination, and that care should be taken that re-vaccination should be performed on arrival at adult age. 2. That, at once, immediately an epidemic outbreak is announced, house-to-house visitation should be instituted in such low neighbourhoods as cases of small-pox may appear in, with a view to discover unvaccinated children, to enforce the law as regards vaccination, and to press re-vaccination upon adults where necessary. The administration of the Vaccination Acts lies, however, in the hands of the Board of Trustees. On a former occasion they adopted this course with excellent results. 3. That every case of small-pox occurring among the poor should be removed at the earliest possible period to the Hospital, and not returned to the healthy until thoroughly free from personal uncleanness, or until the clothing has undergone a process of thorough disinfection. At the present time, I have reason to fear that some of the good anticipated from removal to the Hospital has been counteracted by a neglect of this precaution. 4. That the articles likely to retain infection in any room that has been occupied by a small-pox patient, including the bedding, clothing, carpets, etc., should be disinfected in the most appropriate manner, such as can be washed in hot water being first steeped in some harmless disinfecting solution, and then boiled, and such woollen articles as cannot be thus treated being exposed to a dry heat of 212° or 220°, after the manner recommended by the late Dr. Henry, and adopted at Liverpool. To do this would require the provision by the Vestry of the necessary apparatus in some convenient place, and the Vestry is empowered to make such a provision by the 23rd section of the Sanitary Act. I beg to recommend that it should be made. Sometimes bedding is so horribly filthy and old that destruction by fire is the only method of disinfection that could be applied. Possibly the Board of Trustees—on the representation of this necessity having arisen in any special instance—might not object to replace the articles destroyed. On every occasion that I have sought their co-operation they have assisted my efforts as far as they considered that their power to do so extended, and I cannot doubt that some arrangement might be entered into as to this matter also. In that case, the Sanitary Committee might, perhaps, see fit to order the destruction of what could not well be otherwise treated. 5. That the room or house—if necessary—in which small-pox has broken out should be disinfected in a similar manner to cholera houses or rooms. The Sanitary Act enables us to effect this readily enough. The means of disinfection being provided by the Vestry, outbreaks of scarlatina and fever could also be met with more satisfactory results than they are at the present time.—Edward Ballard, M.D., Medical Officer of Health."

Centenarians in 1866.—Not less than 20 centenarians died in France during 1866. The oldest, the Rabbi Frank, died at Joinville, aged 108. Three others attained the age of 107, two 106, two 105, three 104, two 102, and two 101; the five others exceeded the 100th year only by some months. At Vienna, the Austrian Counsiller of Mines, Steiner, died at the age of 118; the Spaniard Pudro died at Tmelcen, at 115; and Onore Roblez, of Atixtla, in Mexico, is said to have attained his 133rd year.

Reviewing.—Of all that a journalist has to do, I know of nothing that exacts more time, attention, and care, and nothing that is more difficult, than the appreciative analysis or books. It must be well understood that I am speaking of a conscientious analysis. First one has to read the book, as also to understand it, and so to penetrate into it as to be able to get hold of whatever it has in it of good and new. It requires one to be pretty well up in the subject in order to discern these qualities, and then, especially in these days of rapid periodical publication, and when space is so precious, we must know how to present only the substance or marrow of the work, while sitting in judgment on its purpose and mode of execution. All this must be done in such a fashion that the public will read what we write with pleasure and interest, and if possible with profit. Now these conditions are very difficult of fulfilment, and the result is that nothing is more rare than a good critic—a *rara avis* he may indeed be called. It takes a long time to read a book as it should be read, with pen or pencil in hand, and when he has thus read, meditated, and concentrated a volume per month, that is really all that can be expected of a serious analyser who has only that to do. However, it is a very profitable work for him who accomplishes it. I do not know who it was that said that the best manner of learning a subject is to teach it; but we might perhaps say with more reason that the attentive perusal of a good book is preferable to the best lectures, and far more useful.—*M. Latour, in Union Méd., Jan.* 17.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

The "Further Notes on Wine" are unavoidably postponed till next week.

Dr. Whitwell.—*For* "chronic," *read* "clonic."

Ignoramus.—A man has the use of his fingers.

J. W.—Plymouth and Devonport are continuous. The former is mentioned in our article on the Contagious Diseases Act, *Med. Times and Gaz.*, January 12, 1867.

We understand that a National Working Men's League for Stopping the Sale of Intoxicating Liquors on the Sunday, has been established, having its head-quarters at 43, Market-street, Manchester, and for its Honorary Secretary Mr. Charles Darrah. It is proposed to have an auxiliary in every city and town in the kingdom.

Caution.—A well-dressed man, of quiet, plausible address, about 50 years of age, has called on, and has obtained contributions from, Medical men lately, on the representation that he is a Surgeon, who was practising at Bow, but has been reduced by the failure of Overend, Gurney, and Co., to accept a situation as assistant. He is to enter on this engagement in a few days. In the meantime his wife and six children are starving, etc. etc. On applying to the highly-respectable Surgeon at Bow whose name is used, he replies that he has no knowledge of any such person, but that some months ago a person using his name called upon a Surgeon in the Borough with a similar story.

A Member.—No cards will be issued for admission to the Lectures. You are invited to attend.

Obstetrician.—There will be an examination for the "L.M." on the 6th proximo. See the advertisement in the present number of the *Medical Times and Gazette.*

A Fellow.—A rumour has reached us that Messrs. South and Luke are about to resign their appointment of Examiner.

A Case of Juvenile Corpulency.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—If your correspondent "A Constant Reader" will refer to the first volume of the *London Hospital Reports*, he will find a paper on a similar case by Dr. Down. The plan of treatment adopted by him was that of restricting the patient to a rigid animal diet. I am, &c.

London Hospital, January 19. N. Heckford.

Examinations at the Royal College of Surgeons.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I perceive in your columns of Notes and Queries the ominous fact that fifty-one out of the eighty-five candidates presenting themselves for examination before the censors of the College of Surgeons at their recent sitting had been previously rejected; or, in other words, five out of every eight constituted "the bad lot." This surely shows something very lamentably wrong, either with the examiners or examinees—query, which?—seeing that other Colleges who are supposed to require a higher state of proficiency, do not see the necessity of applying the lash so vigorously. I am, &c. Justitia.

Edinburgh University, January 22.

A Recent Debate at the Obstetrical Society.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In your report of the January meeting of the Obstetrical Society, I observe a slight error in the abstract of my paper read at that meeting. It is stated in your columns that the different Physicians who were called in consultation to the case (which forms the subject of my paper) "diagnosed her complaint as white softening of the brain and spinal cord." This statement might somewhat imply that we were *all* ignorant of the existence of pregnancy.

Now, in justice to Dr. Eastlake and to myself, I must state that at the consultation with him we were both thoroughly convinced of the pregnant condition of the patient, having each of us on that occasion distinctly heard the fœtal heart, and we communicated this fact to the husband at the time.

I should be obliged by the insertion of this letter.

I am, &c. Percy Boulton, M.D.

23, Harewood-square.

Food for the People.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—We have one article of food, abundant, wholesome, highly nutritious, and existing in all parts of this island, but, owing to a cruel and ridiculous prejudice, either thrown away or given to the dogs—the flesh of the horse. How many thousands of these noble animals are annually worked or nearly starved to death, and then sold for the value of their skins? Why should not this useful creature, like the ox and the cow, when its share of work is done, have a few weeks of rest and comfort, then die like them, and its flesh be used for human food?

I fully believe, if the subject was fairly brought before the public, this foolish prejudice would soon pass away. All animal food would consequently become cheaper, and this useful beast would not, as now, be worked to death by the human brutes into whose hands it now passes when its usefulness from any cause is slightly impaired.

I am, &c., W. P.

Testimonial to Dr. Frederick J. Brown, of Rochester.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In a conversation with one of my former colleagues I learned that a testimonial was being promoted for that zealous and indefatigable friend of the service, Dr. Frederick J. Brown, of Rochester—the amount proposed to be subscribed, one month's advance of pay. I can scarcely deem it possible that the Surgeons and Assistant-Surgeons can imagine or indulge a belief that so paltry a sum on their part will be commensurate, or even a recognition of the enormous tangible and substantial benefits that peculiarly and pecuniarily accrue to those particular classes, the Warrant according them the double and long-reaped benefits of pay and time.

Were I now in the service, I would gladly forward for such a boon six months' advance of pay towards such an object; and I think, if in a monetary point of view alone the subject of benefits derived be weighed, the scale for subscriptions should be one month's increased pay for Inspectorial and Staff-Surgeons' class, three for Surgeons, and six months' for Assistant-Surgeons. I am, &c.

A Retired Assistant-Surgeon R.N.

Distressing Case.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Will you allow me through your columns to request attention to the following distressing case, respecting which several appeals have been inserted in the daily journals; but unfortunately, owing to the numerous calls on the benevolent at this season, the contributions received have been scarcely sufficient to meet the expenses of advertising?

The objects of charity for whom I venture to solicit the sympathy of your readers are the wife and four young children of a highly respectable Medical Practitioner, who, through harassing duties, chiefly amongst the poor, and great mental trials, was attacked by brain fever, and has since become hopelessly insane. His family of five, thus deprived of their supporter by a fate worse than death, have had a long struggle with adversity, and are now in need of prompt aid, being nearly destitute, while the poor mother is in a bad state of health.

Reference is permitted to numerous persons to whom the case is known, and I should be very glad to receive any contributions, and to acknowledge them in any way that the kind donors may wish.

I am, &c.

22, Finsbury-square, E.C., Jan. 22. Abbotts Smith, M.D.

P.S.—I may add that the friends of the family are making efforts to get the eldest boy into the Medical Benevolent College, and that any proxies in his behalf would be thankfully received.

Army Medical Department.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The general dissatisfaction that still prevails in the Army Medical Department shows that existing arrangements have not met the sentiment of the body of the Profession attached to her Majesty's service. It may be conjectured that the uneasiness has dated from the disturbance of the Warrant of 1858. Nothing that has been done since to correct the subsequent mistakes has succeeded in allaying the suspicion of the Medical officers that changes may be again effected to the prejudice of their interests. It should be borne in mind by the Executive that the Profession do not consider themselves like the Army in the same light as the combatant officers, as the latter are simply the means of executing commands, and are, after all, only soldiers *de facto*. The Medical officer, on the other hand, has to act on his own judgment, and to give orders to his superiors and inferiors in military rank—not, be it remembered, to their detriment, but to their advantage. It is, however, too apparent that the combatant officer frequently aims at considering the Doctor as a military subordinate, and is jealous of his relative rank and position in a regiment dependent thereon. Hence arises most of the discontent, which chiefly arises amongst regimental Medical officers, to whom also the combatant brother wishes to deny the social status to which his education and Profession entitle him, irrespective of rank. The question of reorganising the department on a system similar to the Commissariat is well worthy of consideration, including as it would the discontinuance of all regimental appointments. Field officers of a regiment would then cease to be jealous of their Surgeon, and the subalterns no longer have to take up the cue to snub the Assistant. The Doctors would then be saved the expenses of subscriptions to regimental funds, and liable only to be attached as honorary members to a mess, have only one description of uniform to keep effective, and be at liberty to live as economically as they chose, and avoid the expenses of exchanges. A proper Professional sentiment should be the sole motive for the duties of the Medical officer, and this feeling cannot be ignored by any military body desiring their services. It is chary of being placed under any extraneous restraint when it has not scope to act from its own conscientiousness. Entire freedom in this respect should be a *sine qua non* in compacts between the Government and its Doctors, and this at the present day can only be accomplished by organising a separate department. The regimental Surgeon can no longer expect to hold the position he did, as military colleges and competitive examinations have tended to raise the education of the combatant officer to the level of the intellectual classes. I am, &c.

January 16. Observer.

"Pall-mall" Testimonial.—Hunter *v.* Sharpe.

	£	s.	d.
Amount previously acknowledged	138	14	6
James Startin, Esq. ..	2	2	0
W. H. Richardson, Esq.	2	2	0
Dr. F. Hawkins	2	2	0
James Syme, Esq. ..	2	2	0
Dr. R. S. Sisson	1	1	0
Sir Charles Locock, Bart.	2	2	0
T. W. Nunn, Esq. ..	1	1	0
Dr. Allan	1	1	0
S. C. Hall, Esq., F.S.A...	1	1	0
Dr. Ray	1	1	0
Dr. Gueneau de Mussy..	2	2	0
Dr. Fussell..	1	1	0
Dr. Andrew Clark ..	2	2	0
Dr. A. Farre, F.R.S. ..	2	2	0
Dr. Oldham	2	2	0
C. Bleeck, Esq., Warminster	1	1	0
Dr. Burnie, Bradford ..	2	2	0
Longmans, Green, & Co.	2	2	0
P. Jackson, Esq.	1	1	0
E. Newton, Esq... ..	2	2	0
W. Bowman, F.R.S. ..	2	2	0
Dr. Wakley	2	2	0
Per the *British Medical Journal*:			
T. P. Teale, F.R.S. ..	2	2	0
F. C. Skey, F.R.S. ..	2	2	0
H. Spencer Smith, Esq.	1	1	0
Bernard Holt, Esq. ..	2	2	0

Subscriptions will be received by G. D. Pollock, Esq., 27, Grosvenor-street, and T. H. Hills, Esq., 45, Queen Anne-street, treasurers; at the Argyle-street branch of the Union Bank; at Dimsdale and Co.'s, 50, Cornhill.

Dr. Macloughlin on the Non-existence of Syphilitic Virus.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I have before me the Army Sanitary and Medical Report for 1864, and the Naval Medical Report of the health of the Navy for 1863. From these two reports it appears that the loss of service yearly by the so-called syphilitic disease is equal to the loss of the whole force of the Army and Navy serving in this country for eleven days. Permit me to ask, is there such an entity as a syphilitic virus? In other words, is there such a disease as a specific syphilitic disease? At this moment two opinions divide the Medical world as to what are the pathognomonic symptoms of the syphilitic virus. The first is that of Mr. Hunter, and the second is that of Dr. Ricord, of Paris. Mr. Hunter maintains "that the pathognomonic symptoms of a syphilitic ulcer are that the specific inflammation is confined to the base of the ulcer on the reproductive organs; that the base is hard; and that the edges of the ulcer are a little inverted." Dr. Ricord maintains that no one, by his eyesight or by his touch, can ascertain the existence of a syphilitic virus in an ulcer on the reproductive organs; but he asserts that every ulcer on the reproductive organs which secretes an inoculable pus contains the syphilitic virus. Is either of these opinions correct?

Herpes præputialis in the male, and herpes pudendalis in the female, is a disease which occurs spontaneously in both sexes, and without coitus. The ulcer on the prepuce of the male has most commonly a hard base. If we read Mr. Hunter's description of the rise and progress of what he calls the true chancre on the reproductive organs, we remain satisfied that Mr. Hunter mistook the herpes præputialis ulcer for a true chancre. Besides, if the hardness at the base of an ulcer on the reproductive organs is the only proof of the existence of a syphilitic virus, why have we not that hardness at the base of an ulcer affecting the glans penis? No finger ever yet detected such hardness at the base of an ulcer on the glans penis.

Fifty years ago, at Lisbon, to prove that the hardness at the base of an ulcer on the reproductive organs is not pathognomonic of a syphilitic virus, I saw two Medical officers apply caustic to their healthy prepuce—two hard-based ulcers were the consequence. Moreover, it is not at this moment known to every scientific Medical Practitioner that that hardness at the base of any ulcer on the reproductive organs depends on the tissue in which the ulcer is situated, and on the degree of inflammation which accompanies it. Therefore Mr. Hunter's test of the existence of a syphilitic virus is an error.

Dr. Ricord, the great syphilidographer of the age, says that every ulcer on the reproductive organs which secretes an inoculable pus contains the syphilitic virus.

Fifty years ago I was present at Valenciennes, in the north of France, when my late friend, Inspector-General Dr. Murray, took pus from an herpes præputialis ulcer in a state of active inflammation, inoculated with it, and with perfect success. (See Dr. Evans on Syphilis.)

Very recently a distinguished scientific Surgeon of St. George's Hospital, Mr. Henry Lee, attempted to inoculate with pus from a common ulcer in a state of chronic inflammation, but failed. He, however, irritated that ulcer, excited inflammation, then this ulcer secreted inoculable pus. Therefore, inoculable pus depends on the state of active inflamma-

tion in which the ulcer is, and not on a specific syphilitic virus. Of this fact Dr. Ricord is himself aware; for he recommends that the pus for inoculation be taken from an ulcer before that ulcer has existed fourteen days. After fourteen days the ulcer, he adds, becomes chronic, and secretes no more inoculable pus. Therefore, Dr. Ricord's test of the existence of a syphilitic virus is also an error. Consequently no Medical Practitioner in this country, or in France, is justified to state that an ulcer on the reproductive organs, or on any other part of the body, is caused by a syphilitic virus. Hence I conclude, as the result of my experience during these last fifty years, that all ulcers on the reproductive organs, the consequence of coitus, can be radically cured by ablution, rest, and attention to the general health.

Two years and a half ago, when there was such an outcry about this so-called syphilitic disease in the Army and Navy, I addressed a pamphlet to the Secretary of State for War, pointing out to him that no Medical Practitioner, I repeat, in this country or France could, or can, demonstrate the existence of a syphilitic virus, and I suggested the appointment of a scientific Medical Committee to inquire into its truth. In consequence of the publication of that pamphlet, I was sent for to the Admiralty for my advice what could be done to protect the sailors and soldiers from this so-called syphilitic disease. My advice was to appoint a Medical Committee to carry out the inquiry suggested in the above pamphlet, and subsequently I was informed, by the directions of the then First Lord of the Admiralty, his Grace the Duke of Somerset, that a Medical Committee had been appointed by the Admiralty and by the War Office to carry out my suggestions. That Committee have since published the instructions under which they acted, and they have published their report. It is evident that the instructions given to that Committee were drawn up by persons unacquainted with Medical science, and unaquainted with the object for which this Committee was appointed. Thus these instructions assume that there is a syphilitic virus—the very thing which is doubtful—and to ascertain its existence this Committee was appointed. And the instructions go on telling the Committee that they are specially to direct what is the best Medical treatment for this so-called syphilitic disease without inquiring particularly into its pathology—thus calling on this Committee to prescribe for a disease the pathology of which they had not ascertained, and treating this Committee as quacks and impostors. The Committee accepted this unenviable position, and, true to their instructions, they also assumed the existence of a syphilitic virus; they refused to hear any proofs of the non-existence of a syphilitic virus; they did not examine one witness scientifically; they suppressed and mutilated the testimony of witnesses to meet their preconceived opinions; they have made confusion worse confounded; their report is a disgrace to the Medical acquirements of this country, and is a deception practised on the public.

In the interest of the Navy, the Army, and the public, I have taken the liberty to suggest the appointment of another Committee, better selected, and with clear and positive instructions what they are required to do.

I am, &c.

DAVID MACLOUGHLIN, M.D., Member of the Legion of Honour.

36, Bruton-street, Berkeley-square, London, W., December 31.

P.S.—Since the above was in type, I have received information that the Government will not appoint another committee to carry out the above inquiry. As the question whether there is or not a syphilitic virus is of the first importance to the Army, to the Navy, and to the human race, and as the Government are acting under erroneous Medical advice, I do not despair to send some independent Member of the House of Commons to bring the question before the House of Commons next session, when no doubt the Government will feel it their duty to support such an inquiry.

COMMUNICATIONS have been received from—

J. W.; Mr. G. S. BRADY; Dr. WHITWELL; IGNORAMUS; Dr. R. E. POWER; Mr. W. S. JONES; Mr. N. HECKFORD; Mr. A. BRUCE; W. P.; Mr. W. H. BORHAM; Mr. GANT; Dr. YELD; Mr. J. A. GILES; Dr. G. JOHNSON; Mr. W. F. CLARKE; Dr. ABBOTTS SMITH; A RETIRED ASSISTANT-SURGEON R.N.; Dr. C. H. ROBINSON; Mr. FENN; Dr. PERCY BOULTON; JUSTITIA; Mr. POOLE; Mr. C. P. PHILLIPS: Mr. SOPER; Dr. C. ORTON; Mr. C. B. SUCKLING; Dr. S. HAUGHTON; Dr. MOORE; Dr. CHOLMELEY; Mr. J. CHATTO.

BOOKS RECEIVED—

Robertson on Aphasia—Liebig's Development of Science—Journal de Pharmacie—Jahres-Bericht.

NEWSPAPERS RECEIVED—

Gazette des Hôpitaux—L'Union Médicale—Lincolnshire Chronicle—Nottingham and Midland Counties Daily Express—Sunday Gazette—Gazette Médicale de Paris—The York Star—Gazette Hebdomadaire.

VITAL STATISTICS OF LONDON.

Week ending Saturday, January 19, 1867.

BIRTHS.

Births of Boys, 1131; Girls, 1058; Total, 2189.
Average of 10 corresponding weeks, 1857-66, 1952·6.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	817	897	1714
Average of the ten years 1857-66	754·3	782·2	1536·5
Average corrected to increased population..	..	..	1690
Deaths of people above 90	..	..	14

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,388	4	3	10	3	11	5	1	..
North ..	618,210	14	5	13	4	25	11	2	..
Central	378,058	6	1	4	1	11	4	..	..
East ..	571,158	8	6	6	1	13	9	..	..
South ..	773,175	4	6	12	4	16	17	3	..
Total ..	2,803,989	36	21	45	13	76	46	..	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·586 in.
Mean temperature	26·0
Highest point of thermometer	34·9
Lowest point of thermometer	13·9
Mean dew-point temperature	19·9
General direction of wind	Variable.
Whole amount of rain in the week	0·10

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, January 19, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending Jan. 19.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending Jan. 19.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	2189	1421	1714	34 9	13 9	26·0	0·10	10
Bristol (City) .	165572	35·3	123	74	‡91	33·2	19·2	27·2	0·02	2
Birmingham (Boro')	343948	43·9	255	167	193	36·3	17·0	24·6	0·11	11
Liverpool (Borough)	492439	96·4	365	285	361	32·8	20·7	27·0	0·00	..
Manchester (City) .	362823	80·9	221	205	‡262	35·8	9·0	22·6	0·01	1
Salford (Borough) .	115013	22·2	107	58	64	36·6	8·7	23·1	0 00	..
Sheffield (Borough).	225199	9·9	169	119	115	..	..	..	..	..
Leeds (Borough) .	232428	10·8	155	118	123	35·8	14·0	27·5	0·25	25
Hull (Borough) .	100740	30·0	78	49	58	..	..	..	..	..
Newcstl-on-Tyne, do.	124960	23·4	80	66	100	33·0	20·0	29·4	0·00	..
Edinburgh (City) .	176081	39·8	124	85	103	33·7	20·0	27·3	0·00	..
Glasgow (City) .	440979	87·1	353	257	297	32·3	14·2	26·3	0·09	9
Dublin (City and some suburbs) .	319210	32·8	145	†157	187	36·5	12·5	25·4	0·00	..
Total of 13 large Towns . . .	6187764	34·8	4364	3061	3668 Week ending Jan. 12.	36 6	8·7	26·0	0·05	5
	(1863)					Week ending Jan. 12.				
Vienna (City) . .	560000	..	..	..	358	..	..	§ 28·4	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·586 in. The barometrical reading decreased from 29·79 in. on Monday to 29·32 in. on Thursday.

The general direction of the wind was variable.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 39·3°.

APPOINTMENTS FOR THE WEEK.

January 26. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. G. A. Macfarren, Esq., "On Harmony."

28. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m. Dr. Julius Althaus, "On the Electrolytic Treatment of Tumours and other Surgical Diseases."

29. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Tyndall, F.R.S., "On Vibratory Motion with Special Reference to Sound."

30. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

31. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

KING'S COLLEGE MEDICAL SOCIETY, 8 p.m. Dr. Fenn, "On Rheumatism and Allied Affections."

ROYAL INSTITUTION, 3 p.m. Professor Tyndall, F.R.S., "On Vibratory Motion with Special Reference to Sound."

February 1. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8 p.m. J. Scott Russell, Esq., F.R.S., "On the Crystal Palace Fire."

WESTERN MEDICAL AND SURGICAL SOCIETY, 8 p.m. Practical Evening, for the Narration of Cases and Exhibition of Specimens.

ORIGINAL COMMUNICATIONS.

FUNDAMENTAL STRUCTURE AND ARRANGEMENT OF A NERVOUS APPARATUS.

(With Plate II.)

By Dr. LIONEL S. BEALE, F.R.S.,
Fellow of the Royal College of Physicians, Physician to King's College Hospital, and Professor of Physiology and of General and Morbid Anatomy in King's College, London.

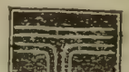
Of Nerve Trunks and Nerve Fibres.

The trunk of an ordinary nerve consists of bundles of nerve-fibres. Each bundle is composed of numerous individual fibres, which interlace and do not run perfectly parallel to one another. A nerve-trunk cannot therefore be torn into fine long shreds like a tendon, or a piece of muscle, or the longitudinal fibrous coat of an artery. The individual cords or fibres vary in diameter, but exhibit the same structure. These fibres are called "dark-bordered" nerve-fibres.(a) They are found in purely *motor*, in purely *sensitive*, and in mixed nerves, and some run with the pale granular nerve-fibres of which the ramifications of the sympathetic system are in great part composed.

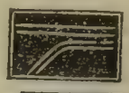
The plexiform arrangement of nerve-trunks and nerve-fibres is one which is very general, and was known to the older anatomists. It can be demonstrated in the case of the finest visible branches, as well as in the coarsest bundles. Many of the networks which can be made out by dissection are very beautiful, but in some of the smaller animals networks and plexuses of dark-bordered fibres can be demonstrated, under low magnifying powers, without any dissection whatever. The diaphragm of the white mouse, the mylohyoid of the green tree-frog, and the eyelid of the same animal, are favourable for the purpose, and in order to see the networks it is only necessary to soak the textures in glycerine, with a trace of acetic acid.

The fibres constituting a bundle of nerve-fibres never run perfectly parallel with one another, nor can an individual fibre be followed for any considerable distance in a trunk consisting of more than a very few fibres. This arises from the nerve-fibres frequently crossing one another. Many appear to pursue a spiral course. I have already described a very striking spiral arrangement of nerve-fibres. At an early period of development of dark-bordered nerve-fibres, one fibre may be seen coiled spirally round the other, as is well shown in Pl. II., Fig. 36. I have reason to think that the spiral arrangement of nerve-fibres is constant, and results from the mode of development of this texture. It will be found that in every part of a nerve-trunk fibres on one side invariably cross over and pursue their course on the opposite side. Those on the lower part of a trunk soon pass to the upper part, and *vice versâ*; and in fine trunks fibres may be seen coiling round one another, and in opposite directions.

The nerves distributed to a tissue or organ are often represented as if they all passed straight to their terminal distribution; but observation proves that so far from this being the case they pursue a most circuitous route. The arrangement is such as to lead to the inference that, of the fibres composing a bundle of nerves, some are proceeding in a direction *from*, and others *towards*, the nerve-centre or peripheral part; and this is observed not only in purely motor, but in purely sensitive, as well as in mixed nerves. It is also found in the case of the sympathetic system, and is to be demonstrated in all animals. It is, however, not easy to demonstrate these facts by the ordinary methods of examination; but by the plan of investigation I have fully described, the arrangement may be readily demonstrated in the nerves of either the higher or lower animals, although with the greatest facility in the very transparent textures of the little Hyla.(b) A smaller branch coming off from a nerve-trunk is invariably composed of fibres which pursue opposite directions in the trunk, thus:—



This arrangement, on the other hand, is very rare.



If compound nerve-fibres cross each other, or if two trunks lean towards one another or decussate at one point, the constituent fibres are arranged as follows:

This occurs, as is well known, in the optic commissure, but instead of being peculiar, it exists in every texture to which nerve-fibres are distributed. Again, if we examine the distribution of a bundle of dark-bordered nerve-fibres to papillæ, we shall find the arrangement accords with that figured in Fig. 21. Nerve-fibres pass from the trunk to each papilla, and each papilla is connected with its neighbours by *commissural* fibres.

Few anatomical facts seem to me of more interest and importance in their general bearing upon the physiology of the nervous system than those just briefly alluded to. In the case of every nerve-fibre which appears to pass into or come from an adjacent nerve-trunk, there are three sets of fibres which pursue three different courses, as shown in the drawings, Figs. 28, 31, 32. What explanation, then, can be offered of these nerve-fibres which can invariably be traced at the point where a nerve-fibre comes off from a trunk passing at right angles to it, as represented in Figs. 24, 26, 28, 29, 31, and 32? They may be *afferent*, *efferent*, and *commissural*; and there are fibres commissural as respects different parts of the peripheral system as well as of the central organ. Thus, I believe, may be explained the action of each peripheral apparatus and central ganglion as a separate organ, independently of its neighbours, or the combined action of several different organs and ganglia.

As has been before observed, the large compound nerve-cords or trunks, the finer bundles, and the finest constituent fibres of the pale terminal nerve-fibres exhibit the same general arrangement.

I do not think that in the finest branches these three sets of fibres are separated from one another or insulated by a layer of white substance; but, on the contrary, I consider that in many cases these fine fibres, although they may often be split in the longitudinal direction, nevertheless in their natural state form almost homogeneous tracts, the material of which may permit the passage of nerve-currents in the different directions indicated. It is very likely that the passage of the currents along precisely the same paths for a considerable time may cause the decomposition of the nervous matter in such a manner as to give rise to distinct lines, which might readily be mistaken for separate fibres, and after a time lines of fibres in an apparently transparent tissue would result. At an early period of development, nerves form a sort of thin expansion, in which the appearance of fibres crossing one another in various directions may be afterwards produced by the passage of the nerve-currents. Beneath the external investment of the common fly and many other insects, and beneath the soft, delicate perivisceral membrane of mollusca, I have seen the most beautiful and elaborate arrangement of apparent nerve-fibres of such a character as to justify the above inference.

In the cornea, that part of some of the nerve-fibres from which several fine bundles radiate in different directions exhibits lines or fibres crossing one another in every direction which the emerging fibres take. This subject is capable of much further elucidation, and is well worthy of being considered in detail.

Division and Subdivision of Nerve-Fibres.

The arrangement of the nerve-fibres described in the last section receives still further elucidation from the facts ascertained with reference to the division and subdivision of the individual nerve-fibres as they approach their peripheral distribution. *All nerve-fibres divide and subdivide*, and this to an extent not generally supposed. I think that an individual dark-bordered nerve-fibre divides into perhaps 100 finer nerve-fibres, and each of these is still compound.

There is the greatest difference of opinion concerning the *structure* of the dark-bordered nerve-fibres of the trunks and the *office* of the textures of which they are composed. A

(a) The "dark-bordered" character of the nerve-fibre is due to the refractive power of the medullary sheath or white substance of Schwann. This, like other forms of myelin, exhibits double contours when placed in water and aqueous fluids. Hence, in the drawings usually given of nerve-fibres, a double line is drawn on each side of the fibre. This character is not seen, however, if the nerve be examined in a more highly refracting medium, as glycerine or syrup. As my specimens are mounted in such a medium, and as I consider that the appearance of double contours is not natural, I have not represented them in my drawings (Figs. 23, 28, 33, 34, 35).

In a section through *a dark-bordered fibre* the following structures would be observed. Most externally, the "tubular membrane," *a*; next, the medullary sheath, or *white substance of Schwann*, *b*; within which is the core, or *axis cylinder*, *c*.

(b) "The Microscope in Medicine." Third edition, p. 50 *et seq.*

consideration of the physical properties and chemical composition of the medullary sheath or white substance of Schwann leads to the conclusion that it is probably an insulating material destined for the protection and insulation of the axis cylinder; and this view is supported by the following facts:—It is not connected with the axis cylinder. It varies much in diameter in different parts of the nerve-fibre, and is very thin at the point where one fibre crosses another, and where a fibre divides so as to form two fibres. This fact I find constant, although it is not represented in most of the drawings I am acquainted with. I have copied this tapering at the point of division in most of my own figures—Figs. 23, 24, 25, 27, 37. The diameter of the *axis cylinder*, on the other hand, is not proportionately reduced, either at the point of subdivision or where dark-bordered nerve-fibres are reduced in diameter, as when they pass through a small hole, as through an aperture in the cranial bones—Fig. 35. All this seems in favour of the notion that the axis cylinder is the essential part of the nerve-fibre, and that the white substance performs the subordinate part of insulating the axis cylinder, and keeping it at a proper distance from its neighbours.

The fibres resulting from the subdivision of a single dark-bordered nerve-fibre take very different directions, and often leave one trunk to pursue a totally different course with nerve-fibres which have come from another part altogether. Many different parts of an extensive surface may receive nervous supply from the same source, and the nerve-fibres supplied to distant parts may result from the division of the very same dark-bordered nerve-fibre. The division of the dark-bordered nerve-fibres is well represented in Figs. 24, 25, 26, 31, 32; but I shall have more to say upon this matter under another head.

The fibres resulting from the subdivision of the dark-bordered fibres are of less diameter than the parent trunks; but the area of the section of two fibres would invariably be much greater than that of the parent trunk. For the most part the fibres divide dichotomously; but sometimes a fibre is seen to divide at one point into as many as three or four divisions, and in muscle five, six, or even more dark-bordered fibres have been seen to spring from one. The finer dark-bordered fibres, which are much nearer to their ultimate destination, often run in the same bundle with coarse dark-bordered fibres.

Having almost reached its ultimate destination, the nerve loses its dark-bordered character, but may be traced onwards for some distance. The fibre now appears pale and granular, and connected with it at varying intervals are nuclei. These pale nucleated fibres in the frog are often less than the $\frac{1}{3000}$th of an inch in diameter. They are nevertheless compound, and consist of bundles of still finer fibres. These, in fact, although much narrower, correspond to the pale granular, but nucleated intermuscular nerves first described by me in the muscles of the mouse (*Phil. Trans.* 1860). The very fine compound fibres still continue to divide and subdivide, and assist to form plexuses and networks in precisely the same manner as the dark-bordered fibres, of which they are the continuation. It is quite certain that these pale fibres are true nerve-fibres, for they are directly continuous with the dark-bordered fibres. The point where the dark-bordered nerve-fibre changes its character and breaks up into the peripheral networks and plexuses, described in the *Medical Times and Gazette* for January 19, page 56, is represented in Fig. 34. Instead of breaking up into one or more bundles of fine fibres, a dark-bordered fibre not unfrequently divides into a finer dark-bordered fibre and a bundle of fine fibres, as represented in the drawing from the frog's mesentery (Figs. 27 and 37).

Of the Fine Fibres running with the Dark-Bordered Fibres.

We find in the same nerve-trunk fine and coarse dark-bordered fibres, and, near the peripheral distribution, we often observe exceedingly fine pale fibres running in the same transparent matrix (sheath) with dark-bordered fibres. The essential difference between these two classes of fibres in the same trunk is that the former fibre is nearer to its ultimate distribution than the latter.

The idea that the tubular membrane or sheath is an essential and separate anatomical constituent of every individual dark-bordered fibre must be given up. For, as I showed in 1860, *several* dark-bordered fibres and fine fibres often run together in the same sheath or matrix. The continuity of the fine fibre with true dark-bordered fibres may often be seen, and the same fibre may in some instances be followed to its ultimate distribution, so that the opinion still entertained by many observers that the fine fibres running in the same sheath with the dark-bordered nerve-fibre, are not nerve-fibres at all, is inadmissible, unless it be also maintained that dark-bordered nerve-fibres terminate in networks of connective tissue. Into the formation of the peripheral network or plexus, the fine fibre accompanying the dark-bordered fibre, and coiled spirally round it, enters. See Figs. 27, 34, and 37. In some cases the peripheral network seems to consist entirely of fibres derived from the fine fibres accompanying the dark-bordered fibre, as in fig. 33, but I have shown that these fine fibres accompanying the dark-bordered fibres are in the majority of cases but the continuation of dark-bordered fibres.

The above observations compel me to conclude that, however fine a nerve-fibre may be, it cannot be regarded as a single fibre, but is compound, and consists of a bundle of finer fibres, which are continuous, and ramify in the manner described in my first paper (*Medical Times and Gazette*, January 19, page 56).

The incompatible views existing between Continental observers and myself are in some measure due to different conclusions concerning the sheath of the nerve. The so-called sheath is not a "tube" or "membrane," or "tubular membrane," which contains the other constituents of the nerve-fibre; nor is it a sheath which invests them, but it is simply a transparent matrix, in which nerve-fibres, coarse and fine, are imbedded. The "sheath" is not formed as a special structure to invest the nerve-fibres, but it results from changes occurring in the nerve-fibres themselves. This "sheath" or "tubular membrane" of the so-called dark-bordered fibre precisely corresponds to the transparent connective tissue, in which the finest nerve-fibres are imbedded. It is a form of connective tissue, and in many situations where nerves existed at an earlier period, nothing but this so-called sheath remains. All the soluble fatty matters have disappeared, and this material, which is not readily absorbed, is left behind. Vessels may waste, and ducts and glands may waste, and leave behind them the same sort of transparent connective tissue. Moreover, as I have before stated, it is altogether a fallacy to suppose that near the peripheral distribution every single branch of nerve-fibre is surrounded by its own separate sheath. The drawings of the so-called axis-cylinder near the terminal distribution of the nerves seem to me to be diagrammatic, founded rather upon a theoretical idea of the constitution of the nerve-fibre than upon the results of actual observation.

Many of the pale fibres accompanying the dark-bordered fibres are doubtless sympathetic fibres, for it has been shown that there are fine fibres springing from ganglion-cells which retain the same character from their origin to their distribution, and I have assured myself in many instances that branches from true dark-bordered nerve-fibres enter into the formation of networks and plexuses around vessels, so that I am led to conclude that the fibres of the sympathetic are at their periphery continuous with nerve-fibres resulting from the division of cerebro-spinal nerve-fibres. Not only has the nervous nature of the fine fibres above described been proved by following them from *their connexion with ganglion-cells*, but a dark-bordered fibre has often been observed to be drawn out so as to form a line as fine as the finest of these thin fibres. Indeed the observer often fails to trace an individual dark-bordered fibre for any great distance in consequence of its becoming so very fine at the point where it crosses, or is crossed by, other dark-bordered fibres. And it may be fairly argued that since a wide dark-bordered fibre may be reduced in certain parts of its course to a fine cord not more than the $\frac{1}{5000}$th of an inch in diameter, without its integrity or conducting power being interfered with, there is nothing unreasonable in concluding that fine fibres of the same diameter are efficient conductors of the nerve-current, although their length may be considerable. And I have shown that in many of the tissues of the frog (bladder, connective tissue, muscular tissue of auricle, &c.), the finest branches of the nerves at their distribution are invariably less than the $\frac{1}{5000}$th of an inch in diameter.

If a nerve-fibre, or a branch from it, started from a central nerve-cell, ramified in the peripheral network, and returned by a circuitous route at last to the same nerve-cell, the facts I have demonstrated in connexion with the nerve-trunks and dark-bordered fibres would receive a ready explanation. Can they be accounted for upon any other hypothesis?

WHEN ONE EYE ONLY IS BLIND, IS IT PRUDENT TO ATTEMPT TO RESTORE SIGHT WHILE THE OTHER REMAINS PERFECT?

By HAYNES WALTON, F.R.C.S.,

Surgeon to the Central London Ophthalmic Hospital, and to St. Mary's Hospital.

This is a question that is put to me many times in the course of a year. I gather from my intercourse with Professional men that there exists an impression against interfering, although I could never discover among them any sufficient grounds for the opinion, nor indeed collect any data. The idea seems to have come down traditionally from an age when ophthalmic subjects were but little understood. I have sought in vain for any definite rules among the treatises on the eye by our countrymen. What is the opinion of the Surgeons of the present, who are fitted by their connexion with Ophthalmic Surgery to speak authoritatively, and who have no doubt examined the question, I do not know. I could wish to have the opinions of each of them all as they exist at this moment, and to hear such in its genuineness, without the influence, bias, or effort inseparable from a discussion.

There is a necessity for me to have some definite rules to act on. The exercise of my calling demands them. My patients, too, seek for them.

In discussing the subject, there are facts to be recognised, conditions and circumstances to be considered. There must be reviewed the physical causes that render the eye useless, the operations that are needed, and the probability of the result, and the quality of the sight that may be restored.

It may be stated in general terms that a person who has lost an eye, besides being blind on one side, has but a very limited field of vision for near objects beyond the centre of the face, and which angle is regulated by the degree of prominence of the nose; that the definition of sight which depends on binocular vision is totally lost; that the power of accurately estimating distance is lost, and in consequence of this mistakes are made in certain mechanical acts, as the pouring of a liquid from one vessel to another, although the vision is quickly rectified by touch. This defect may remain in degrees. Whether it is always entirely overcome by those who have lost an eye in infancy I do not know, for it has never occurred to me to ascertain. That with labour requiring minute sight there are more readily developed the many effects of impaired vision than when two are used, because the one organ cannot do the work of the two. These are points that some one-eyed people are loth to confess, and they cannot be blamed for their caution. It is, therefore, apparent that an individual is the better for two sound eyes, and that that measure is admissible which, while it restores sight, does no harm elsewhere.

And here it is necessary to observe that nothing of value can be gathered from the mere spontaneous expression of patients as regards the question, for they cannot understand the subject. Even more than this, when the data from which conclusions can be formed are set before them, they are as likely as not to act wrongly. The accepting or rejecting, then, of a proposal put to them, must be recognised only as a matter of will, which they have the power to exercise or not, and not as a valid opinion.

I know of several persons who are now blind in both eyes because they cannot make up their minds to have anything done. Every Surgeon must have seen patients die rather than submit to any operation that would save life.

As the physical defects of the eyeball proper that need operation for the restoration of the function of sight are cataract, and the loss of the pupillary aperture, it is impossible for perfection to be restored. After the removal of cataract, peculiar glasses are needed. In the formation of an artificial pupil, the aperture must be either at the margin of the iris when the quality of the sight is lessened, or in the centre when the lens is absent, and minute use of the eye must depend on cataract glasses. Unfortunately, an eye cannot be fitted with a cataract glass, and brought up to a healthy state so as to match the other eye. The adjusting power is gone, and, for seeing at different distances, glasses of different foci are needed. Therefore arises this important consideration on which the whole matter hinges. Will this kind of sight, which must be inferior to that of the other eye, and at times in marked degrees, be really of material service? It may be premised that, if a Surgeon is to answer from his own knowledge and experience, a long time is required to gather facts and dates; and, to avoid errors, the patients should be watched for years. I speak then from what I have seen, and say yes. I should be deterred from operating only by the probability of the eye being too much damaged to give that amount of sight which is known as useful sight, on which point much discrimination and a long familiarity with ophthalmic Surgery are imperative. I have made lateral pupils, the crystalline lens being present, and central pupils, the lens being absent. I have selected those cases only in which I was as sure as I could be that the fundus of the eye was sound, and the retina unimpaired, and the other conditions such as would insure the best amount of sight to be derived from such an operation. I place stress on this; for without it, without useful sight can be fairly expected, I would not operate. The false pupil I have invariably made either upwards or downwards, never inwards or outwards, on account of the double vision which would probably ensue. In every case decided benefit has followed. Side-blindness has been removed, and direct vision assisted; in those cases in which the lens was present there has been restoration of the ocular adjustment. I am giving general results, and avoiding minute detail. My last patient was operated on at the Central London Ophthalmic Hospital in September of this year. He was a soldier in a hussar regiment, and was acting as groom to a captain. When he was sent to me I found that there was a dense central corneal opacity with prolapse of the pupil, almost the whole pupillary margin being adherent. I made an upward pupil by drawing out a bit of the iris and cutting it off. Mr. Wilkinson and Mr. Taylor, my colleagues, assisted me. Perfect success ensued. My patient was highly delighted at the addition to his vision and in the improvement in the focussing power of the eye. He was particularly proud of his distant sight, but he could, too, read quickly No. 9 of Jaeger's best type. There was not the slightest confusion in vision. His master, who examined him with care, wrote to thank me for the result, and enclosed a donation for the Hospital.

In every case in which I have made a central pupil after the loss of the lens, the patients have expressed their satisfaction and pleasure at the benefit they have received. I am certain, therefore, from the result of practice, of the advisability in certain cases of making a false pupil when one eye is sound. It would seem that confusion of vision does not, and is not likely to, ensue when there is perfect vision in the one eye. This agrees with the fact that in "colomba iridis" in one eye no confusion follows.

I have a far more extended experience in operating when cataract affects only one eye. In the cases selected for my trial and observation, I was quite sure that the other eye was sound and not invaded by cataract.

In nearly all, my patients were under adult age; a few were young adults, and two were past sixty years of age. I will allude to five of them specially, because they were in private, were persons of intelligence, and all were seen several times after they had left me as patients. One was a well-educated, clever publican, about thirty-two years of age. Cataract formed without any apparent cause. I operated by solution. No better result could have been obtained. The last time I saw him he assured me that he was as pleased with the new eye as ever. He said, "The more I think of it, the more satisfied I am. I no longer run against people and things."

Another was a master builder, 26 years old. His cataract was idiopathic. He sought treatment because the blindness on the one side was "the plague of his life." The result of the operation enabled him, as he expressed it, "to get on better with his business."

The third patient, about 40 years of age, was a clerk in a house of business. His disease was idiopathic. He was fully satisfied. He found the benefit he had been told he might expect.

The fourth was a governess. She came to me several times to show herself after my Professional attendance had ended. She was well pleased at what had been done.

The last was a guard on a railway. He was 39 years of age. The eyeball was wounded by a splinter of wood, and cataract ensued. Since my operation he has been able to attend to his work satisfactorily. Before I operated he frequently blundered, and his defect was apparent to others.

As, then, the evidence which I have collected establishes

the propriety of endeavouring to restore an amount of sight less than the standard of health in the one eye, while the other is healthy, I advocate such practice when my opinion is sought. When a child with a wounded eye and an opaque lens is brought to me by his distracted parents, anxiously asking what can be done, I set before them the state of the case, and recommend the removal of the cataract.

After 50 years of age, when, as a rule, the operation for solution is no longer applicable, because the lens is harder and the operation for extraction is the more proper, circumstances are somewhat altered, and the opinion I give a patient is modified, and for this reason. The operation for solution being so very safe, I can with confidence promise success to my patient, if time be allowed me. Extraction is attended with risk of failure. Although I suspect, from all I can learn, that I get as good results from this operation as my neighbours, I know that I cannot get the success that I can command in solution. Then there is one more degree in the quality of restored sight in the extraction cases. The sight may be very good or very inferior, although the term success is applied to all. Added to this, when a person is old, he has pretty nearly done with the active affairs of life, and he can then get on tolerably with one eye. I endeavour to do my duty in explaining all this to a patient—adding, "If nothing untoward happen, you will be the better for the operation; if it do, you will be none the worse as regards the other eye"—and leave him to determine between the unpleasantness of the operating process and chance of failure, and the probability of success and the addition of a certain amount of sight.

It does not come within the scope of this paper to entertain the question of the removal of a cataract to improve the appearance, nor in early life to prevent a squint.

OPERA MINORA,

By BENJAMIN W. RICHARDSON, M.A., M.D., F.R.C.P.,
Senior Physician to the Royal Infirmary for Diseases of the Chest.

ON THE BALANCE OF THE RESPIRATING AND CIRCULATING MECHANISMS, IN RELATION TO DISEASE.

The motive powers of respiration and circulation, like all other motive powers in nature, are derived from the two prime movers or forces, the attraction of the earth, and the heat force or caloric. The air enters the lungs by the atmospheric pressure; in other words, by the attraction exerted upon the atmosphere by the earth; the blood moves and circulates through the vessels of the body by the force of caloric, the evolution of motion from matter during change of condition.

These two forces, these prime movers, always at work in the organism during its life, are each regulated by the specific mechanism of the respirating and the circulating apparatus.

The mind, receiving at first the external phenomena that are presented to it only, is wont to consider that the movements of the chest and of the heart represent the prime forces of life. This is not wonderful, for they seem as if they must be the prime forces. To the untaught in mechanism the movement of the pendulum of the clock, or the balance wheel of the watch, seem to be the prime movements of the machine. The educated, however, know, in respect to the clock and watch, that their prime force is hidden, and that what seems to be the force is, after all, the mere regulating movement, the means invented by the maker to prevent the undue liberation of force. But we do not so easily divine, because we do not know so much about the animal machine, that the respirating and circulating movements are the precise natural counterparts of the regulating movements of the timepiece, that they themselves, fed only by a portion of the force they distribute or superintend, have no more means for generating force than have the parts that are under their governance.

Nevertheless, these facts are so; the movements observed in the chest and in the heart itself are but means to an end, means for the regulation of the prime animal forces. Truly by stopping the movements, we can stop the organic motions altogether; but when we stop the pendulum of a clock we, in like manner, bring all the motion of the machine to a standstill.

By the regulating actions of the thorax and heart, nature conserves force, and gives it direction. She strikes a proportion between the amount of blood that shall come to the air surface of the lung, and the amount of air that shall come to the blood surface in given periods of time. By this arrangement the calorific force itself is regulated at its source, the amount of force liberated in the combustion of blood being determined by the combination of air with blood. The balance thus struck during normal conditions is refinedly accurate, the pressure of air and blood being equalised in the extremest degree. On this fineness of balance the continuity of the delicate lung structures, vesicular and capillary, altogether depends.

The natural formula of this balance may be thus expressed — In a given period of time, say one minute, the right side of the heart must so regulate the blood-pressure that there shall be the same pressure of blood on the capillary surface of the lung as there is pressure of air on the vesicular surface; in like manner, in the same time, the thoracic mechanism must so regulate the air pressure in the vesicles that there shall be the same pressure of air on the vesicular surface as there is pressure of blood on the capillary surface.

The balance thus required is regulated, not so much by the number of cardiac or thoracic movements, as by the force of the movements and their equality. But for this provision every irregularity in the motion of the heart or of the thorax would be registered in the lung by lesion of structure. In the act of running this is well expressed. When a man commences to run the heart invariably takes brief precedence of motion, and the sensation of breathlessness is the result. After a short time, if there be a good balance, the breathing movements come abreast of the cardiac, the breathlessness passes off, and the running is easily sustained until the calorific force, the mainspring, fails. In short, for true disturbance of the balance on either the respirating or circulating side, there must necessarily be either direct mechanical obstruction or direct failure on one side.

There are many accidents and many morbid conditions under which this balance, so nicely adjusted, is disturbed; then lesion of the pulmonary mechanism is the immediate result. The lesions thus induced are of two kinds, varying simply according to the side on which the disruption of balance first takes place.

When in any case there is sudden obstruction to the column of air passing along the trachea so that the respirating mechanism cannot bring a sufficient volume of air into the lung, the blood pressure remaining the same, there is at once congestion of lung with blood, and, according to the degree of obstruction, stasis of blood in the lung. If the tracheal obstruction be complete and instantaneous the heart, it is true, may be suddenly paralysed, and the congestion may be indifferently marked; but when there is time for continued action of the heart, even for the space of three or four minutes, then there is invariably congestion.

On the other hand, if the balance of power fail on the side of the circulation, the respirating action being continued, then there is undue injection of the lung tissue with air, rupture of vesicles, and emphysema.

Both of these positions admit of being rigorously demonstrated by direct experiment upon the inferior animals. Both are constantly demonstrated in disease of the human subject. Asphyxia by hanging or by the exudation of plastic matter into the trachea or larynx, illustrates the first position; sudden deposition of fibrin in the right cavities of the heart, and gradual failure of the right side of the heart from degeneration of its walls, illustrate the second position.

These are common examples of break in the balance of the two mechanisms, but there are others not less important.

Sudden exposure of the air surface of the lung to extreme cold may, and often does, break the balance on the respirating side. There is contraction of the air-passages, a rapid abstraction of caloric from blood, and a reduced oxidation of blood. On this, if the heart continue active, and the prime force of the circulation remain sufficiently long, there is extreme congestion, exudation, and what is called pneumonia, or congestive bronchitis.

Sudden paralysis of the heart, as from mental emotion, severe pain, or physical shock will break the balance on the circulating side. In cases of that most painful of affections, cardiac apnœa, we see this effect of disturbed balance painfully demonstrated. The patient, with the respirating mechanism in full vigour, breathes into almost bloodless lungs with nearly certain disruption of structure more or less extended. In one case of sudden death from this affection, I found the bloodless lungs as white as milk, and so infiltrated with air as to distend the chest walls, and to resist being emptied of air by the firmest pressure of the hands.

The balance of the respirating and circulating mechanisms

is disturbed by the agency of various substances, vaporous and soluble, some of which we have in common use. I find that all volatile fluids which have a boiling point as low or lower than the standard temperature of the blood—98° F.—produce, when inhaled, obstruction in the respirating power and therewith extreme congestion of the lung, the pressure exerted by the blood current exhibiting a relative excess of power. On the other hand, volatile fluids having a higher boiling point, say 140° F. or higher, and which produce no effect until they make the round of the circulation tell first upon the heart, and break the balance on the circulating side. Ether and chloroform respectively are perfect representatives of these two classes of volatile fluids. There are other volatile substances, which producing by their inhalation an immediate action on the nervous expanse paralyse the heart instantaneously when inhaled in sufficient quantity, and lead to instant pallor of lung and often to rupture of the vesicles. Nitrite of amyl is the most striking substance of this class.

Substances soluble in the blood act differently, according to their primary effect, on the heart or the muscles of respiration. Tobacco first paralyses the heart and breaks the balance on the circulating side. Opium and woorali paralyse the respirating mechanism first and break the balance on the respirating side.

When once the balance between the respirating and circulating mechanisms is actually broken, death is the inevitable result, and most sudden deaths are due to this break. In time science will possibly show us how to restore the balance in cases where there is no destruction of organs or tissues; but as yet science on this point is almost dumb.

When the balance is not actually broken, but disturbed, danger to life is at once imminent. The disturbance being on the circulating side, and the blood being held in partial stasis, the blood-corpuscles begin to coalesce, the lung structure begins to lose its perfect organisation, and even if the cardiac power is restored, these obstacles to recovery offer serious difficulties. When the balance is disturbed on the respirating side, and the heart is left imperfectly controlled by the air pressure, then there is exudation from the blood into the pulmonary structure, reduced combustion and increasing strain on the thoracic mechanism, with failing prime force to supply it withal. In a word, in the course of disease there is no danger so long as the balance of the respirating and circulating mechanisms is correct; that disturbed there is danger; that broken there is death.

And now the last and great question comes: Can an appreciation of the disturbance of this balance, and of the seat of the derangement, be applied in any case of disease to the wants of practice? I think so.

1. I think there are facts to indicate that when we have before us a clear case of disturbed balance from distinct and continuous obstruction to the entrance of air through the larynx, any attempt to relieve by operation—tracheotomy—must, to be successful, be made very early; and that such operation is vain, when, after long struggling for breath, the lungs are congested, their structure infiltrated with fluid, their blood in languid motion, and the respirating muscles exhausted by incessant labour.

2. I think we may conclude that when in any given case of disease it is clearly discernible that there is a disturbance of balance, from failure of the circulating mechanism, depression of any kind is but an invitation to death.

3. The inference is, I believe, equally clear, that when there is disturbance of balance from failure of the respirating mechanism, a careful depression, even by the abstraction of blood in urgent cases, is the most scientific, as it has often been proved, empirically, to be the most efficient of means for restoring the balance.

4. As experiment teaches us that some volatile fluids having low boiling points, such as ether, tend to reduce the respirating power, and that some volatile fluids having high boiling points, such as chloroform, tend to reduce the circulating power, it were worth testing experience by experiment, in extreme cases, to see if these agents could be used by inhalation as regulators: Ether, in cases where a relatively over-powerful respiration is working with an enfeebled circulation; Chloroform, in cases where a relatively over-powerful circulation is working with an enfeebled or embarrassed respiration.

And, lastly, in prescribing soluble remedies, we might, with advantage, remember their relative values as controllers of the respirating or circulating organs, and select from them according as we may be anxious to regulate the balance between air and blood.

NOTES ON THE DERMATOLOGY OF EGYPT.

By TILBURY FOX, M.D., M.R.C.P.,
Physician to St. John's Hospital for Skin Diseases.

It appeared to me that the English Physician would not unwillingly accept some general remarks, meagre though they may be, touching many points which came under my notice during a recent tour through Egypt and Palestine. For much of the information I am indebted to the eleven years' experience of Dr. Paterson, of Cairo, and, in addition, to the researches of a gentleman, Dr. Pruner Bey, who has paid particular attention to the matter of dermatology. All that came under my notice—and much of it was very interesting—was only corroborative. Upon a general review of matters we have to notice, in the first place, that there are certain peculiarities which diseases of the skin in Egypt exhibit, when compared with those in Europe, the details of which will be given presently. But as regards type, comparative frequency, and causation, they are under the governance of the same laws. The outward evidences differ somewhat, in consequence of the peculiarity of the texture and pigmentation of the derma. The climate, habits, the apparent commingling though separative character from the difference in the religious views, of the masses, possess points of interest. The population is made up of the people of many nations and sects—Wallachians, Greeks, Arabs, Jews, Copts, Europeans, Nubians. Each of these kinds has a different trade, a different mode of life, and many of them very special habits. For example, whilst the Copts and Jews drink freely, the Arabs and Turks are abstemious in this respect. This has its influence. In Egypt, then (simple enough and without entangling circumstances), is an experiment prepared by nature upon her own terms and in her own way, and careful observation alone is needed to give important results—to determine what are the prevalent forms or different modifications which a disease assumes or undergoes, under the influence of different modes of life. In a few years the opportunity may be lost, in consequence of the very rapid change which is coming over the state of society in Egypt. This much is clear—elephantiasis is more common amongst the fish-eating population, the Copts especially. Again, the Arabs and Turks (abstemious) are not so much prone to ulcerative disease as the other folk.

The Influence of Climate.—The skin is much more active in Egypt than in most parts of Europe, and a steady degree of perspiration is observable, but oftentimes the nights are very cold—indeed, there are extremes of temperature which act very efficiently in checking the action of the cutaneous surface, and hence the latter exhibits a disposition to derangement of its function, and to inflammation of an erysipelatous kind. I have observed a difference in Nubia in the state of the thermometer in the *shade* at midday and at night of 45° Fahr. and even 50° Fahr. The air varies in the degree of dryness: sometimes there is humidity; generally, however, it is dry. There is always a very large amount of dust, which contains nitrate of soda in great quantity, and, helped on by the wind, in connexion with the heat and dryness, this acts as a pretty active irritant. Amongst a good many the free use of the hot bath, combined with friction with irritants, has a tendency to cleanse, at the same time that it evokes any latent mischief. The people, it must be remembered, live a great deal in the open air, and many are cleanly. The dryness of the air plays a very important sanitary part in Egypt. Nothing, perhaps, strikes the sanitarian so forcibly in passing through the cities and inhabited spots of the land, as the total want of drainage, the offensiveness of the smell, and the amount of ordure that lies freely about. Dead animals are commonly left to become the food for the many birds of prey, and the masterless, mangy, night-prowling dogs—the natural scavengers of Egypt. No wonder that typhoid fever is very bad and very prevalent in Cairo; the wonder is that plague is not always there. As it is, the inhabitants escape with severe ophthalmia and fevers.

We are wont, and properly so, since the evidence justifies our so doing, to trace a close connexion between diseases of the surface and digestive disorders. The latter are not marked at all amongst the people of Egypt, and to this we may ascribe much of the immunity from great prevalence of skin disease amongst the natives. Highly seasoned dishes, rich pastries, and alcoholic liquors are unused by the majority of the people. No overloaded states of system occur—not overloaded in the sense attached to the term by modern Europeans. Gout is not frequent.

Diet.—The Turks eat oil, meat, vegetables, soup, rice, fowl, lentils, and without spirits or beer. The diet of the mass is unstimulating. The Copts and Jews, as before observed, offering exception to this rule. A decided change may be anticipated in the habits of the people, for the European element is all-powerful and its influence pervading; moreover, cotton is being successfully and freely cultivated, producing a large amount of capital. People have more money, and therefore more supply of necessaries and luxuries, and Dr. Paterson informs me that there is an approximation gradually taking place to the diet of the European. It is to be expected that disease will assume a more sthenic type. At the present time, in the early stages of diseases of an inflammatory type, farinaceous food is found to be most appropriate, though at the same time a moderate amount of stimulant is soon needed. For my own part, I cannot but believe that the preponderance of the vegetable as compared with the animal elements in the food has something tangible to do with the prevention of cutaneous mischief. Then the people eat not white, starchy, but brown, branny bread, thus securing to themselves the natural phosphates and the cerealin, which are of so much importance in aiding assimilation.

In estimating the quality of the health of a community, one places a certain amount of reliance upon the prevalence or absence, more or less, of scrofula and phthisis, considered in the light of guiding or suggestive data. Now, in Egypt phthisis is not common, neither is it rare. Scrofula, on the other hand—that disease which has its seat in the glandular and osseous tissues especially—is pretty frequent, though not severely marked. The mesenteric glands are supposed to be the seat of disease in infants and children, but in Egypt and Nuba we find ample proof that a pot belly well marked by no means indicates mesenteric disease. You see any number of children with enormous bellies. The abdominal distension is often the result of habitual tympanitis in conjunction with worms, and is especially favoured by the vegetable diet which is employed. Rickets is rarer than scrofula, and is seen amongst the superior classes and the mixed races. Dr. Paterson tells me that he has never seen it amongst the Negroes or Fellahs. At first sight one does not exactly see why rickets is more common in the higher orders. Scrofula is common amongst the lower, why not rickets, for the two seem to arise out of pretty much the same conditions? The fact is, the children of the poorer classes undergo a kind of "Spartan" discipline; the dying off of the very delicately formed and the weak amongst the poor, accounts for the absence of many phthisical and rickety children, the latter being carried off by convulsions. Frequently the scrofulous child has a greater amount of resistent power, and survives, in the upper classes; the rickety child is taken more care of, and is reared in consequence; and, indeed, so with the phthisical subject. Scrofula, too, is not *severe*, and consistent with this is the fact that the ulcerative type or aspect of disease is uncommon in Egypt. It is necessary to add that syphilis has not been common or severe up to the present time. Latterly there has been a murrain amongst the cattle, and the average general health has not been quite so good.

Strangers coming to Egypt exhibit a disposition to contract certain diseases; their mode of life in many cases is altered, whilst the dry climate also demands more activity on the part of the skin. Measles and small-pox are two diseases likely to be taken. Dr. Pruner Bey's observations on this point are valuable. Small-pox is specially prevalent at certain times Of late years, however, a diminution in its frequency has taken place, owing, certainly in great measure, to the spread of vaccination. Formerly this was so badly done, and the selection of matter possibly so ill chosen, that not only did it avail little, but indeed seemed to provoke the very thing it was intended to prevent. It was no uncommon thing to bribe the native Doctors, who were ready at all times to accept the offer, and agree to a mutual shirk of the operation. Now, curiously enough, small-pox is rarely confluent. The negroes are most liable to it, and this is nowhere more remarkably displayed than in time of epidemics, for then they are invariably attacked first of all, and in a very marked way. The disease often kills by the occurrence of cerebral congestion before the period of desiccation.

Scarlatina is of pretty common occurrence in Egypt, especially in Cairo, and it is said upon the best authority that it is there never fatal. There is no reason to doubt the general truth of this opinion; the explanation is to be found in the mild quality of the virus, and not any special plan of therapeutics. Erysipelas is very common in consequence of the frequency of checked perspiration and the prevalence of winds. Rubeola is often seen; it has two forms—the one catholic, the other bastard. Europeans are peculiarly liable to be attacked by it, especially Europeans who are passing through Cairo, but the disease is generally of a mild character. Much attention has been excited in England by the prevalence of a bastard form of measles to which the name *Rubeola Notha* has been applied. Opinions differ in regard to its nature. Most Practitioners think it a compound of allied roseolas; now an abortive or erratic rubeola; now roseola annulata; at other times an erythema, etc. It will be interesting to know that this affection has long been known in Egypt. Dr. Pruner observed that a rosy rash is often epidemic, accompanied by a species of convulsive cough, particularly in the badly fed. It mostly exhibits the general aspect of rubeola; at other times it takes the form of a rose rash, and is seen about the face and forearms only. The disease lasts three or four days, is recurrent, and leaves the child perfectly well; but it has little or no premonitory coryza and the like; it is not followed by phthisis. It is no recent disease here, but an old familiar friend, and, like its English ally, it possesses recurrence as its particular feature in a marked degree. It is regarded as an abortive measles. I carefully attempted to discover any circumstance that might in any way confirm or negative the observations and views of Dr. Salisbury as to the fungoid origin of rubeola, but failed.

The negroes and others are very subject to attacks of inflammation of an erysipelatoid nature, and it is a matter of difficulty oftentimes to diagnose between erysipelas and erythema in the dark folk. The result of congestive inflammation of the skin may be described in general terms as producing a coppery colour on a yellowish base. The diagnosis of erythema is made by the seat of disease, the degree of pain, the character of the general symptoms, and other concomitants, rather than the actual eruption. Erythema of the legs is frequently met with; many of the people are constantly standing in the water for washing, water-carrying, etc. Erysipelatous inflammation of the scrotum is often met with in the men who work amongst the lime, and it frequently runs on to gangrene.

Urticaria is a fertile source of discomfort, particularly amongst the Europeans, it is affirmed, who travel far into the country away from the supply of fresh food, and who use as substitutes various kinds of preserved and potted provisions—especially fish. I believe this proposition to be perfectly true. It is scarcely necessary to mention mosquito bites.

Miliary fever is rare, but is not unusually seen as a so-called critical eruption after fevers and acute rheumatism. I saw a most interesting case in Syria; it was at Beyrout, where the air is rather moister than in other parts. A change from a hot dry to the moist air rather tended to check free perspiration at the same time that it was oppressively hot; the consequence was that the whole of the perspiratory glands became enormously distended, and showed upon the surface as beautiful, delicate, minute, white bladders, yet with their orifices plainly visible. The next day the eruption had almost disappeared.

The most common disease of the skin is certainly eczema. In the dark races the erythematous aspect is somewhat altered, as before observed, and in the chronic state, as I have noticed myself, the scales appear very branny and white, probably from contrast with the dark ground. As in England it occurs especially in persons of the most delicate skins, and in those who wear much clothing.

Chronic eczema is observed in those who eat meat, especially if salted, and who drink spirituous liquors. When it attacks the back of the hand or the scrotum, which is often the case, it is very obstinate.

Herpes zoster is by no means rare. Dr. Paterson informs me that in his experience it is common. In negroes it is frequently seen, and passes through its ordinary stages. Acute pemphigus occurs pretty frequently, and attacks children, and even those at the breast. There is no reason to believe in its syphilitic nature. I cannot find out that congenital pemphigus, supposedly of a syphilitic nature, occurs. Rupia is less common, and certainly less dangerous, according to all experience, than in cold climates. It follows acute diseases oftentimes. It is worth recalling the fact that syphilis has never been very prevalent or severe in Egypt.

It is a universal thing for children at the breast to be attacked by an impetiginous eruption, owing most chiefly to

uncleanliness. Dr. Pruner observed that *I. granulata* sought out by preference the Caucasian and Mameluke. Papular diseases are observed especially amongst the negroes, but also in the white folk. Prurigo actually spares none amongst the lower orders; it is evidently due to want of cleanliness. I have never been able to determine for how long a period the same garments are worn. Judging by the swarming of lice and other filthy vermin, one would say they were never changed; and one must be careful not to estimate the amount of cleanliness by the social standing or wealth of the individual. Nothing can be truer than the remark of a Scotch servant—"Well, they're terrible rich, but awfu' lousy." The dark races, on leaving their native parts, too, relinquish their accustomed practice of systematically rubbing into their skin (with or without a certain degree of ablution) a quantity of unguents. It is a very curious circumstance in these people that, before any eruptive manifestation appears, the skin becomes exceedingly dry, and as if covered over by a powdery substance, apparently in a crystalline state, supposed to be fatty and epithelial matter. Prickly heat (*Lichen tropicus*), as might have been expected, is often met with. Its characters have been well and fully described by many observers. It often appears to act as the excitant of other dormant eruptions, so that a mixed result is arrived at. Its great alleviators, medicinally speaking, are Nile water, and Nile mud which is alkaline, and contains a large amount of alluvial matter; and lastly, a vastly popular remedy, the water-melon. It is the custom to rub the skin over with the inside surface of the water-melons, which is a cooling process of the most delicious kind.

Pityriasis is a very common form of disease; but, curiously enough, ichthyosis is rare. Furunculi are abundantly frequent; carbuncle not rare; it attacks the whites and corpulent ones of those who drink. Gangrene is not an unlikely termination. Psoriasis and lepra (*alphos*) appear to be altogether independent of the syphilitic virus; they existed in abundance before syphilis was known. The psoriatic form is more common than the lepraic; the guttate variety preponderates in the Abyssinian.

Pigmentary diseases, curiously enough, are certainly rare. Albinism seems, according to most observers, never to be seen. The negroes always seem to have their *quantum* of colour. I have, however, seen an exception to this rule in a case in which there was a white tuft in the midst of the black hair of a black person.

(To be continued.)

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

THE FEMALE LOCK HOSPITAL.

The Working of the Contagious Diseases Act—The Wards of the Hospital—The State of the Patients admitted—Notes on Treatment—The Out-patient Department.

Anxious to have some exact knowledge of the working of the Contagious Diseases Act, the other day we visited the Female Lock Hospital, to which all the Government patients are sent from Woolwich. The Hospital has been in existence since 1746, and formerly, when the building was in Grosvenor-place, accommodated 100 patients; but since its removal from that locality want of funds has prevented it doing that amount of good such an institution is calculated to effect if adequately supported. It is now subsidised by Government, and as the amount of room has been found insufficient, a large addition is being made to the building. The wards are four in number, situated on two distinct floors, each ward containing about fifteen beds, but from press of Government cases more have been introduced into some of them, so that the number is, for the present, rather above what the size of the wards would seem to warrant. Under the former system the number of patients seldom exceeded thirty-five or forty; the greater portion of these being sent in by the parochial authorities, who partially contributed to the maintenance of the institution. A considerable number even then came from Woolwich; but many of these, finding the Hospital routine rather unpleasant, left before being cured. Now, however, when admitted by the Government examiner's order, they cannot leave until they receive a clean bill of health from the principal Medical officer of the institution. Several who had previously left uncured have since returned under the new regulations, and will, of course, be detained until completely free from "contagious disease."

The modes in which the law may be worked have already been laid before our readers, so that we need say little on the subject. On information being laid that any woman is diseased, a warrant is issued for her examination and, if necessary, for admission into the Hospital. Such cases are admitted into the Hospital any day, but the ordinary patients are only taken in on Thursdays, and the regulations for the two sets are slightly different.

Now, with regard to the effects of this Bill on the health of the women themselves, nothing can be more marked. The great majority of cases brought from Woolwich are of a very simple nature, insomuch that a few days' detention suffices for their cure. The kinds of disease, too, are altered for the better—soft sores, mucous tubercles, or simple gonorrhœa being those usually encountered. But, on turning to the class of cases admitted by governors' orders, we can only characterise them as disgusting in the extreme. Want of funds and want of room compel the governors to reject all but the very worst cases, and what these worst cases are like few have any idea. Again, among the Government patients many are actually unaware of being affected with disease until brought before Dr. Stewart, the Government examiner; and in one particular case, in a woman accused by two men of having given them gonorrhœa, the discharge had scarcely been appreciable. What of the voluntary inmates? Gonorrhœa by itself was unrepresented, and syphilis in its worst forms constituted a mass of cases, having a history extending backwards in some instances for many years, implying, of course, a correspondingly long period of residence in the Hospital before they could be cured.

Some curious facts were elicited on an examination of the Government patients. In almost every one of them there was noticeable that hypertrophy of the external organs of generation which in women usually follows frequent excitation, and in some of them a still more curious condition was observable: this was a dilatation of the urethra to such an extent as to be capable of admitting two or three fingers. Such women are often admitted with a ring of sores round the orifice of this, and there can be but little doubt that the passage had been unnaturally dilated.

Mr. J. R. Lane is at present in charge of the wards of the female Lock. In cases of simple sore he usually employs a lotion of chlorinated soda, or the old black wash, or a preparation which all connected with the Lock speak highly of in such cases, a solution of tartrated iron. Should, however, secondary symptoms make their appearance, he has recourse to that old and much abused remedy, mercury. This drug he gives sometimes by the mouth, sometimes by the skin, as ointment or vapour, and in all he thinks that the effect is very much similar. When, however, the eruption comes out very thickly, and there is consequently much constitutional disturbance, he is inclined to think that the vapour is the best plan of administering the metal. When given by the mouth, he generally orders blue pill with opium, but in the more advanced stages Plummer's pill, or the corrosive sublimate.

We saw a rather interesting case of a woman who had been thoroughly syphilised, but whom Mr. Randall, House-Surgeon, inoculated with some matter from a spreading sore; the consequence was that each of the points took on a similar action, notwithstanding the fact of her being insusceptible to the ordinary virus, but, the woman being in tolerably good health, it was soon arrested.

Mr. George Gascoyen, who at present has charge of the male Lock in-patients, alternates with Mr. Lane in these duties. His treatment of ordinary sores is very similar to that of the latter gentleman. He also uses mercury, and that too in all instances where the sores do not heal kindly. When secondary symptoms make their appearance, provided the patient has had no mercury previously, he always prescribes it, usually in the form of blue pill or grey powder. Should the patient have taken this substance before, he prefers iodide of potassium.

All the gentlemen connected with the Lock Hospital with whom we have talked on the subject believe in the contagious nature of the secondary effects of syphilis, especially in the moist forms of mucous tubercle and condylomata, and that they give rise to sores of a primary kind, but leading in their turn to similar complications.

For the purpose of comparison, we visited the female out-

patient department, at present under the care of Mr. Shillitoe, and we found that on an average there were from thirty to sixty applicants for relief each day, and also that during the past year 2731 fresh cases had been treated, to say nothing of those who had been under treatment before; whilst the number of male out-patients, under Mr. W. J. Coulson, was probably nearly ten times as great. Further, about three-fourths of the female out-patients are professional prostitutes, and probably one-half of them are able to, and probably do, continue their mode of life without any very great inconvenience to themselves, while the disease is in a sufficiently active state to be readily transmissible, although under treatment. Again, although all the cases are not equally bad, there can be no doubt of the fact that there are many worse than any sent from Woolwich, even under the imperfect mode of carrying out the law now practised.

What do all these things teach—the slight and easily curable forms of disease now seen among the Government in-patients, the horrible state of some of the ordinary in-patients, the nature and condition of the female out-patients, the number of male out-patients, to say nothing of those elsewhere treated, and the testimony of military Medical officers as to the improved condition of the men under their care? Surely it favours the opinion of those who say that—when such a system as is now pursued of shutting the door when the steed has been stolen, of examining only women who have communicated the disease, has proved so beneficial, why not at once institute inspection of all known prostitutes, and above all, why limit the Act to a few isolated spots, if it be doing good? and if it can be wrought in these, why should the whole country not partake of like benefits by an extension of the law to other places?

We trust, at any rate, the authorities will see the necessity of fully carrying out the provisions of the Act by instituting periodical examination of *healthy* as well as diseased prostitutes within the military districts, in order that disease may be discovered at the earliest possible period. At present, we believe, the examination is confined to those *suspected* of being diseased.

We are indebted to the able and well-known gentlemen who constitute the staff of these Hospitals for much that is detailed above, and we have particularly to thank Mr. Randall, son of the well-known head of Marylebone Infirmary, and House-Surgeon to the Female Lock Hospital, for much trouble he took in our aid.

UNIVERSITY COLLEGE HOSPITAL.

CASES ILLUSTRATING THE USE OF THE SPHYGMOGRAPH IN MEDICAL PRACTICE.

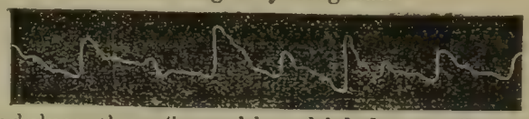
(Under the care of Dr. WILSON FOX.)

The following cases belonging to different classes of disease, under the care of Dr. Wilson Fox, where Marey's sphygmograph (an instrument first introduced into Medical practice by Dr. Anstie and Dr. Sanderson, and which has received some improvements from Mr. Berkeley Hill) was employed to register the character of the pulse, are interesting, as showing the value of this instrument—among other advantages, in testing the effects of treatment.

Case 1.—*Emphysema—Bronchitis—Consolidation of Lung—Cardiac Dilatation, with probable Fatty Degeneration—Relief by Digitalis.*

J. D., a blacksmith, admitted University College Hospital, August 17, 1866. Family history generally good, but some members have suffered from asthma. Patient has suffered habitually from shortness of breath, which became worse in January, 1866, and he has been unable to work since. Four months ago his legs began to swell, chiefly in day time, the œdema disappearing at night.

State on Admission.—Feeling of tightness across chest, but no pain; little cough; face somewhat cyanotic; no marked anæmia; shoulders high; chest barrel-shaped, expansion deficient. Percussion note generally hyper-resonant, but there is dulness in the right supraspinous fossa, and at the right base below angle of scapula. Inspiration in left back weak, expiration prolonged; both attended with sibilant and sonorous râles. Right base, respiration weak, not bronchial; medium sized, and some small crepitant râles heard with respiration; vocal respiration and fremitus exaggerated at right base. Respiration under right clavicle bronchial; a little coarse, distant, moist râle in axillary and mammary regions of this side. Cardiac dulness commences to left of sternum, and superiorly at lower border of fourth rib, only two inches of heart uncovered transversely by lung; apex beat very weak and indistinct, most evident in fifth and sixth interspace one inch below, and half-inch outside nipple; no epigastric pulsation. No murmurs at base or apex. Jugular veins much distended, do not pulsate or fill from below. Brachial artery visible and tortuous; pulse jerking and irregular, but complete intermissions are very rare. On listening to the heart, complete intermissions are heard with nearly every third beat, to which no corresponding intermission of the pulse can be felt, only one complete intermission of the latter being counted in sixty beats. A tracing with the sphygmograph shows a sudden filling of the artery, then a sharp recoil followed by a feeble impulse, the whole contraction of the artery in the diastole being very irregular.



Liver dulness three fingers' breadth below cartilage of eighth rib reaches fifth rib in mammary region. Urine scanty, 1007, contains a trace of albumen; no casts.

Dr. Fox's diagnosis in this case was that the primary disease was emphysema of the lungs; that it had been followed by dilated heart; and that this organ was probably in a medium degree of fatty degeneration, as shown by the feeble impulse, which, together with the dilatation, produced the sudden filling of the artery, the rapid recoil of which was due partly to this cause and partly to its rigidity from atheroma—a condition in which it was probable that the aorta also participated. That this phenomenon was, however, in some degree due to the weakness of the cardiac action is shown by its improvement under the effects of treatment.

The plan followed was to relieve the congestion of the liver, and promote the secretion of urine by pil. hydrarg. gr. v., pulv. scillæ gr. iij. o. n.; and with a view to increase the heart's power, Dr. Fox ordered infusion of digitalis, remarking that this was one of the cases in which the administration of that drug is found peculiarly beneficial, acting as a stimulant on the cardiac nerves, and thus moderating the irregularity and excessive rapidity of its action arising from the dilatation of its cavities and the impaired nutrition of its fibres.

In three days the dulness at the right base had almost entirely disappeared. In five days all traces of albumen had disappeared from the urine, and the heart had become more regular, and the pulse completely changed, presenting a full strong beat, with occasional intermissions, followed by five or six rapid beats. Second sound now heard reduplicate at base. The dose of digitalis to be diminished to 5ij. of infusion. Having greatly improved by September 1, he was discharged.

On September 17, he was readmitted with a fresh severe attack of bronchitis, and the albumen had again reappeared in the urine. There was, however, no œdema, and no return of the consolidation of the right base. The heart's condition still showed some intermissions. There was no murmur; but the pulse, as taken by the sphygmograph, though indicating great general weakness, as shown by the very slight elevation, does not exhibit the same degree of irregularity as was manifested on the patient's first admission.

He was treated by Dr. Fox with occasional doses of pulv. jalapæ co. and a mixture containing carbonate of ammonia, vin. ipecac., dec. senegæ, and infus. digitalis; with counter-irritation to the chest. His cough gradually improved until October 10, when all râles had disappeared from the lungs, and scarcely any intermissions were observable in the pulse. The accompanying tracing shows the change in its character:

Case 2.—*Acute Pleuro-Pneumonia extending—Rapid Resolution under the Use of Stimulants.*

The following case is one in which the sphygmograph and the thermometer simultaneously indicated the beneficial effects of the change from a depressing to a stimulating plan of treat-

ment in a case of acute sthenic pleuro-pneumonia. The patient, aged 30 years, who had always been somewhat "delicate" in his chest, and who, as it transpired afterwards, though not known on admission, had been until recently a hard drinker, got wet through on September 13, and four days subsequently was attacked by severe rigor and pain in the side, for which he was admitted on the same day, September 17. When seen by the Physician's assistant, the right base was found consolidated in its lower fourth, and he was ordered ant. pot.-tart. ¼ gr., with liq. amm. acetat. ʒss. 4tis horis. When seen on the 21st by Dr. Fox, the right side was found consolidated from the fifth rib in the axillary region, and from the spine of the scapula posteriorly, to the base, the respiration over the dull region being bronchial in some places, harsh blowing in others, and attended with fine crepitation. The vocal resonance was increased. The sputa were frothy and tenacious, and of a rusty tinge.

On the 22nd an herpetic eruption appeared about the lips and nose. On this day dulness was found in the left infra-clavicular region and supra spinous fossa, both of which had been tested on the previous day as healthy, and in both these places there was bronchial breathing; the sputa were still tenacious and rusty; the tongue thickly furred. To omit the antimony.

On the 24th a trace of albumen appeared in the urine; look of great prostration; pulse full and weak, and very compressible; crepitation over whole right back; dulness in left side, as before; to have brandy ʒij. every hour, and amm. carb. gr. iij. 4tis horis. Began brandy at 8 p.m. on 24th; slept well all night; on the following day dyspnœa was much diminished.

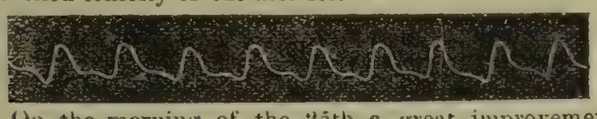
26th.—Skin natural; dulness in right side only reaches to seventh interspace in axilla; that on left has almost entirely disappeared. Respiration: Right base weak, but healthy in tone; a little fine crepitation and some friction on forced breathing.

28th.—Dulness in right back does not extend above tenth rib, in axilla to seventh. Some coarse friction in mammary region. Sputa muco-purulent, but viscid, pigmented.

The respiration continued somewhat weak in right back until the date of his discharge, on October 8, when he insisted on leaving the Hospital, feeling quite well.

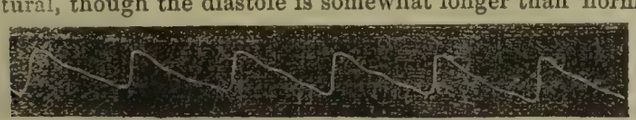
The following tracings show:—

1. The pulse on the evening of the 24th, before stimulants were commenced, indicating by the rapid filling, the sudden recoil, and long pause, the weakness of the heart and the diminished tonicity of the arteries.



2. On the morning of the 25th a great improvement is already seen to have taken place in the more equable character of the diastole, though some traces of the rapid recoil are still observed.

In the third tracing, on September 27, or three days after the commencement of the stimulants, the state is nearly natural, though the diastole is somewhat longer than normal.



The accompanying table of the temperatures, together with the ratios of the pulse and respiration, equally indicate the improvement in the patient's condition after the adoption of stimulants. The sudden fall of the temperature, coincidentally with the rapid revolution of the pneumonia, which up to that period had been extending in both lungs, is very instructive, and scarcely needs any further comment. It will be observed that in the subsequent apyretic period the temperature fell to a degree lower than the normal standard, gradually rising to the latter as the patient regained his strength.

	Temperature.	Pulse.	Respiration.
Sept. 19, even.	. 102	96	30
,, 20, morn.	. 104	104	32
,, 20, even.	. 102⅘	96	36
,, 21, morn.	. 102⅕	96	32
,, 21, even.	. 103⅕	96	36
,, 22, morn.	. 103⅖	96	36
,, 22, even.	. 102⅖	96	36
,, 23, morn.	. 103¾	102	42
,, 24, morn.	. 104⅕	110	40
,, 24, even.	. 102⅘	102	48 (Began to take brandy.
,, 25, morn.	. 99	96	24
,, 25, even.	. 98⅖	90	30
,, 26, morn.	. 97⅘	84	24
,, 26, even.	. 98⅖	72	32
,, 27, morn.	. 98⅕	72	30
,, 27, even.	. 98⅖	72	30
,, 28, morn.	. 98	84	24
,, 28, even.	. 98⅕	84	30
,, 29 . .	. 98	84	24
,, 30 . .	. 98⅖	78	22
,, 30, even.	. 99⅕	72	84
Oct. 1 . .	. 99	78	24

THE MIDDLESEX HOSPITAL.

PERICARDITIS, ENDOCARDITIS, PLEURISY, PERITONITIS, INTERNAL HÆMORRHAGES, ETC., IN A BOY TEN YEARS OF AGE.

(Case under the care of Dr. MURCHISON.)

This case was of great interest in many points of view, and especially as regards diagnosis. As Dr. Murchison pointed out, the case, on the patient's first admission, and before his history was known, might readily have been mistaken for one of typhoid fever, the cardiac bellows murmur being regarded as the result of some antecedent lesion. The previous history and subsequent progress, however, excluded entirely this view of the case; but, with all the facts before us, there was still some difficulty in arriving at its real pathology. Two explanations appeared open. The first was, that the case was one of rheumatism, with pericarditis, endocarditis, and inflammations of the other serous membranes, and that the appearances found in the kidneys, and perhaps also the hæmorrhages on the surface of the brain, were due to embolism. The enlargement of the spleen, on this view, might be attributed to the obstructed circulation through the heart. Opposed to this view were the early development of cerebral symptoms and the absence of any articular affection, or of any previous history of rheumatism, although, on the other hand, the appearances presented by both the pericardium and the mitral valves indicated previous diseases of these parts. The other supposition was that the early rigors, the inflammation of the pericardium and endocardium, and of the serous membranes, the enlarged spleen, the deposits in the kidneys, the extravasations of blood, and the miliary eruptions on the skin, were due to acute idiopathic pyæmia, opposed to which was the absence of the usual symptoms and of any of the usual causes of pyæmia. On the whole, the symptoms and post-mortem appearances pointed to some form of blood-poisoning like that which occurs in pyæmia.

James T., aged 10, was admitted into the Middlesex Hospital on October 25, 1866. According to his mother's statement, the boy had never suffered from rheumatism or shortness of breath, and he had been in his usual health up to the 21st, when he complained of headache, was sick and vomited, and had several rigors with great prostration. On the 22nd he was very heavy and drowsy, and during the following night he was delirious. On the nights of the 23rd and 24th, he slept none, and was very delirious. The vomiting recurred at intervals, but the bowels had not acted since the day before his illness.

On admission the boy was very prostrate, and in a heavy stupid condition. He was constantly moaning and picking the bed-clothes. The eyelids were not closed, but the eyeballs were turned up, and the pupils were rather small. The pulse was 110. The cardiac dulness was normal, but the impulse was strong, and there was a prolonged systolic bellows murmur, loudest over the apex of the heart, but distinctly heard over the whole of the chest, back and front. The respirations were 24, and the only abnormal sound presented by the lungs was a few moist bronchial râles posteriorly. The lips were dry, cracked, and bleeding; the teeth were coated with sordes; the tongue was moist, red, and with a white fur; the abdomen was full, but not tender or fluctuating. The skin was hot and dry (temperature 101·2° Fahr.), but

there was no eruption. There was no pain or swelling in any of the joints, and the urine was free from albumen. The treatment consisted in nitro-hydrochloric acid, with chlorate of potash and nitric ether, brandy, beef-tea, and milk; a simple enema to clear out the bowels, sinapisms to the back of the neck, etc.

On October 29, or the ninth day, the boy was worse. He was scarcely conscious, and the pupils were dilated and inactive. The pulse varied from 128 to 140; the systolic bellows murmur was as loud as ever; the temperature was 103·4°; the tongue was still moist, but the abdomen was more distended, and gave distinct indications of tenderness, while the respirations were thoracic. The bowels had acted once after the enema, but continued costive. The urine had been examined daily since the boy's admission, but never yielded a trace of albumen.

On October 30, friction was heard over both lungs; there was difficulty of deglutition; the pupils were very dilated and insensible; and the urine was passed involuntarily. A few miliary vesicles and small papules were scattered over different parts of the body, but chiefly on the arms and legs. The tongue soon became dry and brown, and the prostration and stupor rapidly increased until the patient's death, on October 31, or the eleventh day of his illness.

On post-mortem examination, no ecchymosis or sign of injury could be discovered about the scalp or cranial bones, but beneath the arachnoid covering the left hemisphere of the brain was an extensive extravasation of blood, three or four inches in diameter, and about three lines in thickness, dipping down between the convolutions. There were also several smaller patches of extravasation over both hemispheres, both on the convex surface and also on the opposed surfaces of the longitudinal fissure. The brain in other respects was normal. There was no tubercle, and nothing unusual could be discovered in the arteries at the base. On the anterior surface of the heart was a white patch larger than a shilling, and at the apex of the left ventricle was a firm band of adhesion (evidently old). There were also a few adherent flakes of soft recent lymph, both in front and at the back of the heart. The mitral valves were considerably thickened and rigid, and loosely attached to their auricular surface were several soft vegetations larger than peas. Both sides of the heart contained firm white adherent coagula. There were firm adhesions over the back of the left lung, and the surfaces of both lungs were coated with a thin membranous layer of recent lymph, with numerous minute sub-pleural ecchymoses, but no consolidation of the pulmonary tissue. The peritoneal cavity contained no fluid; but the spleen, the upper surface of the liver, and the under surface of the diaphragm, were coated with a membranous layer of recent lymph. The intestinal and mesenteric glands were healthy, but the spleen was large and firm, and weighed nine ounces. Both kidneys were studded with numerous firm opaque yellow deposits, varying in size from a pin's head to a pea, and each surrounded with an injected rim of renal tissue; in other respects these organs were healthy. Careful examination failed to reveal any wound or solution of continuity of any part of the surface of the body.

THE LONDON HOSPITAL.

AMPUTATION AT THE HIP-JOINT FOR CARCINOMATOUS DISEASE.

(Under the care of Mr. COUPER.)

On Saturday Mr. Couper amputated the left lower extremity of a man, aged 22, at the hip-joint for the removal of a large tumour involving nearly the whole of the left femur. The abdominal aorta was most successfully compressed by means of Lister's abdominal tourniquet. There was not any more hæmorrhage than during an ordinary amputation through the thigh; perhaps not so much. An assistant was prepared to compress the artery in the anterior flap if necessary, but this was not needed. Mr. Couper first of all passed his knife deeply across the front of the joint, and then cut downwards and forwards, making an anterior flap and exposing the head of the bone at once. The femur was then abducted and everted, the capsule cut across, and a posterior flap made. The operation took a remarkably short time, each step being performed with great ease and dexterity, and yet very deliberately.

Mr. Couper afterwards remarked that the man had first come under his notice last spring with a slight enlargement of the lower end of the femur, which he regarded as periosteal, and treated with mercurial inunction (Scott's dressing), but the man only attended a few times, and he lost sight of him till about three months ago, when he applied again. The tumour now involved the lower half of the femur, and there could be little doubt as to its being of a malignant nature. Amputation was advised, but he would not consent, and went out of the Hospital. He was again admitted a few days ago, the tumour having so rapidly increased in the meanwhile that amputation at the hip-joint was the only remedy, and after some delay the patient consented. He was very much reduced by the constant pain, but not truly cachectic, and the glands in the groin were not enlarged.

The specimen is to be sent to the College of Surgeons, and no examination was made at the time, but the rapid growth, its great size, about that of two adult heads, the large veins on its surface, and the discoloration, sufficiently indicated its character.

Mr. Couper also stated (on the authority of Mr. Curling) that this was the sixth amputation at the hip-joint which had been performed at this Hospital during the last century—one by Mr. Thompson, the first amputation at the hip on record—three by Mr. Curling, one by Mr. Adams, and the present one; but Dr. Woodman and several other gentlemen at once thought of others—one by Mr. Little (last September), another by Mr. Ward, and the number soon amounted to nine, and probably there are still more. Up to the time of going to press the case had progressed quite favourably.

A CASE OF ACUTE HYDROPHOBIA ONE MONTH AFTER A BITE FROM A DOG.

(Under the care of Mr. HUTCHINSON.)

In our last report (see p. 60) we mentioned the case of a boy, aged 4, who was admitted for a severe dog-bite of the cheek. Mr. Little pared the edges of the wound, and brought them together with hare-lip pins. The wound healed fairly, and the boy was made an out-patient. On Tuesday afternoon, the thirty-fourth day after the injury, he was re-admitted, under Mr. Hutchinson's care, with well-marked symptoms of hydrophobia, and died twenty-four hours afterwards. The autopsy will be to-day (Thursday). We believe the case will be made the subject of a clinical lecture by Mr. Hutchinson.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0

Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.

Post-office Orders and Drafts on Army or Navy Agents, should be made in favour of Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d. | A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d. | A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, FEBRUARY 2, 1867.

FACTS AND FIGURES.

Go into the City every working-day out of the 365; take your stand at the corner of that little alley whose mouth opens at the point of junction of Broad-street with Threadneedle-street; put every broker who flits in and out upon his oath, and you will find that not one of them has ever bought stock, share, or debenture, with any money that was made by lecturing on Anatomy or Physic. It is not that Medicinemen are not rich; as a craft, they get well paid. But there is all the difference between the potter and the porcelain. Palissy's fingers turned clay into gold, but he could not feed his children. So you may now spend your life in training

up Watsons, or Lawrences, or millionnaire apothecaries, and die, after all, a penniless grinder. Teaching Physic does not pay, and you had better take to manufacturing pipe-lights or curing red herrings if you wish to live by your wits. It ought not to be so, and it would not be so if things had their natural course, any more than is the case with the production of other rare and choice works of art or skill. There is about the same demand for chronometers as for Doctors. But ask Dent or Arnold whether he would be satisfied with the pittance of a Medical lecturer. Beggars seldom count their pence as rich men do, and we dare say that Medical lecturers, reckless as beggars, hardly know what money they get or what work they do for their money. Let us look at the figures for them and see how things stand. Therein if we find neither lays nor legends, "mirth and marvels" will not be wanting among the facts.

The sum and substance of the matter is this. A certain number of Medical students have to be milled into examinees, and then passed through the licensing sieves into the market for general consumption. There are ways and means of doing this; so much work to be done, so many men to do it—so much money to be paid, so many men to pay it. Our facts and figures have reference to these classes.

It appears from published statements that within seventeen years no less than 6183 men have "entered" themselves in London as Medical students, giving a yearly average, as nearly as possible, of 363. But there has been a falling off from these numbers during the last ten years, the total entries for that time being only 3528, with an average of 353 per year. We shall take these ten years as the basis of our calculations and what we have to say. The recognised work to be done as Medical education is to convert this bulk of raw material into licensed Physicians, Surgeons, and Apothecaries, in a way and time rigidly marked out by the curriculum of the licensing bodies. But as some of the 353 yearly takers of licences to practise are also aspirants for the honours of the Profession in the shape of degrees and fellowships, and these honours require more elaborate training than is necessary for the mere licence, provision has to be made for such extra teaching. The curriculum, however, for the licence of an ordinary Practitioner ordains about three years as the time of study, and it requires of each candidate attendance upon about 1225 sixty-minute lectures, in courses, upon twelve specified subjects, each to be heard in a certain order, and at one or other of a given number of "recognised schools." At these schools also an indefinite number of other lectures, supposed to be "clinical," must be taken in conjunction with so many months of what used to be called "walking the Hospitals"—that is, going round the wards, looking, listening, dressing, and clerking. According to this, it seems that the actual estimate for bringing men into the condition for passing the standard gauges involves at least 102 working days, of 12 hours, incessant regular grinding, with an unascertained amount of irregular clinical polishing.

Now, what is the apparatus employed in doing this work? For be it observed that the product, according to Council law, is to be made in batches, or lecture classes, and so rolled into shape in lots, like pills in a machine, and not twirled and moulded one by one, artistically, by the fingers of experts. Advertisements and prospectuses reveal to us the existence of no less than eleven schools or colleges attached to Hospitals, or with Hospitals attached. These have an aggregate staff of about 132 lecturers on the twelve subjects marked for examination, with a tail of some 110 supernumeraries, who do, or will when two or three can be gathered together, lecture on other ten subjects outside the curriculum to the "germinal matter" of the future F.'s and M.D.'s of the Profession. We find that every year as many as 8750 lectures are delivered at all the schools to the 1000 and odd students therein assembled. About 550 of these are given during the winter session, and 250 during the summer session, at each school; and each lecturer has some thirty-six and a-half lectures falling to him as his share of the yearly turn of the treadmill. To hear all this, each school on an average musters every 1st of October a new squad of about thirty-two men, and has an average attendance of some ninety-six new and old. Taking the schools altogether, the lecturers number, in proportion to the students, about one to four and a-third; but, in some of the smaller establishments, every two students get a professor to themselves.

There are two questions we may well ask as to the result of all this over-lecturing and waste of time and intellectual strength. The first—What ought it to be?—every man may answer for himself. The second—What is it?—we may refer to Dr. Parkes and the rest of the Army and Navy Examiners. Sorry consummation this of the working of a 240-professorial power when directed to the elaboration of a curriculum and the rough-hewing of collegiate and company standard doctors. But what else can be expected? Ordinary students know very well that not much is wanted of them, and that, provided they can get their certificates by flattering punctuality in opening their note-books, they may dream or whittle away the weary hours of recognised talk in the confident assurance that two or three months' cram at last with the convenient College tutor or the regular grinder will make all safe for them. As for the teachers, they also have their know. What is the use of making bull's-eyes when hits on the white will fill up the score and satisfy the boards? What strain or pull on any man's nerves will alter the relative position of the schools? How can Charing-cross or the Westminster compete with Guy's or Bartholomew's, except on the Dutch auction system? And that has been done to the last penny. Who will care to give better lectures outside recognition than they do inside? And, after all, what is the pay? Modesty, or something else, forbids that it should be marked on the tickets or posted on the doors; but simple division gives us the figure—4¼d.! "Admission to each lecture fourpence-halfpenny!" That is the dismal demand. A fourpenny-bit may make a crossing-sweeper touch his hat to a passenger; but how will the sight of it, even with the odd copper, affect the nerves of a Professor of Medicine or Surgery? We shall be told that this is fiction. Figures, however, declare the fact. Test them. The gross amount of fees charged at all the eleven schools in 1866 is £995 2s. 6d. The average fee at each of these eleven schools is £90 9s. 4d. The gross receipts at all the eleven schools for the ten years under review, calculated on this scale, tell up to the sum of £319,284. The average receipts per year at all the eleven schools are £31,946 10s.; and, at each of the eleven, £2904. A fair estimate allows one-half (it is really more) of the gross fees for Hospital charges and working expenses, so that about £16,000 a year are taken at all the schools for lectures only. This allows, as the share of each school, say, £1450. For such sum nearly 800 lectures are delivered. The lecturers ought, if all the cash were available for division, to get one pound sixteen shillings and sixpence for each of them. The ninety-sixth part of six and thirty shillings and sixpence is, as near as possible, fourpence-halfpenny. If this is the average all round, what must be the actual price of admission at some of the small schools? Shall we pry further into the mysteries of penny theatres? Better pause at the anticlimax. Were we not justified in saying that Medical teaching is neither honourable nor profitable?

SMALL-POX.

London—some districts more than others—is just now suffering from the extension of a disease which, always present amongst its population, has claimed during several weeks past a considerable number of victims, and disfigured more or less the good looks of a still larger proportion. Ever since cholera declined small-pox has been spreading. 240 deaths from

small-pox have been registered within the last seven weeks. We do not suppose that there is any other relation between these events than between the sequences of other diseases which one after another prevail amongst us. Our object now is simply to ask what steps are being taken to prevent the spread of the malady above all, perhaps, the most easily guarded against; what appliances there are for effecting this object? In our last number we reprinted Dr. Ballard's report upon the subject to the Islington Vestry. He tells them in almost as many words that both they and the guardians of the poor in that parish have neglected an obvious duty, and calls upon both to perform it. Dr. Whitmore, of Marylebone, makes suggestions somewhat similar, and other Health Officers have not been remiss in urging their respective Boards to greater exertions. The special points of amendment which Dr. Ballard dwells upon are the improvement of the vaccination arrangements and the provision of proper means for disinfection. No doubt, imperfect as the vaccination of the lower classes is, we should be in a very much worse position if there were no public vaccination at all; but we might be much better off than we are if Boards of Guardians were more impressed by their responsibility. In the first place, there are in London even now a number of children who have been permitted to grow up and enter the national and other schools upon whom not the slightest care has been bestowed with a view to protect them from attacks of small-pox. Adults innumerable enter London every year similarly unprotected, and there is a still larger proportion of persons in whom the protective influence of vaccination has worn out by lapse of time, and whom Boards of Guardians do not think it worth while to trouble themselves about at all. Again, we are sorry to have occasion to add that there is amongst all classes of the population a vast deal of very shabby vaccination—vaccination so badly performed, with lymph badly selected, and inoculated into so few spots, that on examining the arm a few years afterwards nothing can be seen but a miserable flat white speck or two, which no Medical man who knows anything of small-pox can regard as protective. Drs. Seaton and Buchanan during their inspections of charitable schools in London, found as many as 59 in every 1000 children without any scars of vaccination at all, and only 180 per 1000 who were protected as they ought to have been by the vaccination that they had undergone. We do not dwell upon this part of our subject, but shall dismiss it with the remark that the Profession itself must take some part of the blame for the discredit thrown at various times, and in high places sometimes, upon the efficacy of vaccination. Still, there are the wholly unvaccinated to be accounted for. It cannot be said that the law will not reach them. Vaccination is an operation which the Legislature says shall be undergone effectually, under penalties to be inflicted upon the guardians of children. Why, then, are not these penalties sought for? It would only be necessary in each district to make a few examples, and to advertise the convictions as convictions for non-payment of fares, etc., are advertised at railway stations, to give a salutary lesson to negligent and obstinate parents. Again, why do not Boards of Guardians require their vaccinators to search out unvaccinated children, as well as to vaccinate such as may be brought to their houses? Surely, it is not too much to require that public officers such as they should be made responsible for the offer of vaccination, at any rate, to every unprotected child in their district? Can it be that the Boards in question fear that the expense of thus employing active vaccinators would be too great?—that, after all, Parliament may be asked to give some central authority control over this as well as other sanitary matters, because local authorities will not act up to their powers, on account of the money which must be laid out in doing so?

So much for shielding our population against the operation of the virus of smallpox, but science tells us that the virus itself may be destroyed. Why is no attempt made to destroy it? and why is not the virus thrown off from fever and scarlatina patients also, against which we can offer no similar protection, followed into its lurking places, and rendered harmless? Dr. Ballard reminds his Vestry that this is not the first time he has asked for material aid to carry out such necessary disinfections, although, perhaps, he may have failed to put the suggestion to them so pointedly and so forcibly as now. What is the use of the Legislature requiring health officers to be appointed to advise, if their recommendations are not to be heeded, or merely to be accepted as an expression of opinion which the Boards they are addressed to have no manner of concern with? Through the watchfulness of the Metropolitan Association of Medical Officers of Health, a clause was inserted into the Sanitary Act empowering local authorities to provide the means of disinfection of woollen articles, bedding, &c., for the poor and rich alike. How many parishes in the metropolis, we should like to know, have availed themselves of the power? And yet, until such means are provided, the mere disinfection of rooms and houses, which landlords can be called upon to carry out, is merely labour in vain. We have heard that in former epidemics one parish at least has paid as much as three guineas for every patient sent to the Small-pox Hospital; for anything we know to the contrary, a similar tariff may prevail now. If the provision of a proper means of disinfection by heat be really only one of expense, let us ask how many such three guineas would go to render such payment unnecessary, and save life and disfigurement into the bargain? We should also like to know whether a solitary cabman has yet been summoned by the police authorities for permitting his vehicle to be used without being disinfected after conveying persons with small-pox or fever. In spite of the law, cabs are still used for the conveyance of small-pox and fever patients. In one instance not long ago, information of the offence was forwarded to Sir Richard Mayne by the health officer under whose observation it occurred, with a suggestion that a notice calling attention to the 25th and 38th sections of the Sanitary Act should be posted up at every cab-stand. Perhaps the dignitary in question considered such a proposal involved too great a stretch of arbitrary power, for no attention was paid to the suggestion. What on earth is the use even of compulsory legislation when the persons to whom is entrusted the execution of the statutes are so lukewarm as to permit them to remain unenforced? Another question suggested by Dr. Ballard's report we should also like to ask, namely, whether any, and what, means are employed at the Small-pox and Fever Hospitals for disinfecting the clothing of persons discharged from those establishments. We fear it is too true that discharged patients have carried the germs of small-pox and fever with them from these Hospitals, and have infected others in the houses whither they have gone to reside. In what stage of convalescence are the persons themselves discharged? We are quite prepared to be told that these are institutions for the cure of the sick, and not for the prevention of disease, and that they accomplish their end if a proportion of persons who would have otherwise died are saved alive by removal thither; that they are supported imperfectly by voluntary subscriptions; and that the funds at their disposal are not such as to permit the extension of their plans. Such an answer would be only an additional reason for taking such Hospitals under State control. We hear there is a project of this kind on foot as regards the Fever Hospital.

One word more about our national statistics of vaccination, and we have done for the present. Nothing can be more useless for any purpose—nor, indeed, more delusive—than the records now kept. For Parliamentary purposes it may be necessary to learn what proportion of the children whose births are registered have been effectually vaccinated. But then certificates of vaccination are not always given, and of those that are given by Medical men only incomplete returns are made to the Registrars of Births. Then, for sanitary pur-

poses, a health officer would desire to learn the names and addresses of the unvaccinated children in his district, and would naturally consult the local register; but he also is met by the same difficulty as a Parliamentary inquirer, and with another obstacle also. For, in the first place, it is not *all* births that are registered at all. The registration of birth gives certain advantages in the event of disputes arising as to parentage, inheritance, succession to property, and so on; but it may be neglected by parents with impunity, and is neglected to a considerable extent among certain of the poor, who, if their children are baptised, think it a work of supererogation to register them, or, if they are registered, to have them baptised. The first reform that is requisite is to make the registration of all births compulsory. A further difficulty is that returns of vaccination are not made necessarily to the registrar who recorded the birth. A child may be born in one registration sub-district, and vaccinated in another, and it is to the registrar of the other district that the vaccination return is made. Some arrangement, then, is necessary by which the two registers—that of birth and that of vaccination—should be made to correspond, so that an inquirer might see in a glance who the yet unvaccinated children in his own district are.

THE WEEK.

THE HARVEIAN SOCIETY AND INFANTICIDE.

On Monday last a deputation from the Harveian Society waited on Mr. Secretary Walpole to urge on the Government the recommendations for the diminution of infanticide drawn up by a Committee of the Society, on which we commented in our number for January 12. We regret to see that these recommendations have been in no degree modified, as we regard many of them as simply impracticable. However good some of the recommendations may be in the abstract, they are all founded on what we believe to be an erroneous view of the causes of infanticide. The Committee of the Harveian Society evidently regard poverty as the chief cause of this crime, and all their measures are intended to obviate it. We, on the contrary, conceive that shame is a more common cause than poverty, and we therefore believe that the main root of the evil would be left untouched were the recommendations of the Committee made law by Parliament. Mr. Walpole, in dismissing the Committee, informed them that a Bill, based on the recommendations of the Capital Punishment Commissioners for Abolishing the Punishment of Death in cases of Infanticide, would be introduced in the next session of Parliament. On the propriety of this there can be no question. He very wisely, we think, declined giving any further pledges, but intimated his readiness to receive any statistical information that the Committee may be able to give.

THE NEW INSTITUTION FOR THE TREATMENT OF HIP DISEASE.

We have received from one of the Ladies' Committee a programme of the New Hospital—or, as the Committee prefer to call it, "House of Relief"—for Children with Chronic Diseases of the Joints, which is to be opened at 19, Queen-square, W.C. The Committee state that diseases of the joints abound amongst the children of the poor, and that chronic and tedious cases are necessarily turned away from the London Hospitals, and that a large number of these cases, especially those of hip disease, are curable. This may be, and doubtless is, true, but we should have supposed that such cases might with propriety have been received at one or other of the Orthopædic Hospitals, or that the money to be spent in this institution might have been expended in adding to the already existent Hospitals special wards for the treatment of the joint affections of children. In our opinion, to erect hip disease into a specialty, by a special institution for its treatment, is a mistake on the part of the charitable, and is injurious to the best interests of the Medical Profession. At all events, if the thing is to go on, we hope that proper care will be taken that those only be admitted whose parents are utterly unable to pay for Medical or Surgical advice, and that the institution be not paraded as an inducement to the lower, middle, and working classes to throw their sick children on charity, to the injury of the Practitioner of Medicine, and the loss of their own independence and self-reliance.

LECTURES ON SKIN DISEASE.

The course of lectures on diseases of the skin and syphilis, undertaken by Mr. Hutchinson at the Blackfriars Hospital, was commenced on Monday. The first lecture dealt with the general aspects of the subject, definitions of terms, use and abuse of systems of classification, etc. The lecturer insisted, in reference to the latter subject, that all the old methods of classification were useless or worse, inasmuch as they attempted to group mere appearances which might be due to very different causes. He insisted that the only useful classification was of causes, not of results. At the second lecture, on Tuesday, the chief causes of skin diseases were enumerated and briefly described, and the anatomy of the skin and the anatomical seats of the various eruptions were considered. These two lectures were, therefore, both of them introductory. On Monday next Mr. Hutchinson will commence the more practical part of the course. The lectures are well illustrated by diagrams, and are delivered in the library of the institution, which contains a good collection of plates, drawings, and atlases.

"SUPPORTED BY VOLUNTARY CONTRIBUTIONS."

It is quite true that we can't make men sober by Act of Parliament, but it is certainly true that we can diminish drunkenness of certain kinds. To this end we highly commend the efforts now making to abridge the hours during which ginshops shall be open, especially on Sundays. A singular inconsistency exists in the fact that the class of society which maintain magnificent ginshops, yet come on other classes for medicine, medical comforts, and assistance of all sorts.

ST. PANCRAS.

This populous and opulent parish advertises for a resident Medical officer at a salary of £85, with the liberal (?) inducement of an increase of £5 every two years! Where is the mercantile firm who would offer so paltry an increase for effective services?—£5 every two years!

THE ROTHERHAM DISPENSARY.

Dr. H. D'O. Foote has sent us an extract from a Rotherham paper containing a letter from himself to the editor in answer to the letter of the late Medical staff of the Rotherham Dispensary, which we published last week. It appears to us that, admitting it was advisable for the benefit of the poor and for the extension of the practice of the Dispensary that the Medical staff should be increased, to bring forward and pass a measure making all the Medical men of the neighbourhood Surgeons to the institution, without consulting the existing staff, was an insult which no body of Medical officers could brook. The indignity is made worse by the fact that not a syllable can be urged against the manner in which the late Medical staff performed its duties. We are enemies to nepotism and exclusiveness in elections to the staffs of Medical charities; but a staff of honorary Medical officers to a Dispensary has at least a claim to common consideration at the hands of the subscribers. Dr. Foote disposes of the matter by stating that there was no law on the subject, but we suppose there was the law of common courtesy. He writes:—

"With respect to the informal proceedings of the Governors, alleged by them, making a proposition without previously acquainting the Medical staff or committee of their intentions so

to do, there is no rule requiring this to be done in the code authorised as the guide to the proper management of the affairs of the institution; therefore I presume any Governor is at liberty to make a proposition at any annual meeting if he choose, and I know perfectly well this has been done before and not demurred to."

THE ROMANS AT LONDON-WALL.

Our readers have probably seen from time to time notices in the daily papers of excavations that have been lately carried on in the vicinity of London-wall. A detailed and authentic account of the very remarkable human remains found has been presented to the Anthropological Society of London by Lieut.-Col. Lane Fox, and we hear that a description by Mr. C. Carter Blake of the remains of animals occurring in the excavation is to appear in the *Geological Magazine*. Through the kindness of the latter gentleman we have been allowed to inspect some portions of the treasure-trove, and the scientific interest which attaches to them will be a sufficient apology for their notice here. It appears from Lieut.-Colonel Fox's account that a section of the soil excavated shows at a depth of from seventeen to twenty-two feet a bed of gravel similar to Thames ballast. On this rests a bed of peat from seven to nine feet thick, and above all are the modern remains of London earth, composed of the accumulated rubbish of the city. In excavating the peat it was found to be interspersed with numerous wooden piles, arranged in clusters, rows, and curves; these averaged from four inches to a foot square; the lower ends, which are pointed, were inserted one or two feet in the subjacent gravel, and the tops, which had rotted off, projected about two feet into the peat. These piles were roughly hewn, as if with an axe, and have been identified as of oak and elm. In the gravel no organic remains were found, but the peat was full of bones and of works of Roman art—the former broken and black from having lain in the peat for centuries. Several human skulls were found, together with remains of horse, ass, red deer, wild boar, wild goat (*bouquetin*), dog, roebuck, and several species of *Bos*—viz., *Bos primigenius*, *B. longifrons*, *B. frontosus*, and *B. trochoceros*. The works of human art were various. Besides the piles, there were planks found, one plank having several Roman nails in it. There were also a quantity of red Samian pottery, some of it bearing men and animals cast in relief; bronze and copper pins, iron knives, tweezers, iron shears, a piece of polished metal mirror, so bright that the face may be seen in it, and a quantity of leathern soles of shoes or sandals, some much worn, some thickly studded with hobnails, the *caliga* of the Roman legions. Besides these, there were articles of a ruder construction, which may reasonably be supposed to have been of British manufacture—spear-heads (?) made of the metacarpals of the red deer and *Bos longifrons*, and skates formed of the metacarpals of a pony or donkey. One of the most remarkable points connected with this excavation is the great thickness of the peat, the evidence given by its section of its upward growth, and the fact that from its lowest to its highest level it contains Roman remains. Thus at a foot and a half above the gravel was found a kitchen midden of oyster and mussel shells, with Roman pottery and a Roman *caliga*. Similar refuse heaps occurred at higher levels in the peat, and at its very top Roman remains of the same kind were found. It is evident, therefore, that the enormous growth of from seven to nine feet of peat must have occurred during the 400 years of Roman occupation. Sir Charles Lyell, following M. Boucher de Perthes, would have estimated the probable growth of peat during that period at about four inches. To quote Colonel Lane Fox, the history of the growth may be read by the sections as follows:—

"1. Oak piles driven into the gravel, the tops of which rotted off at the surface before the peat had grown more than two to three feet. 2. A kitchen midden deposited on peat a foot and a half thick during the Roman period. This may, or may not, have been contemporaneous with the first piles. 3. A growth of peat of one to two feet above this kitchen midden, and other piles then driven in. 4. A kitchen midden with *Bos longifrons* and Roman pottery at three and a half feet. 5. Another growth of peat and another kitchen midden at six feet; and, lastly, Roman remains at the very top."

With regard to the use of the piles found driven in the peat, there can be doubt, from the kitchen middens in their immediate vicinity, that they must have been the foundations of human habitations. The remains of no superincumbent architecture were found above them; and whether they were the work of Roman or British workmen remains a question. Similar piles and remains have been observed in excavations in other parts of the city, as near the Mansion House, in the line of the old Wall Brook and north of the Bank. Colonel Lane Fox suggests that they may be the remains of the British capital of Cassibelaunus, which Cæsar says he found situated amongst woods and marshes. Another point of great interest is, that there can be now no doubt that the giant bull, *Bos primigenius*, the congener of *Elephas primigenius*, *Ursus spelæus*, and *Cervus Megaceros* was not extinct at the time of the Roman occupation of England. Reasons for accepting this conclusion were stated in this journal some years ago,(a) and it must hereafter be an accepted fact. The tide of discovery seems, on the whole, to be setting in favour of a shortening of the geological periods which the observations made a few years ago seemed to render necessary in the interpretation of the human remains then first brought to light. If it be so, modern scientific teaching may yet be brought into accordance with the history and traditions of civilised man.

THE PEATY CASE.

This extraordinary case has throughout the week been exciting a good deal of attention in both public and Professional circles; to the former it is interesting on account of the curious issues involved, and to the latter as a specimen of that conflicting evidence too often encountered in lunacy trials. The facts are these;—In 1863 Mr. Peaty, a clerk in the Bank of England, married his cousin, Miss Mary Ann Hancock, her nearest relations being present at the marriage. The lady's mother had, before her death, which took place in an asylum, been for some time lunatic, and she herself had from her youth been "queer"—all admitting that her excitement was very much greater about the catamenial periods than at other times, and as it so happened that her marriage took place during one of these, the question was whether this marriage should not be declared null and void on the grounds of the lady's insanity at the time of its celebration. We cannot help thinking that there is more in the case than meets the eye, or else we must look upon those concerned in it as having a morbid desire for litigation. It must surely be a curious feeling which, for the sake of separating a lady from her husband, is willing to lay bare the family history for years back, more especially as the lady on whose behalf the action was laid is living very happily with her husband, and desires to remain with him.

But as to the general bearing of the matter, we have little to say, looking at the Medical evidence alone. We can see that previous to the marriage no Medical or other witness speaks distinctly and decidedly as to the wife's insanity; they all talk of her unusual degree of excitement at the catamenial periods, but they all admit that she was at other times quiet enough, although, it may be, a little peculiar. Dr. Robert Lee was consulted as to her state, and he in his evidence—which seems to have created a deal of amusement—states that she was, when examined by him, labouring under violent hysteria, and that he recommended that no proper offer of marriage should be refused, as his experience led him to believe that marriage was a cure for hysteria, although there were cases where it proved rather an aggravation than a benefit. His advice was acted upon, but, unfortunately, the

(a) *Medical Times and Gazette*, June 28, 1862, art. "Homo antiquus."

Fig. 21.

Fig. 22.

Diagram to show course of fibres in nerve trunks.

Fig. 24.

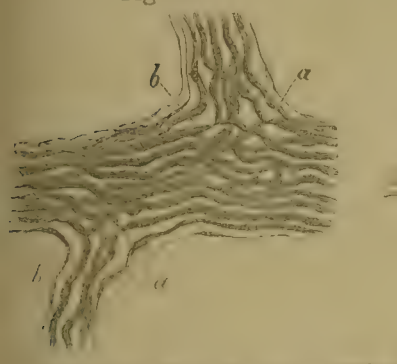


Fig. 25.

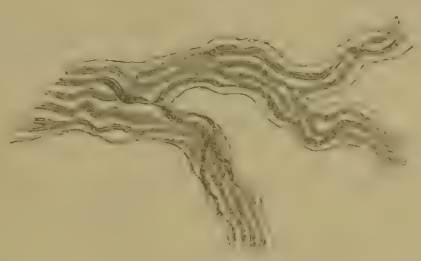
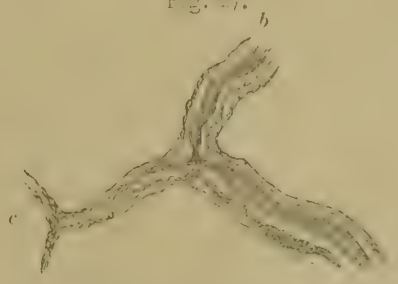


Fig. 26.

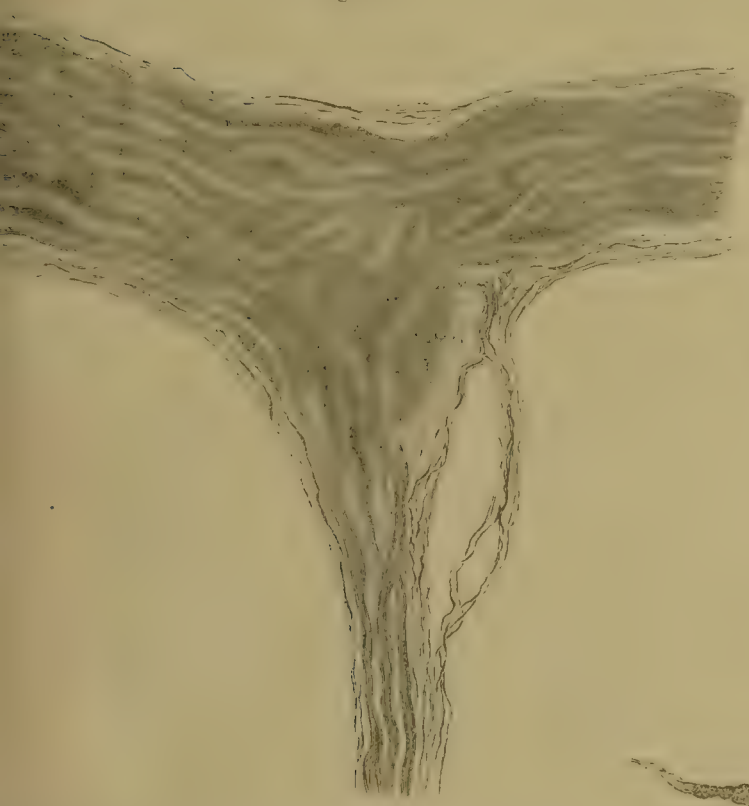
Diagram to show course of nerve fibres in branch trunks.

Fig. 27.



Dark bordered nerve fibre, *a*; dividing into a fine dark bordered fibre, *b*, and a pale fibre, *c*. From the mesentery of the frog. × 700.

Fig. 23.



Fine compound nerve trunk, with a branch coming off at right angles, composed of fibres which pursue opposite courses in the trunk. From the submucous tissue of the palate. Frog. × 700. 1862

Fig. 29.

Very fine nerve fibres, from the mylohyoid of the hyla. To show that the arrangement is the same as in larger trunks. × 1800.

Fig. 30.

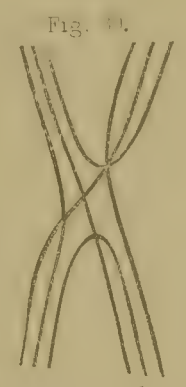


Diagram to show course of fibres in optic commissure. This is most common, and is to be found in nerves in all parts of the body.

Fig. 31.

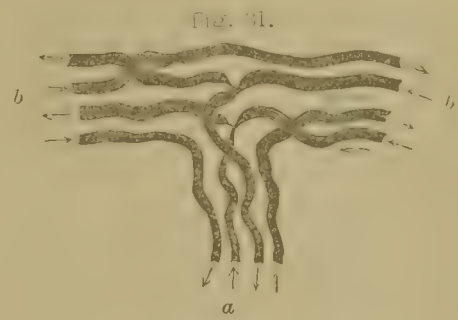


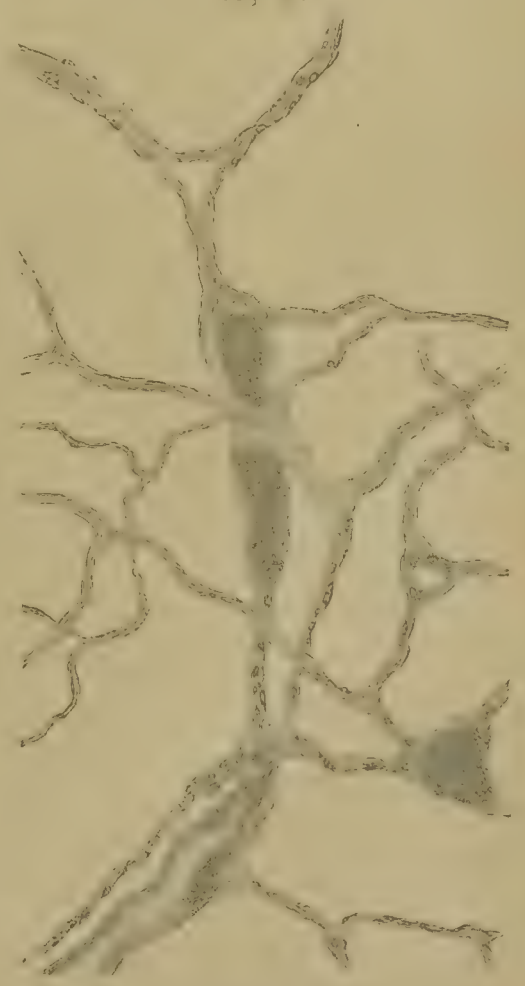
Fig. 32.

Diagrams to illustrate the course of the nerve fibres in a branch, *a*, coming off from a larger trunk, *b b*. The arrows in Fig. 31 indicate the supposed course of the nerve currents.

Fig. 33.

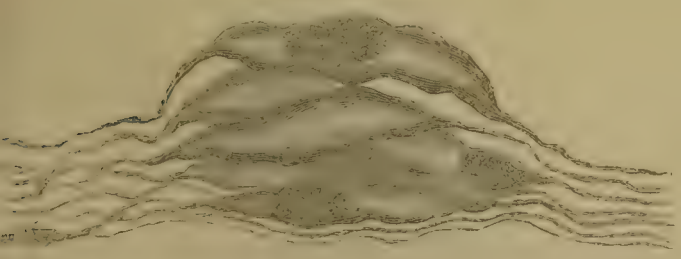
Thin dark-bordered fibre, with fine fibres in sheath, which cross it and form a branch which leaves the fibre. From muscle of neck of frog. × 700.

Fig. 34.



Terminal portion of dark-bordered fibre. Bladder of frog. × 1700.

Fig. 35.

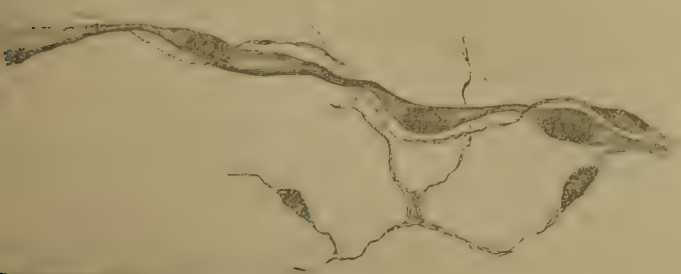


Part of trunk of pneumogastric nerve, where it passes through an opening in the base of the skull, showing how thin the essential part of the nerve fibre is compared with the insulating (?) envelope. × 700.

Fig. 37.

Division of dark-bordered fibres and formation of networks, with the subdivisions of the 'fine fibres.' From the mesentery of the frog. × 215.

Fig. 38.



results were very far from satisfactory—if, indeed, they are ever otherwise—for we find Dr. Ellis and Dr. Wood, of St. Luke's Hospital, both testifying to her insanity when admitted into that institution last year. Mr. Peaty's evidence explains away many of the circumstances brought forward as tending to show the insanity of his wife, but it also shows something more. Of course, the case would be incomplete did not Mr. Baker Brown figure in it, and Mr. Peaty swears that Mrs. Peaty was admitted into the Surgical Home and treated according to the principles in vogue there, altogether without his sanction, and that he is even now in the dark as to the nature of the operation performed on his wife. What says Mr. Baker Brown to this? We cannot but regret that such a case ever came before a court of law, or, having done so, that the issues were not more clearly defined and a settlement come to at once, either by the agreement of the parties or by the ruling of the judge.

FROM ABROAD.—DISCUSSION ON THE MORTALITY OF NURSE-CHILDREN—VENEREAL DISEASES AS OBSERVED IN DIFFERENT COUNTRIES—THE OPERATION FOR STRABISMUS IN FRANCE.

In the discussion on the mortality of nurse-children at the Academy, M. Guérin observed that the ignorance, carlessness, and cupidity of nurses induce a great mortality of infants from "premature alimentation," which is to be distinguished from bad, insufficient, or even artificial alimentation, although such distinction is not always appreciated even by Medical Practitioners. By premature alimentation he understands food which is given to infants in disproportion to their age and digestive power. This is not to be confounded with artificial alimentation, which, when employed with intelligence, may prove a valuable substitute for the maternal alimentation —cow's milk, tempered with a certain quantity of sugar and water or barley water, being equal in nutritive value to the milk of many nurses. The real mischief arises from combining with this milk other aliments of a consistency unsuited to the child's digestive capacity. Gastro-intestinal derangements ensue, especially in the shape of obstinate diarrhœa, and numbers of children are carried off who might have lived had milk diet been adhered to. During the ten years he has had the management of the orthopædic ward at the Hôpital des Enfants, M. Guérin has observed the mischievous effect of such premature alimentation in from 1800 to 2000 children; and by subjecting puppies to it experimentally he has succeeded in inducing rickets and deformities.

Another prominent cause of the great mortality of infants is the indifference, or even the complicity, of the mothers, M. Guérin adducing evidence to prove that certain nurses gain a great reputation for disposing of their charges, and are promptly supplied with new objects of this murderous traffic. In the departments of the Eure-et-Loire and l'Yonne, in which nursing is carried on to the greatest extent, it is found that, while the mortality of legitimate infants is from 24 to 25 per cent., that of illegitimate infants is from 85 to 95 per cent., no machinery existing there for the verification of the causes of death. It is of inanition these wretched infants are allowed to perish, every characteristic of this condition being observable both during life and after death. Whether nurse-infants die in consequence of premature alimentation or through inanition, their death being preventible can only be regarded as forms of "infanticide by nursing." Even the children who escape the fatal effects of this "slave-trade in nurslings" have their frames debilitated and unfitted for the business of life; and it is probable that the increasing difficulty in recruiting the army, owing to the increase of exemptions and the decrease of conscripts of the requisite height, may in some measure be due to this cause.

As remedial measures, M. Guérin suggests the active Medical surveillance of hired nurses and an exact registration of causes of death. While nurses who betray their duties should be rigorously punished, rewards and encouragements should be held out to those who satisfactorily fulfil their engagements; and these may well be determined by exhibitions of the products of their care—in other words, M. Guérin advocates the introduction of "baby shows" in imitation of the Americans. While, indeed, in the United States these were only the offspring of ridiculous vanity and transatlantic eccentricity, it is very possible that among a medal-loving people like the French they might work wonders. At all events, M. Guérin is quite serious in his proposal, arguing for its adoption from the great benefit in the improvement of stock that has resulted since the introduction of cattle-shows.

M. Boudin, in a subsequent communication, protests against the above statement that the standard for recruits has been lowered, while the proportion of their infirmities have increased. On the contrary, he says, while the exemptions for defective stature amounted to 901 per 10,000 in 1831-33, they were only 600 in 1858-60, exemptions for infirmities decreasing from 2735 to 2577 per 10,000. It is true that a diminution of the standard of stature is contemplated, but that arises from men now well fitted to serve being now exempted. It is a serious error to make military aptitude dependent on stature. Of 10,000 young men 20 years of age, 904 were found in Normandy with a stature of 1·73 metre, while Brittany only furnished 444; but while 1000 Bretons furnished 705 men fit for service, 1000 Normans only furnished 643. In Prussia 1000 young men 20 years of age only furnish 283 soldiers, while in France they furnish 682.

In a memoir read recently at the Academy of Medicine, M. Lagneau exhibits the varieties observed in the manifestation of venereal diseases, as observed in different countries. 1. Ulcerations of the genitals, which are very frequent in some countries, among others in the British possessions in North America, are almost exceptional among the Arabs and Kabyls of Algeria. 2. Constitutional syphilis, very frequently observed among the indigenous inhabitants of Algeria, is of infrequent occurrence with the negro soldiers of the English colonies in America, Africa, and Ceylon, although they present a great number of genital ulcerations. 3. The evolution of syphilis is less rapid in cold than in warm climates—in Christiania than in France, in France than in tropical regions. 4. Bubos, either appearing at once or accompanying genital ulcerations, are of much more frequent occurrence in China, Cochin China, New Caledonia, Polynesia, Mexico, etc., than in cold countries, as the English colonies of America and Australia (?) 5. Blenorrhagia, very common in the United States, and less so in China, is scarcely met with among the indigenous inhabitants of Algeria and the Levant, excepting those of them who are brought into relation with Europeans. 6. Orchitis is very common in the United States and China, although in this latter country blenorrhagia is not common. 7. Syphilitic and blenorrhagic affections are met with, according to regions and peoples, in the proportion of 3 to 1 or the inverse proportion of 1 to 2. 8. Syphilitic diseases are cured less promptly in cold than in warm countries—in Christiania than in France, in France than in Algeria and the tropics. They are readily cured among negroes. 9. Of two peoples in contact in the same country, that one will be most cruelly ravaged by syphilis which has already been least attacked by it. 10. Individuals attacked by syphilis in one country generally find the symptoms amend in a warmer, and grow worse in a colder one. 11. Although syphilis has spread in most countries and amongst most peoples, it would seem from the observations of Thorstensen and others that it has never become durably established in Iceland, situated almost in the polar circle, while, according to Livingstone, it is spontaneously cured in the interior of Southern Africa. 12. In most countries the frequency of venereal diseases is proportionate to the insufficiency of the prophylactic measures and means of treat

ment. While in the British army, in which prophylactic measures are null, the proportion of venereal cases rises to 318 per 1000, and in that of France, in which they are in vigour, but irregularly enforced, it is 113, in that of Belgium, where they are vigorous and uniformly applied, there are only 90 venereal cases per 1000 effective men.

In corroboration of the observations which we recently made on the backward condition of ophthalmological practice in France, we may advert to a statement just published by Dr. Wecker, one of the distinguished German oculists established in Paris. After adverting to the crowd of publications on the operation for strabismus which appeared in France between 1840 and 1843, he observes that since this last date writing upon the subject well-nigh ceased. It is true that this was also the case in the other parts of Europe, until the writings of Von Graefe, in 1855, followed by those of Boehm and Donders, gave such a powerful impulse to the operation in Germany, Holland, and England; its re-establishment in repute being due to the recognition of the close relationship between the development of strabismus and certain conditions of refraction—that is to say, of certain conformations of the eyes. This discovery proved of singular fertility, since it furnished the operator with a certain guarantee of success, by showing how its effects might be consolidated by the employment of optical means. But, while the rest of Europe has availed itself of this improvement, matters seem to have remained stationary in France, the operation continuing in the disfavour into which it had fallen. Including his own numerous operations, and those of other Germans in Paris, and of M. Sichel, jun., Dr. Wecker does not believe that the number of strabismus operations performed in Paris can exceed 300 per annum. In the large clinic of M. Desmarres, jun., it was only practised once during 1865-6. In the provinces it is still less resorted to, most of the Practitioners therein having been pupils of Desmarres, or Sichel, sen., neither of whom encouraged the operation.

MEDICAL EDUCATION AT OXFORD.

(*From a Correspondent.*)

Some correspondence has lately appeared in your columns, in reference to Medical education at Oxford. This is a subject which we are always glad to ventilate, for there can be no doubt that the elder Universities do not do as much as they ought to promote the study of the physical sciences, and to advance Medical education. Many Medical men scattered throughout the country are keenly alive to the advantages of a University education, and yet they have hitherto been prevented from sending their sons to Oxford or Cambridge on account of the excessive expense—expense both of time and of money.

So far as the first of these impediments—the expenditure of time—is concerned, the Universities have lately done much to meet our wants; and they have so far modified their regulations that a young man can now lay aside classics altogether about the end of his second year, and turn his whole attention to the physical sciences. So far as the second of these impediments—the expenditure of money—is concerned, two of your correspondents have pointed out that the proposed Keble College is likely to meet our requirements in this respect. The College will, we believe, be limited to members of the Church of England, but it will be open to the candidates for all professions. It will be regulated on the most economical principles, and all unnecessary expenditure will be discouraged. At the same time every effort will be made to give the students all the educational advantages which the University affords. Such being the "platform" upon which this new Oxford College is to be erected, it is not at all improbable that it may meet the wants and obtain the support of many of the members of the Medical Profession.

FURTHER NOTES ON WINE.

By the Author of the "Report on Cheap Wine."

PRICE OF WINE COMPARED WITH THAT OF BEER (*continued*)—CHEAP FRENCH WINE—VAUCLUSE—WINE AS AN ANTI-HÆMORRHAGIC.

Let me once more state that the object of these papers is to discountenance the use of distilled spirits in all cases in which they are not specially prescribed by Medical authority. Spirits, like all other things, have their uses. They set the heart beating in cases where life is failing from hæmorrhage or exhaustion, or from the action of sudden powerfully depressing causes. They may give comfort to the aged and bedridden, and they may be used for a time as the drink of persons affected with atonic gout, dyspepsia, and some other diseases, but they should not be used as common articles of diet or luxury; they should not be used by the young and healthy, and no matter whether raw, or mixed with water, or in the shape of the fortified wines, the ports, sherries, etc., which the sins and follies of the last century have bequeathed to us as our accustomed beverages. We are all of us, I suppose, agreed that, for the most part, the common drink of every country will be that which is cheapest, but a common drink may be unwholesome in itself, and may lead to abuse. Spirits are of all forms of alcoholic drink the most pernicious in themselves, and the most liable to breed habits of excess. They are also intrinsically the cheapest, even when weighted with heavy duties. Beer suits most persons in our country who take active muscular exercise. But if beer do not suit, it is a consolation to know that the price of wine is not so high that we need fly to spirits, whether in the shape of fortified wine or any other.

Each kind of drink has special properties; hence no mere numerical comparison is possible, especially as regards any attempt to compare two drinks by their quantities of alcohol. Thus some of the very strong ale brewed at ——— College, Oxford, which is at least ten years old, contains 20 per cent. of proof spirit by volume, which is the average strength of a good sound light wine; but a man who cared for his head, though he might drink a tumbler of light wine with benefit, had need be very cautious in doing the same by the ale. There is quite unbroken ground for any one who would determine the conditions under which fluids containing equal quantities of alcohol differ in their powers of affecting the brain. Chemical analysis confirms the impressions prevalent in common life as to the nutritive virtues of porter; for Professor Haughton and Professor Apjohn have shown that Guinness's porter contains nitrogenous matter equal to fifty-four grains of urea per quart, which is precisely the same as is contained in beef-tea made with one pound of beef without bone to the quart.(a) It stands to reason that beer must be better than wine in some cases, and worse in others. If the difference between various liquors were one of quantity of alcohol only, the only rules for their administration need be quantitative, and we should not find, as we do, that different kinds suit different cases. But if the comparison be made on an alcoholic basis, we find that at the present time the cost price of good home-brewed beer, made with one bushel of malt to eighteen gallons, is tenpence per gallon. It is found to contain, on analysis, 10 per cent. of proof spirit. This is as brewed by a private gentleman, and includes the cost of materials and labour, but not of rent, apparatus, or establishment. No man who lived by brewing beer could afford to give beer of equal quality under 1s. 4d. per gallon, and no one can buy it at such a rate. But 1s. 4d. per gallon is the original cost of the Gauphiné wine, which contains 20 per cent. of alcohol, and which, after paying duty, the consumer

(a) "Natural Constants of Healthy Urine of Man," *Dublin Quarterly Journal of Medical Science*, November, 1862. See also Haughton's paper on "Diabetes Mellitus," *ibid.*

can drink here for 2s. 6d. or 2s. 8d. per gallon, exclusive of the charges of bottling.

Many men, however, who drink beer, cannot drink it out of the cask, but must have some of those finer varieties in bottle, such as Guinness, Bass, Allsopp, &c., which are certainly admirable drinks. In to-day's *Times*, bottled beers are priced at such rates as to equal from 2s. 4d. for the commoner to 3s. 2d. for the better sorts per gallon. Such beers are not so cheap as the Gauphine. To compare wine and beer, however, is to compare a pen-knife to a carving-knife. The briskness arising from carbonic acid, the flavour of the hop, the bitterness, the body of good beer differ *toto cælo* from anything found in wine; their functions are different, but whoever wants to change beer for wine as an alcoholic nutritive, or to use wine as food for his brain, need not be deterred by the price.

Since my last communication, I have received from Mr. Rew, the agent of MM. Piot *frères*, a sample of a wine called *Vaucluse*, which they sell at 12s. per dozen retail, but which, if bought in bulk, would, of course, be very much cheaper. It is a wine selected from one of those great wine-growing districts of the south of France, which have hitherto sent us chiefly small quantities of fancy wines (Lunel, Rivesaltes, etc.), or else wines brandied up to resemble port, as the Masdeu and Roussillon. So much for this part of my argument, in which I have tried to show that any one who cares for good serviceable wine may have it for about sixpence, and may get a really gentlemanly wine for about a shilling per bottle, by the expenditure of a little trouble and brains.

It is a question well worth considering, how far wine ought to be made part of the regular diet of Hospital in-patients, more especially in the spring, when potatoes are bad and fresh vegetables not yet procurable, and a diet of bread, bacon, and tea is the staple of the poor. For the scurvy (although Dr. Aitken states that fermentation deprives vegetable juices of their antiscorbutic virtues), experience seems as much in favour of light wine as it is against distilled spirits. Dr. Barnes, in the admirable "Essay on Scurvy" affixed to the Sixth Report of the Medical Officer of the Privy Council, quotes the case of the English and French fleets serving in South America in 1845, when the former suffered from scurvy, and the latter did not, the difference being attributed to the French wine and soft bread enjoyed by the French fleet. Dr. Barnes also recommends beer or wine instead of rum, as part of the ordinary diet of every ship. He says also that too exclusive dependence should not be put upon lime-juice, as if it were the sole antiscorbutic. The value of wine for scurvy is a thing not to be argued about, but to be determined by clinical experiments; but its value as an alterative in the case of children with skin disease (impetigo), and its chemical composition as well, point it out as a likely remedy. There are tartaric acid and potass in abundance. Dr. Garrod may not have enounced the whole truth when he ascribed scurvy to want of potass, but there can be little doubt that this proposition includes a great part of the truth, and there are few modes of giving potass more agreeable than pure wine.

We need not look far to find an application of these principles to the general practice of Medicine. Hæmorrhage—*i.e.*, an unnatural excess of a natural flow—is the bane of the weaker sex. But hæmorrhage, so far as it affects women, arises from one of three causes—the condition of the blood—coagulating softly and feebly;—the condition of muscular tissue in not contracting firmly and closing vessels as it ought to do;—the condition of the nervous system, too prone to emotion, and, with it, to irregular distribution of blood. All three are usually present in the same patient. Such conditions are fostered by indolence, want of air and exercise, and a diet too full, especially of beer and strong wine. Women with such proclivities may be usually recognised easily—some accoucheurs call them *bleeders*—red lips, full figures, too soft, insufficient tone, tendency to early stoutness. What are the remedies? I need not say what are the requisite rules of diet and hygiene, but what medicines? Astringents and acids. I have for years carried in my midwifery bag a bottle of the tincture of galls, a strong solution of tannic and gallic acids. When attending any patient presenting the characteristics above mentioned, I give her during labour from half an ounce to an ounce of the tincture, well sweetened with white sugar, and mixed with a tumbler of cold water. It tastes no worse than flat cider. It is seldom that there is need of other anti-hæmorrhagic proceedings. This confirms the expediency of a light astringent wine during pregnancy instead of the heating spirits or the bile-creating beer. For the exuberant hæmorrhages, which affect young girls and older women, I feel most thankful to have learned as an empirical fact from an eminent and most experienced Physician, that *cream of tartar drink* will effect a cure when mineral acids, vegetable astringents, ergot, and metallic salts fail. Whether Dr. Garrod be right in his theory of scurvy or no, I suspect that the deficiency of KO which he accuses may be at the bottom of some other cachexia—of menorrhagia amongst other. But claret is a cream of tartar drink, Q.E.D.

REVIEWS.

On the Nature, Cause, and Treatment of Tuberculosis. By Horace Dobell, M.D., M.R.C.P., Physician to the Royal Infirmary for Diseases of the Chest. London: Churchill and Sons. Pp. 84.

"Tuberculosis," says Dr. Dobell, "is due to defect in the action of the pancreas on the fat taken as food (especially the solid fat)." The remedy is pancreatic juice. Such is the basis of the work before us. Let us first speak of the hypothesis.

Now we might state, as broadly as is consistent with courtesy, that this can scarcely be true, on the ground that a state so complex as tuberculosis can scarcely be accounted for by reference to any single condition; and we might also, with as much show of truth, assert that it was due to defect in the action of the bile on the fats taken as food, saying nothing about their solidity or fluidity. Such an assertion involves immediately an investigation into the relative action of these two fluids, which we now propose to make.

In the first place, let us inquire which is the more important in a quantitative point of view; and here we find that, according to the estimate of Bidder and Schmidt (never a very small one), 150 grammes of pancreatic juice are daily poured into the alimentary canal of a man of average weight, whilst in a similar person, according to the same authors, no less than from 1000 to 1800 grammes of bile are daily secreted, and the very lowest estimate makes the quantity of bile to be very considerably greater than that of the pancreatic secretion. Next, with regard to their functions (assuming, meanwhile, it will be observed, our author's theory as to the immediate cause of tuberculosis being want of fat in the system), on all hands it is conceded that the pancreatic secretion acts as a powerful amylolytic ferment, rapidly converting starch into sugar, even in the presence of an acid like the gastric juice; and all now grant that bile has nothing of this action. We have thus one decided and important function for the pancreas, but nothing for the liver. But again, it has been proved that pancreatic juice, when brought in contact with an acid fluid like half-formed chyme, has a most important action upon it, dissolving up the albumen and converting *parapeptone* into *peptone* even more quickly than pepsine does. Further, as Fick has shown, the contents of the duodenum in carnivorous animals are always acid, exactly the condition best adapted for the action of this secretion in such animals. Two well-marked functions—the conversion of starch and of albumen—have thus been made out for that secretion of the two—the pancreatic—which seems the less important from the lesser quantity in which it is discharged.

Now, then, only one great object for the two secretions can remain, since no other known work takes place in the duodenum—viz., *the preparation of fats for absorption.* Should

the bile have nothing to do with this, we have 2½ lbs. of a secretion formed every day for no particular purpose we can see, except to stimulate the walls of the intestines and to act as an antiseptic upon their contents.

Pancreatic secretion *out of the body* has doubtless the power of emulsionising fats, whether acid or neutral, which bile, when *out of the body*, has not; but the experiments of Dr. Marcet show the fallacy of applying such observations to actual digestion, for he proved that the free acid in the gastric juice converted fats into that acid condition in which they are very readily emulsionised by the bile.

But if we assert (for the sake of argument) that the pancreas has nothing to do with the absorption of fat, we may be met in the teeth by Bernard's experiments, whereby it was shown that after tying the pancreatic duct no milky chyle was found in the lacteals. To this we reply by the counte experiments of Schmidt, which show that although no pancreatic secretion escape into the duodenum, the lacteals may be found filled with milky fluid, *provided there be no inflammation* at the part of the intestine where they originate, for if there were he found no chyle.

But, again, it is objected that in the rabbit, where the pancreatic duct opens a good way below the orifice of the ductus choledochus, no chyle is seen in the lacteals above the pancreatic opening. True, says Dr. Chambers, if you wait till it has all passed away; most untrue, if you examine the parts sufficiently early.

What, now, are the effects of hindering the bile from passing into the duodenum? Neither in this case is there entire absence of chyle, though there certainly is comparatively but a small quantity; thus an animal which before tying its bile duct could absorb ·465 gramme of fat hourly, could not, when that fluid was arrested, absorb more than two-fifths, one-fifth, or even one-seventh of the former quantity; and at the same time the fatty contents of the thoracic duct sank from 3·2 per cent. to ·19 per cent.

Dr. Dobell tells us that olein is absorbed when the other fats are not; how does he account for this by his theory? If one fat be taken up whilst the pancreas is diseased, why not more? Dr. Marcet has, however, shown that olein is the only fat which is not acted on by bile, and which must, therefore, be absorbable without it. If, then, the bile be deranged or deficient, or what not, no other fat can be present but this, always supposing that the liver is the prime cause of tuberculosis.

But again, according to Dr. Dobell's hypothesis, the solid fats are of far greater consequence than the fluid fats or oils. The one is compared to good soil, the other to water, with relation to plants. Why it should be so, he does not explain, seeing that in all cases he speaks of them with relation to the carbon which they contain, and it so happens that oleic acid contains relatively a larger proportion of carbon than stearic acid does, the formula for the one being $C_{36}H_{33}O_3$, that for stearic acid being $C_{34}H_{33}O_3$.

In the whole account of his theory Dr. Dobell, although constantly referring to carbonaceous matter as its basis, never speaks of such articles as sugar and starch, which he seems entirely to ignore as heat-givers or anything else; but in return we might be justified in founding a new theory, viz., that, taking for granted that pancreatic emulsion is a good thing in consumption, it acts altogether by aiding in the conversion of starch into sugar, and albumen into peptone—the former process being completely arrested by the absence of pancreatic secretion, and the destruction of the fermenting principle of the saliva in the acid gastric juice, which would, however, favour the complete assimilation of the albumen. Increased carbonaceous matter is thus thrown into the system, and the tissues are saved from waste until they have had time to recuperate. Such is another view which, starting from the *à priori* ground of the pancreas, we are justified in taking, but it leads to a treatment quite different from Dr. Dobell's, viz., dosing the patient with sugar and suchlike hydrocarbons. Surely such treatment would meet the following condition, which is described by Dr. Dobell as the third specially favouring tuberculisation, etc., viz., "an interchange of oxygen and carbonaceous matters through tissues nourished by blood deficient in fat elements can be provided for by supplying carbonaceous matters to the circulating medium of the part." We shall say nothing of the erroneous notion which seems to be inferred here, viz., that oxygen and carbon chiefly unite in the lungs, but we are at a loss to see why this union, apart from any *à priori* reason, has any special influence on the production of tubercle.

But the danger of being carried away by an *à priori* hobby-horse is probably still more evident in the following passage:—"In females, the balance of their nutritive functions is so arranged that, at the age of puberty and during the whole generative period, there shall be, normally, a surplus of carbon in the system. At the age of puberty this surplus carbon protects them from some of the dangers of tuberculosis, to which boys, who have no such surplus to fall back upon, are exposed." (It must be understood that the writer has already declared menstruation to be "a means of eliminating carbon.") So that by this theory the very essence of life or death is made to reside in the quantity of charcoal, blacklead, or in whatever form the carbon may be, within the organism. Notwithstanding this statement, we have further on cited as one of the causes of tuberculosis, those which act indirectly on the pancreas by diminishing the elimination of carbon! We cannot now enter into the author's views as to the immediate formation of tubercle; we would only remark on the self-contradictions, the innumerable assumptions, and the minor inaccuracies which this method of study involves.

It will be seen that we have proved that the pancreas is not the only nor even the most important organ regulating the absorption of fat; therefore, the very foundation of the theory may be questioned. But again, after accepting the view of the importance of the pancreas, we have shown that the theory on which the treatment is founded may be altogether wrong; whilst, if we were to accept the importance of solid in contradistinction to fluid fats, the best food for a consumptive patient would be patent candles and white of egg, with plenty of the aromatic spirit of ammonia. But we have said enough to demonstrate the inexpediency of setting up *à priori* hypotheses in this fashion, whilst we have said nothing of the results of the plan of treatment advocated. These stand by themselves, and it is with the theory, and the theory alone, that we have our quarrel. The pancreatic preparations are in high favour with many patients; they can do no harm, and deserve a trial. To have introduced them is a good deed; but, for all that, the theory on which they were introduced may turn out to be a mistake.

PROVINCIAL CORRESPONDENCE.

NEWCASTLE-ON-TYNE AND SUNDERLAND.

January 21.

Since my last communication Medical affairs in the North have been going on pretty smoothly, and that is the reason why your correspondent has been so long silent. However, with the advent of a new year, perhaps it will not be amiss to take a retrospect of what has occurred in Newcastle and Sunderland during the latter six months of the past year. In my last report I stated that typhus fever was extremely prevalent in most of the northern towns. In Newcastle, where it still continues, it has been of a most malignant type and very fatal in its results, and I regret to state that the Profession has suffered severely, several Medical men having fallen victims to the disease, and amongst the number Mr. Gilchrist, whose death took place about ten days ago. The mortality in the northern capital is excessively high, being 34 per 1000. This is a matter which requires the most serious consideration of the authorities of the town, which evidently must be in a most unsatisfactory sanitary condition. At the last meeting of the Northumberland and Durham Medical Society, it was stated that scarlatina maligna was very prevalent and very fatal. At the same meeting a very interesting paper was read by Dr. Eastwood on the Cans-hill murder case, which clearly showed the defective state of the law in reference to cases of lunacy. The principal event connected with Newcastle has been the election of Mr. J. Russell as Surgeon to the Infirmary, in the room of Mr. Annandale, who retires after many years of faithful and active service.

The new General Hospital at Sunderland is rapidly approaching completion, and heartily glad will the staff of the present Hospital be when they are able to take possession of the new building. In July last some important changes were made in the honorary Surgical staff of the Infirmary. The pressure of work upon the four Surgeons was so great that it was deemed advisable by the committee to recommend the appointment of two honorary Assistant-Surgeons, which recommendation was adopted by the governors. Six candidates offered them-

selves, of whom five went to the poll, which resulted in the election of Mr. E. A. Maling and Dr. H. J. Yeld by a large majority. A few months later, Dr. Donken was elected one of the Physicians, and the Hospital honorary staff is now complete, which has not been the case for very many years. The House-Surgeoncy is now vacant, and there are several candidates in the field, but some of the Medical journals have fallen into an error in stating that it is a matter of dispute as to whether the election be made by the governors or committee, seeing that there is no option in the matter, the rule distinctly stating that it is in the hands of the governors. The resolution proposed by Mr. Morgan will not affect the present election in the slightest degree, but will, if carried (and it is very desirable that it should be), have reference to all future elections for House-Surgeons. While speaking of the Infirmary, I may mention that a grand bazaar is advertised to take place during Easter week, in aid of the building fund of the new Hospital, and which promises to be a great success, if one may judge from the array of names under whose patronage the bazaar is to be held, and also from the number of ladies who have undertaken the preparation of stalls. It is hoped that the sum of 2000*l.* will be realised. The Medico-Chirurgical Society, established about two years ago, is in a very satisfactory condition, and consists of upwards of 40 members, with every prospect of further increase. The Board of Guardians have kindly granted the use of their commodious board-room, in which the Society's meetings are held. The characters of the papers read before the Society are such as to lead to useful and practical results. At the last meeting two interesting papers were read—one by Dr. Donkin, on "Uræmic Eclampsia," and the other by Mr. M. Douglas, on "Cholera;" and the meeting on the 29th of this month is to be devoted to a discussion on cholera. The allied sciences are not forgotten, as will be seen from the fact that, at the ensuing March meeting, Mr. George S. Brady will read a paper on "The Anatomy and Physiology of the Crustaceæ." Papers will also be read by Drs. Murray and Philipson, of Newcastle, &c.

In conclusion I may remark that Sunderland at the present time is in a healthy condition. A few cases of fever continue to occur in the pent-up lanes and alleys of the old part of the town, as might naturally be expected, but the Corporation are taking active measures to obtain an act of Parliament to enable them to make great sanitary improvements in the borough, by pulling down most of the wretched houses, or rather hovels, which are the hotbeds of fever and all kinds of loathsome diseases. This town improvement scheme will necessitate the outlay of a large sum of money, probably of upwards of 100,000*l.*; nevertheless, it is a scheme which has met with the hearty and cordial approval of the ratepayers in general. The mortality of Sunderland has always shown a favourable contrast as compared with the neighbouring town of Newcastle, the average death-rate being 10 per 1000 less, and at times even 13 per 1000 less, which is, in itself, a noteworthy fact; and it may reasonably be expected that, with the increased sanitary improvements such as are contemplated in the new scheme, that Sunderland, ere many years have elapsed, will rank as one of the healthiest towns in the kingdom.

IRELAND.

DUBLIN, January 21.

A MEETING of the Medical Society of the King and Queen's College of Physicians was held in the College Hall, on Wednesday, the 16th inst.—Dr. Stokes, President, in the chair—when a very interesting paper, on "Sphygmographic Observations on the Pulse of Typhus Fever," was read by Dr. Grimshaw.

After a few remarks upon the meaning of the tracings afforded by Marey's sphygmograph, Dr. Grimshaw pointed out the peculiarities shown in the sphygmograms obtained from the pulse of typhus fever during the course of the disease. With reference to the dicrotism of the pulse depending, as it does, upon the rebound of the blood from the obstacles opposed to its onward flow, and as the amount of its development depends upon the elasticity of these obstacles, Dr. Grimshaw observed that it might be destroyed in two ways, either by great flaccidity of the arteries and capillaries, or by great rigidity of the same. Both these conditions are developed during the course of typhus fever. During the height of the disease, when the temperature is highest, and the muscles in a very relaxed state, the dicrotism is lost from the first, flaccidity, but towards the end, when the temperature has fallen, the dicrotism is lost through rigidity, which Dr. Grimshaw ascribed to a pinched and contracted state of the muscular fibres of the arteries, similar to that which appears to be present in other parts of the body in fever convalescents. Besides the absent dicrotism, the typhus pulse was characterised by great lowness of tension. All these variations could be accounted for by alterations in arterial tension.

The correspondence between the variations in the sphygmograms and the typhus eruption was also pointed out. The darker, larger, and more numerous the spots, the lower the tension and less marked the dicrotism, and *vice versa*. With regard to temperature, the author of the paper stated that typhus cases might be arranged under two classes—one following a short course to recovery, having their maximum temperature on the sixth or seventh day; the other running a longer and more sure course, having their maximum temperature on the eighth or ninth day. In the former class of cases the characters of low tension and absent dicrotism of the pulse lasted for a much shorter period than in the latter; in fact, these characters agreed with the variations in temperature. The above classification of cases was suggested to the author by the late Dr. Warter, who stated that the seventh and ninth days were the common days of maximum temperature, and that the ninth day was the commoner, whereas Dr. Grimshaw found the maximum usually before the ninth day; this difference Dr. Grimshaw explained by the difference in the gravity of typhus in Dublin and in London, it being a more severe disease in the latter than in the former city.

In conclusion, Dr. Grimshaw stated that, as a guide in treatment, the lower the tension and less developed the dicrotism in the sphygmogram, the more stimulants would be required. As a guide to prognosis, an improvement in the state of the pulse would be shown by the sphygmogram before it could be detected by the finger. Dr. Grimshaw considered that the sphygmograph gives more accurate information as to the state of the heart than the finger can do when applied over an artery.

The paper was illustrated by an extensive series of diagrams, lithographed for the occasion, so that without illustrations it is hard to do justice to this paper in so limited a space.

I am happy to be able to announce that it has been recently decided by the Board of Trinity College to extend to members of the Royal College of Surgeons of England the privilege already possessed by the members of the Royal College of Surgeons in Ireland. "Any member of the College of Surgeons of England or of Ireland is entitled to present himself for examination for the licence in Medicine of the University of Dublin, provided he passes the Examination in Arts prescribed as preliminary to the Examination in Medicine."

The following are the subjects of the Arts Examination:—Homer's Iliad, i., ii., iii; Lucian's Dialogues, Walker's edition; Xenophon's Anabasis, i., ii., iii.; Virgil's Æneid, i., ii., iii.; Sallust; Horace, Satires; Latin Prose Composition; English History; Modern Geography; Arithmetic; Algebra, to the end of simple equations; Euclid, i., ii., iii.

ON Monday next, at 8 p.m., Mr. John Gay will deliver his Third Lettsomian Lecture on Surgery—"Varicose Diseases of the Lower Extremities."

SIR WILLIAM SNOW HARRIS, F.R.S.—It may not be generally known that the distinguished electrician and man of science who died last week was a member of our Profession; he was educated for the Medical Profession at the University of Edinburgh, and admitted a member of the Royal College of Surgeons of England so long ago as December 3, 1813. He practised for several years with success. Doubtless our readers will inquire how it was such a man was not made an honorary Fellow of his College, instead of which it seems his name has been left out of the College list for many years; as in that official publication for 1853, now before us, his name does not appear in the body of the work, but at the end of the book we find a "list of members who have made no return of their respective places of residence, in compliance with the request of the Council," and who in consequence were supposed defunct, and here we find the simple announcement—"Harris, W. Snow."

GENERAL CORRESPONDENCE.

ON A BESETTING TRIAL OF BOYS.

LETTER FROM THE REV. DR. PUSEY.

[To the Editor of the Medical Times and Gazette.]

SIR,—As my name has been mentioned several times by your correspondents, you will allow me to say a few words. And surely our professions ought not to be at variance; they might materially help one another. *You* have primarily to minister to the body, *we* to the soul; but, since the body acts upon the soul and the soul upon the body, *we* need oftentimes your help, and sometimes (excuse me) we may help *you*. It has been by a mistake, however, that the theological question has been brought into this discussion. I never set forth confession (as two of your correspondents say) as *the preventive* of an evil which now undermines the health of mind and body of so many of our youth. I believe that if our boys were in the habit of confession, they would be guarded against it. For what they want is, for the most part, simply *fore*warning. Again, confession has been very often the means of overcoming it, when all other means had failed, after long struggles. But it would be unpractical to recommend as *the* preventive what one is morally certain would not be adopted. And I did not do it. The question which gave rise to the discussion was this—"Do questions in books of self-examination teach boys evil?" My answer was, that boys knew mostly, at a very early age, more than all contained in those books, and that the questions would not be understood by boys who did not know the evil.

But I was thankful for the opportunity of speaking clearly to those whom it concerned, and who would consequently understand me, of the existence and extent of a fearful evil, and of the fact that *that* evil, in almost every case which I had ever heard of, had its origin amid complete ignorance, that it was grave evil. In my whole experience of above twenty-six years I have not known above two or three cases in which that evil has been self-originated, or began in any internal or physical temptation. I have, indeed, heard of cases where the seeds of it had been sown by unprincipled nurses, who, something in this way, stilled the child to sleep. I have heard, too, of an abnormal case, akin to those which Dr. Meadows speaks of. Yet in all the cases (except in two or three) of which I have had any knowledge, it was taught by other boys, in the absence of any inherent temptation. And its gravity never came home to the sufferers until the habit of years had made victory over it very difficult. Amid the complete silence about it, the consciousness of its being a "vice" was not awakened until years of maturity; often not even then. Sometimes it was brought home to them by some veiled allusion, sometimes by a sermon on purity; I have known several cases in which those quack advertisements, which you so justly condemn, conveyed the first thought that it was a "vice." Until it was brought home to them, the sufferers did not know that it affected their health, and so they did not consult those of your Profession; if suspected, they often out of shame denied it, and delicacy, for the most part, made you accept the denial; and so I would account for those of your Profession (those excepted who take charge of the insane) hearing less of it than might have been expected. Those sufferers who became aware of special evil effects of the habit went commonly to the quacks, who promised speedy restoration.

Dr. Beale thinks that I have "exaggerated the evil." Would to God I could think that I had! But the numerous letters which I have received since the correspondence in the *Times* (some of them from Medical men) confirm all which I said. But apart from my own experience, or that of other clergy, let me state five facts:—

1. I have been informed by one who knew it that the great success of one who had a considerable reputation for curing those who consulted him some years ago, and who did effect cures which surprised people, was in great degree owing to this—that he brought the vice home to patients, and so, by scaring them from it, as the cause of their bodily illnesses, checked the various illnesses which it entailed.

2. A Physician, of a very great Medical name and in large practice, recently told a friend of mine that, when he observed certain symptoms of debility of system, he always charged the patients with it, and so cured them.

3. Many years ago I accompanied a person labouring under mental delusions to a lunatic asylum. The first question asked me by the Resident Medical Officer was, whether he had this habit. He told me that it had brought many there. (I have heard the like as to other lunatic asylums.)

4. The Medical head of a lunatic asylum lately told a friend of mine that the person labouring under mental delusion whom he placed there was (I think) at least the *tenth* whom he had had from that cause from *one* large school.

The system, then, of "ignoring" the habit has failed. It is the very system under which it has grown up, from a time subsequent to my own boyhood, when, at a very large public school, boys (except two, of whom I heard afterwards that one died of it at the school, the other was a half-idiot) were wholly ignorant of it. We did not understand the poor half-idiot's allusions to it.

But since the evil originates for the most part without internal temptation, it might be again eradicated. The experience of other clergymen concurs with my own, that it is, almost in every case, begun in ignorance of its evil. Elder boys teach it to the younger mostly at the small private school at a very early age—commonly about eight, or from eight to twelve—and they, in their turn, to those younger than themselves. If the younger generation are warned in time, before they have contracted the habit, the plague, by God's mercy, might die out. But there should be some systematic effort among schoolmasters; for the infection spreads rapidly. One or two boys have, for the time, infected a whole school. It is not necessary to give any *definite* warning. Let parents say to their boys, before they go to their *first* school, "You will find at school bad as well as good boys; you *may* find pernicious habits there; take care that you do nothing, alone or with others, which you would be ashamed of your mother or my knowing." Schoolmasters might say the same, *mutatis mutandis* (of course not throwing any suspicion upon their own school). Such advice might have saved thousands from falling into the sin unknowing. I have known the evil stopped by the Scriptural warning, "Remember that your body is the temple of the Holy Ghost." One, speaking to me lately of what Winchester and he himself, as a boy there, owed to Dr. Moberley, said, "He was always inculcating purity." There are battles which have to be fought by, I suppose, almost all. But *this* is a sin to which there is no antecedent temptation; it antedates natural temptation, being itself a violation of nature. Warning, then, might be the more readily effectual if schoolmasters or parents, and the Medical Profession instructing both, would be persuaded that at eight years old every boy who mixes with other boys should be set upon his guard in some such general way as I have stated. If any think that, in four out of five cases, the statement would not be needed, let him think what may become of the fifth. "The statement exaggerated?" said one to me lately who had much experience; "I do not think that it can be exaggerated!"

I most heartily concur in all which Dr. Beale has said of the value of healthy exercise, manly games, etc.; strong, cheerful exercise is a great help to purity in boys and young men. Experienced clergy and schoolmasters commonly promote such amusements for this very end, apart from their benefit in developing the bodily frame and adding cheerfulness to the mind. Only, experience shows that, alone, it is not enough. It is unphilosophical to set one preventive against another, when they are not only compatible, but ought to be united. Dr. Beale, I am sure, would not object to such warning as I have spoken of. Forewarned, forearmed.

I am, &c. E. B. PUSEY.

Christ Church, January 27.

MEDICAL EDUCATION IN OXFORD.

[To the Editor of the Medical Times and Gazette.]

SIR,—As you have so pointedly invited communications on the subject of Medical education in Oxford, I venture to lay before you some considerations which are the fruit of a varied, if not large, experience. May I, in the first place, suggest that the phrase "Medical education" requires a little definition if we are to have a clear notion of the end in view? Is it proposed that Medical students should pass at Oxford a certain portion of their prescribed time of study, or is it merely expected that they shall learn there some branches of the preliminary sciences? The latter is, as is well known, all that is generally aimed at by the few Oxford men who take a Medical degree, and this limitation is understood to be in accordance with the judgment and policy of the authorities. Oxford has

no Medical school, principally because it has not been thought advisable that there should be one. If it is desired that students should leave the University as you suppose, prepared to pass the primary examinations of the London boards, not merely increased numbers will be required, but a change in the system of study. Let me explain what I mean. At the time of the "Oxford Commission," when wide changes were introduced in the University curriculum, the question was often raised whether the attempt should be made to revive the professional studies of law and Medicine. The verdict of those most competent and influential in the question was, I believe, in both cases the same. It was thought useless to interfere with the natural process which had transferred these studies to London. The consequence has been that, though the arrangements for teaching physical science in Oxford are in some respects unequalled in England, they have not been adapted to the wants of Medical students. To put the matter plainly, men cannot get on their Oxford lectures certificates which are satisfactory to the London boards, and it is understood that the University authorities do not wish it to be otherwise. I do not, of course, know whether the gentlemen of whom I speak have seen any reason to alter their opinion, but I cannot help feeling very strongly that if the objects you have in view are ever to be effected that verdict must be reconsidered. Allow me to draw the attention of those interested in the matter to the two following questions:—In the first place, whether you will ever attract Medical students to the University unless you provide them with a Medical education; and in the second place, whether it is really impossible to found in Oxford a Medical school not unworthy of a great University.

The first question must, I greatly fear, be answered in the negative. Any education which does not save an equivalent portion of the three or four years of Medical study is a luxury: it costs time, and therefore money—more of both, I think, than we shall find parents disposed to give. In few cases does their ambition go beyond a liberal education, which ends at the age of 18 or 19. Rightly or wrongly, they do not think that anything more than this is worth the price. Now, it is only fair to point out that the standard all over Europe is about the same. The French student at about this age takes his degrees of Bachelier-ès-Lettres and Bachelier-ès-Sciences, and enters the Faculty of Medicine. The time of beginning Medical study in Germany is also about the same. No doubt, to go through first a liberal education in Oxford and then a Professional education in London, gives a more complete training, but it is a system adapted only to the few. If this is all we can offer, Medical students will never, as a rule, enjoy the advantages of University life. We come, then, to the second point. What are the obstacles to the establishment of a Medical school in Oxford? On examination, these obstacles will be found to reduce themselves to one—namely, that Oxford has only about thirty thousand inhabitants. Now, it is worth considering that the University of Würzburg, one of the most illustrious Medical schools in Germany, is in a town of thirty-six thousand inhabitants, and that Halle, which has a great reputation in North Germany for its school of Clinical Medicine, is not much larger. Further, great Medical books, such as Luschka's "Human Anatomy," Niemeyer's "Pathology," and the still unfinished classical work on anatomy of Henle, have been written in the insignificant towns of Tübingen and Göttingen. These facts are enough to show that good work both in the science and teaching of Medicine may be done in small towns, and that, especially in the scientific branches, deficiency of material may be more than compensated by the resources of a great University. Now, it is fortunate that these branches are exactly those which come first in the Medical programme, and it is not easy to see why a man should not spend some two years in serious Medical study at such a place as Oxford. The resources of the University in the way of physics, chemistry, and comparative anatomy are already superior to those of the London schools, and no great changes are needed to make them at least equal in anatomy and physiology. Will the active and liberal representatives of Medical and scientific interests in Oxford consider the feasibility of systematising this instruction, so as to make it both formally and actually sufficient for the Medical student? Whether it should be attempted also to teach the other branches of Medical study would be a matter for subsequent consideration; but I think with you that a student could pick up a good deal of useful knowledge at the Radcliffe Infirmary.

The plan I have sketched out amounts to this, that if a man can give only two years to Oxford he should nevertheless go and devote the time to serious Medical study. This would not give him all the advantages of a "University education," but it would give him a great deal, and would involve no loss of time whatever. If he can spare sufficient time to take the degree of B.A., it will be so much the better, but I do not regard this as indispensable. Those who can go through the more complete course will naturally do so, but even these who cannot will at least be better off than the majority of Medical students are now.

On the subject of expense and on the question of a Medical Hall there might be much to be said, but I have already trespassed unduly on your space. I am, &c.

January 24. OXONIENSIS.

A SUBSTANTIATION AND AN EXPLANATION.

LETTER FROM DR. MOXON.

[To the Editor of the Medical Times and Gazette.]

SIR,—Dr. Johnson in your last number calls upon me to reproduce from his published writings any expressions which will justify me in having made the following statement:—"Dr. Johnson proceeds forthwith to comment on the inertness of mind, the indolence, and the pride of his Professional brethren, which he regards as the only remaining obstacles to the triumph of his true interpretation of the chief symptoms of cholera."

With the preface of his work "Notes on Cholera" before me, I am at a loss to know what part of the quoted statement he objects to. He says (page xiii.)—"There is nothing more difficult than for a man who has been educated in a particular doctrine to free himself from it, even though he has found it to be wrong. There is nothing more difficult than to unlearn. This fostering of false doctrine in the mind is one cause." The condition here spoken of I paraphrased as "inertness of mind," but this is, perhaps, too mild a term for fostering of false doctrine, which savours of a wicked preference of error. Dr. Johnson further says, "But there are other causes too. The indolence of many men will prevent them taking the trouble to unlearn. The pride of many men has the same effect;" and lastly, he says that a very large number have not been taught to teach themselves.

True, this language is borrowed from Dr. Stokes, but this is far from lessening, and, indeed, actually increases, the responsibility of its employer; because, whether a man using original language compares his rising thought with the language into which it seems to spontaneously shape itself or no—a question of the highest interest and of equal difficulty, a question touching the man's responsibility for the words he uses (which words may have come away unchecked by adequate comparison with the thought they are to utter)—whatever may be true of this question, and the doubt may soften one's judgment on hasty language, there can be no similar uncertainty about the deliberateness of quoted language. When a man adopts language from another, he does so because on deliberate comparison of it with his own sentiments he finds that language fit for their expression.

Now, Dr. Stokes uses the above language before his clinical class when it would be doubtless intended to produce the effect of warning his young hearers of the dangers of the faults described, and stimulating them to such diligence as would prevent the inertness, etc. But it is quite another thing when that language is used towards the audience that Dr. Johnson's preface addresses, who are not young nor with unmoulded minds to profit by these warnings, which, at our time of life, come too late to us, who are the subjects, not the audience, of Dr. Stokes's clinical lecture—*i.e.*, those among us who do not receive some new truths.

Thus Dr. Johnson certainly comments on *some* people's inertness, etc. Now, the only question is, whose inertness, etc., is intended by him in his comments? Some people they must be who do not receive some new truth.

The tenour of pp. xi.—xiii. is that of a remonstrance with the Profession for the neglect with which Dr. Johnson's theory had been treated. First, it is said that more than ten years ago what Dr. Johnson believes to be the true interpretation of the chief symptoms of cholera was published, but the book attracted very little attention. Then we are told that this problem of all other pathological problems admits of the most complete and intelligible solution; then we are reminded that these are matters of life and death; then it is said many men

doubtless will find it hard to give up a theory which they have long held to be indisputable, but the sacrifice must be made promptly; and then comes the above comment on the causes which prevent the ready reception of a new doctrine. Surely these comments point at those who have not received the new interpretation which is the theme of his book—that is, point at the Profession which took little notice of the book.

Surely I cannot be wrong in this? No other people are alluded to as having neglected any other new truth. But if Dr. Johnson, when he commented on *some people's* inertness, indolence, and pride, and said that the subject of his theory admits a more complete and intelligible solution than any other problem in pathology, and that yet it had been neglected for ten years, did not mean that the solution of the problem was impeded by the inertness, indolence, and pride of those who did not heed the solution of it, then I am sorry to have misunderstood him; but I much fear that under parallel circumstances I should be in danger of again committing a like mistake.

I observe with regret that the tone and style of my criticism have occasioned annoyance to Dr. Johnson. I trust he will accept my assurance that nothing that I may have written has come from any disrespect for him personally or for his ability; for I cordially concur in the universally high estimate of the excellent service which Dr. Johnson has in his honourable career rendered to his Profession by the happy results of investigations which have made his name so widely known.

6, Finsbury-circus. I am, &c. W. Moxon.

TOXICOLOGICAL DISCREPANCIES.

Letter from Dr. W. H. Borham.

[To the Editor of the Medical Times and Gazette.]

Sir,—As Dr. A. S. Taylor first replied to Professor Rodgers' letter which appeared in your journal through the medium of the country papers (the *Halstead Gazette* of December 20, 1866), my reply, as "the Halstead Physician," was sent through the same channel. Since that time (January 5) Dr. Taylor's letter has been published in your paper; permit me now to ask you to insert my reply, as Dr. Taylor levels severe strictures on my conduct, and I now submit to the Profession the principle of my acting rightly or wrongly in this lamentable affair.

Professor Taylor was asked by Government to give his analysis of the medicine and the contents of the viscera of Mr. Southern's children, and not for his opinion as to my conduct in this matter. I fear Dr. Taylor has been misinformed as to the part I took in the case. He has not replied to my answer. I am, &c.

January 21. W. H. Borham.

P.S.—I cannot resist stating, after such conflicting opinions, and such great discrepancies as we have seen over a bottle of medicine, by three toxicologists, that it is quite time that Government should appoint a toxicological commission of some six or eight analysts to examine things suspected of containing poison which may destroy life. It is unconstitutional and un-English that life or death should be held in one man's hand, and the public are more now than ever desirous of such a step being taken by Government.

*** We regret that press of matter will not permit us to republish Dr. Borham's letter to the *Halstead Gazette;* but he seems to rely on making good his points by the symptoms which the medicine produced on a dog. He says:—

"On September 28, some days after Mr. Southern's children were buried, he (who was a perfect stranger to me) brought a bottle of medicine, and said 'he had his doubts about its being proper medicine for his children's complaint,' and asked me to examine it; this at first I declined to do, but upon his strongly urging me again to do it, I yielded thus far to his request: I called into my studio a little dog, took the bottle of medicine from Mr. Southern's hand, and in his presence there and then poured a small quantity of the mixture down the dog's throat. We both watched the dog; he became restless, then sleepy, then curled himself up, and lay down, saliva of a glairy white nature ran from his mouth; he then got up and went into the back yard, vomited, and had tetanic convulsions, and these are facts testified by the father, a grain of which is worth a ton of argument."

Again he says:—

"During the interval of my sending the note and receiving a reply, I again gave the dog a small dose of the mixture, when similar symptoms were produced, and I took thirty drops myself, became very sick, vomited, and was much purged, had numbness in my fingers, and the salivary glands were excited all that day, both in myself and the dog."

And again—

"I am informed that the Medical man who first saw the children thought so lightly of their malady that he did not even feel their pulse, look at the tongue, or examine the secretions, yet directly after they took the first dose of the medicine, thealarming symptoms (which they never had before) described by Professor Rodgers, immediately set in, and they died about eighteen hours after, a time little more than double that of the death of the rabbit, after Professor Taylor gave it half a grain of real veratria. I am further informed that when Mr. John Taylor first saw the children, he said they were suffering from poison, and asked if there were any 'rat poison' about the house, an observation made in the presence of two or three witnesses."

As to the merits of this case we do not intend to express an opinion; but we must be allowed to hold that for men of eminence in the Medical Profession to conduct a dispute as to a purely Professional question in a country newspaper, is, to say the least of it, a mistake.

POSTURAL TREATMENT IN PROLAPSE OF THE FUNIS.

Letter from Dr. R. Dyce.

[To the Editor of the Medical Times and Gazette.]

Sir,—In a recent number (December 22) of the *Medical Times and Gazette*, which I have just seen, I observe a letter, signed "W. G. K.," commenting somewhat freely upon Mr. Adams of Lymington's case of funis presentation, which had been successfully treated by this method. In that letter, "W. G. K." makes the somewhat startling remark that this plan might be resorted to amongst poorer patients, but that many ladies would object to being placed in this position. Such a principle as is here enunciated is something new to me—that we are to have one method of treatment for the rich, and another for the poor. I have always taught, and have ever myself felt, the same responsibility in midwifery practice whether the position in society of my patient was among the high or the low, and have experienced equal satisfaction in bringing to a successful termination a difficult case, even in a pauper.

There may be, no doubt, a momentary hesitation on the part of the patient—nay, perhaps she may experience some dread for the consequences, if any request of an unusual nature is made during labour, more especially to one who is a mother; but I can truly say that I never knew an instance of refusal on the part of any female, whatever may have been her rank in life, when a proper explanation of the objects and intentions has been given. Should there be objections urged after such an explanation, I should strongly suspect that either the patient had lost confidence in her accoucheur, or she had not the common feelings of a mother, who, for the sake of securing the life of her child, should refuse to submit to a little temporary inconvenience.

I have a notion that rank and position in society do occasionally weigh with some men, and thus lead them on to irresolution and indecision at a time when time is of paramount importance, when, perhaps, as too often happens in midwifery practice, the patient's life is trembling in the balance. I must acknowledge that I have myself experienced this same feeling; but I have always been recalled to a proper sense of my duty by the recollection of the memorable reply of Napoleon the Great to Dubois when the life of the Empress Marie Louise was in danger—"Forget the Empress' station, and treat her as you would a soldier's wife."

Before concluding, I would make one observation on Mr. Adams's case, as it sufficiently accounts for his requiring over an hour's manipulation—viz., that his efforts were made during a pain, whereas they should have been made in the interval of a pain.

I have been favoured with notices of two successful cases similarly treated, since the publication of my paper, from my friend Dr. Keith, of Aboyne. One is particularly so, where he discovered the prolapse before the rupture of the membranes, and, by the postural method, succeeded in keeping the

cord out of the way, and thus saving the child, and, he adds, without causing the "slightest pain, and with the greatest ease." I question much whether the forceps or turning which "W. G. K." advocates would have had similar results.

I am, &c. R. Dyce, M.D.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, January 22, 1867.

Dr. James Alderson, F.R.S., President.

Mr. M. Berkeley Hill read a paper on a case of

DISLOCATION OF THE SIXTH FROM THE SEVENTH CERVICAL VERTEBRA FORWARDS WITHOUT FRACTURE; IMMEDIATE PARAPLEGIA; DEATH ON TWENTY-FIRST DAY.

In this case, during life and even after death, until the injured parts were laid bare, no deformity of the spinal column could be detected. The paraplegia involved all the parts below the seventh vertebra. There was no irritation of the spinal cord during life. After death, which took place on the twenty-first day, the cord was found softened and compressed by much blood, as well as flattened by the dislocated arch of the sixth vertebra forcing it against the body of the seventh. The urine was at first alkaline, and loaded with mucus and pus; but at the end of the first week it was restored to its natural condition by continuous drainage of the bladder. The author referred to the opinions of McDonnel and others in favour of trephining the arches of the vertebræ in cases of displaced vertebræ with paraplegia, and stated the reasons which dissuaded him from attempting it in this instance. These were—the situation of the injury being so high up in the vertebral column; the inability to ascertain with exactness, during life, the amount of the injury to the spinal column; the small probability of the auxiliary muscles of respiration regaining their motor power after the cord had been released from pressure; and the possibility of so severe an operation causing immediate death by displacing the phrenic nerve, or by the shock it would involve to the exhausted patient.

Mr. Holthouse would have expected, from the manner in which the accident happened—the forcible flexion of the spinal column—that the displacement would have been backwards, and that the anterior portion of the cord would have been the part injured. He had seen cases of separation of the bodies of the vertebræ from each other, but they had occurred from forcible extension of the spine, and were accompanied with fracture of the transverse and oblique processes. It was rare to find so much separation as occurred in this case without fracture. The case was not an encouraging one for the operation of trephining the spine, because, assuming the anterior part of the cord to be injured, removal of pressure posteriorly could not remedy the damage to the part in front. Then in cases of recovery it was difficult to say how much credit was to be given to the operation, for patients sometimes recovered without any operation. Mr. Holthouse mentioned the case of a patient of his own who lived twelve months after a fracture of the upper dorsal spine.

Mr. Wm. Adams said the case was interesting and well described. It was a rare case as one of dislocation without fracture, and one of great value as regards the question of operation. There was not, in his opinion, sufficient evidence to warrant the operation, as during life it could not be ascertained which vertebra was displaced. The diagnosis of the exact position of the injury could only be arrived at approximatively by our physiological knowledge, but in cases where the operation was performed it was necessary to be clear as to the exact spot injured. Mr. Adams next related cases in which, after accident, the head had been fixed forwards and a little sideways. In these cases there had been no actual palsy, but numbness and pains in the limbs. In such a case he had been asked whether reduction of a supposed dislocation ought not to be attempted. He thought it not advisable. However, it was done, and the patient got well. Thus encouraged, Mr. Adams, in a similar case, "pulled in" a neck in which there was similar evidence of displacement, and the result was restoration to a proper position, an apparatus being worn subsequently to retain this improvement. In Mr. Berkeley Hill's case, however, there was no evidence to warrant extension.

Mr. Holmes thought there were two points of interest in the case brought forward—1st. As to the rarity of such results from injury to the spine; and 2nd. The question of the propriety of operation. He was not certain that displacement in the cervical region was really so very rare. Several specimens showing displacement of the cervical vertebræ without fracture were in the St. George's Hospital museum, and there was one showing displacement of the last dorsal from the first lumbar, with fracture of the transverse processes. Then, as to the operation, although warmly recommended, it had not been approved in practice. Trephining the spine, or, more correctly, the laminæ of the vertebræ, had been performed by Cline, and the operation had recently been strongly urged by Brown-Séquard. Mr. Holmes was surprised that Mr. Hill had not noticed the remarkable statement of Mr. Hutchinson in the last volume of the *London Hospital Reports* on injuries to the spine. Mr. Hutchinson shows very satisfactorily that the displacement of the spinal column is very easily remedied by extension. This was so in Mr. Hill's case. If, then, the vertebræ could be put in position so easily, why operate? Then, when there is fracture, the fracture is of the body and not of the laminæ of the vertebræ, and there is no complete and permanent displacement in such cases. In cases of this kind will trephining the laminæ prevent pressure of the displaced body on the anterior part of the cord? Dr. Brown-Séquard thinks removing the laminæ would indirectly relieve the pressure the body exercises in front. On this point Mr. Holmes would give no decided opinion, except that, if such an operation could have a chance of relieving in the manner supposed, the laminæ of at least three vertebræ ought to be removed. Besides, Mr. Hutchinson showed that the pressure is not permanent, and that the paralysis results from contusion or smash of the spinal cord. If this be so, Mr. Hutchinson's facts show that the operation of trephining will be nugatory, and can do no good. Mr. Holmes did not find that in Dr. Gordon's case the operation had relieved the paralysis, and this was so in every case. The fact of survival after the operation was no evidence that the operation saved life, as a survival was common after injuries to the lower part of the spine. In the case Mr. Adams had mentioned of reduction there was no paralysis, and in the case he (Mr. Holmes) had seen, in which there had been paralysis, reduction was not followed by restoration of power to the palsied parts. He instanced a case in which Mr. Cæsar Hawkins had reduced a displacement of the last dorsal from the first lumbar without any effect on the paralysis. Mr. Hutchinson believed that reduction had no effect on the paralysis, and thus it was not necessary to add the risks of an operation to the dangers of the injury. In Mr. Hill's patient reduction was easy, and therefore in such a case it was utterly unreasonable to operate.

Mr. Callender was glad that the question of operation had been raised. It could not be considered irrelevant, as in most cases of the kind a fatal issue follows. In Dr. Gordon's case a certain amount of advantage was claimed. The patient regained power over the bladder, and he lost the painful affection of his limbs. But results quite as good follow without operation. Not long ago a patient had been treated in St. Bartholomew's Hospital by Mr. Paget and by himself (Mr. Callender), who, after an injury to the lower dorsal spine, had difficulty with his motions and urine, and appeared sinking. Yet this patient rallied and got into fair general health. He could not walk, but was able to enjoy life to a very considerable extent. After his discharge, being poor, he had no sufficient nursing, and then died, because he had not necessary comforts and attention. In this case the results were as good as in Dr. Gordon's case. As far as the operation was concerned, the man would doubtless have lived if he could have had proper care. Dr. Gordon's case was the only one in which any credit could be claimed for the operation in question. Mr. Callender thought the operation was an experiment not yet carried out largely enough to warrant positive conclusions.

Mr. Willett had once trephined the spine in the cervical region. A drunken man was thrown into the air by another man, and fell so as to injure his back. He was brought directly to the Hospital the same day—a Saturday. There was no external irregularity. After going on apparently satisfactorily for a day or two he became worse, and on Thursday he was nearly comatose, and appeared to be dying of asphyxia. Mr. Willett sought Mr. Savory's opinion, and it was agreed, as the patient was not likely to live long, to give him the chance of a prolongation of life. Chloroform could not be borne. Mr. Willett cut down on the spine, but

the bleeding was so great that there was much delay consequent on the necessary applications of ice to stay the flow of blood. For a short time the patient seemed better, and his breathing became less embarrassed, but he failed again, and died before the operation was over. Mr. Willett added that he had seen one case of complete, or nearly complete, dislocation of the third and fourth vertebræ. The slight injuries usually partook more of dislocation than of fracture.

Mr. Berkeley Hill, after expressing his thanks for the discussion following the reading of his paper, pointed out that some of the speakers had misconceived his meaning on one or two points. His object in bringing this case forward had been to obtain the opinion of other Surgeons concerning the advisability of trephining the spine when the injury was placed so high up. He was glad to find that the opinion of the Society corroborated him in the non-advisability of such an operation in this case. Mr. Holmes had laid stress upon the great probability that in these cases the cord was too seriously injured to recover, and that the removal of continuous pressure by operation would have small effect. Mr. Hill, though fully impressed with the value of these objections, was inclined to think that, had this been a case where the position of the injury had been less critical, and the symptoms had made it possible to estimate with tolerable exactness the kind of injury the bones had received, the operation would, seeing what success followed two operations of the kind, have been justifiable; for, post mortem, we do not always find the primary injury to the cord so great that recovery is necessarily hopeless. And he was greatly pleased to find that Mr. Adams did not altogether discard the operation as wrong. In Mr. Gordon's case, the patient, from complete motor and sensory paraplegia, had regained the power of walking with a stick.

Mr. Charles H. Moore read a paper on

TWO CASES OF PERIODICAL INFLAMMATION OF THE RIGHT KNEE-JOINT; WITH REMARKS.

Before detailing his cases, Mr. Moore referred to several examples of transient local disease characterised by recurrence at regular intervals. In some of these vomiting came on weekly for many years; in others, various inflammations of the throat, tonsils, eyes, etc., occurred daily at a regular hour. One case was that of a distinct quotidian ague of the arm, the rigor, heat, and stage of perspiration being marked in each fit. Most of these cases were cured by arsenic or quinine. The first of Mr. Moore's patients was a woman aged forty-three, who had had ague in girlhood and was cured. Eight years afterwards, at the end of a day of fatiguing work, she was attacked with inflammation of the right knee-joint, which increased till the third day and then subsided. Thirty days afterwards a similar attack came on, and the inflammation was repeated many times at the same interval. From the third month of pregnancy to the third month of lactation the attacks were quite interrupted. They then returned again, and when she came under Mr. Moore's care they had continued eighteen years. The only difference in the early and later characters of the ailments was that nine instead of thirty days constituted the interval; but successive attacks recurred so punctually that they could be predicted almost to an hour. This patient was not cured. The second case was that of a girl of twenty one, who never had ague, but who was attacked with inflammation of the right knee-joint after washing stone steps. The joint swelled, and on the third day was painful, and after that was well again. Twelve days from the attack, the whole local process was repeated in every particular without any external occasion, and again an intermission of perfect health ensued. She had altogether nearly twenty attacks, but they were not always quite punctual to the day, some occurring thirteen days and one or two eleven days from the previous one. Towards the subsidence of the disease two attacks missed, and the interval was three times as long as usual. This patient got well, apparently from the effect of quinine. The first patient was under Mr. Moore's care only a short time, but he had the opportunity of witnessing three or four attacks. The second was under his observation during many of the attacks, and he was able to take precautions with a view to prevent their being feigned or artificially produced. In each case there was a movable body in the joint, and to it possibly the first onset of inflammation was owing; but the subsequent attacks were too precisely regular in their outbreak to be referred to any accidental cause; they were out of the date of the catamenia, and Mr. Moore expressed the opinion that they were in both patients of the nature of ague.

METROPOLITAN ASSOCIATION OF THE MEDICAL OFFICERS OF HEALTH.

Saturday, January 19.

Mr. Rendle, Vice-President, in the Chair.

A paper by Mr. P. H. Holland on the subject of

A LOCAL AND TEMPORARY OUTBREAK OF CHOLERA AT IVINGHOE IN BUCKINGHAMSHIRE, IN SEPTEMBER, 1866.

was read by the Secretary. With two exceptions, the disease was confined to a court called Cooke's-yard, in which sixteen persons out of twenty-six were attacked, and nine died. It had been at first supposed that the disease was imported from London, without any real foundation, and, in the opinion of Mr. Holland, it was far more reasonable to conclude that the disease was produced from some local cause immediately connected with the place in which it broke out, to which it was almost entirely confined. Not only was the yard a miserably dirty place, with defective drainage and badly ventilated houses, but the inhabitants obtained their supply of water from an imperfectly covered well dug in the chalk, but not secured from pollution from foul water flowing from the surrounding soil, which was saturated with filth. Upon examination the water was found to contain a quantity of putrid matter, together with several visible animalcules and some dead earthworms, while foul surface water was seen trickling down the sides of the well.

The Chairman said the facts afforded one more illustration of the influence of impure water in propagating cholera.

Mr. Burge said he did not think it had yet been proved that water was the sole cause of the propagation of cholera. He believed that in the last outbreak of cholera atmospheric influences were at work, not only in the production, but in the propagation of the epidemic, and its appearance in an isolated village like Ivinghoe, while many other places escaped, was a confirmation of this opinion.

Dr. Aldis thought that they must all concur in the opinion of Mr. Burge with respect to the propagation of cholera. In his own district only one case of cholera during the recent epidemic could be said to be caused by the use of impure water.

The Chairman said that the poorer classes were in some places obliged to drink water which cattle had refused, and, so long as such a state of things existed, they would be subject to periodical attacks of epidemic disease. With regard to the influence of impure water in propagating the disease, it appeared that the investigations up to the present tended to show that impure water was the most common and effective agent in the propagation of cholera.

Dr. Letheby said that the difference of opinions with respect to impure water as a medium in propagating the disease arose from an extravagance of views on both sides. It was asserted by some "that impure water only was the means by which cholera was generated and diffused," while others maintained "that it had nothing whatever to do with the disease." He thought both were equally wrong. The facts with regard to the communication of the disease by means of impure water were so conclusive that they could hardly be disturbed, but he thought himself there could be very little doubt that the sole agent in the propagation of cholera was the discharge from the body; whether it was communicated by water, or by the atmosphere, or by any other means, that was the sole operating agent. But if water was laid down as the sole means by which the disease was communicated, every other line of investigation would be shut out, and he thought the question was not yet so satisfactorily settled as not to admit of controversy. He was of opinion that the more the subject was investigated the more they were led to the conclusion that water had nothing whatever to do with the late outbreak in London. An argument in support of this opinion was afforded by the fact that in the City of London Union Workhouse, where they did not use a drop of the East London Company's water, 27 deaths from cholera occurred out of a population of 800, while in the East London Union Workhouse, where that water was used, not a single case of the disease made its appearance. It was his opinion that cholera had its origin in some specific cause, of which nothing more was known at present than when it first appeared in Europe; and that impure water, and every other species of impurity, as well as dissipation, predisposed the system to its attacks.

Dr. Liddle said that impure water had a great deal to do

with the propagation of the disease, but he believed with Dr. Letheby that they knew nothing whatever of its originating cause.

Dr. Letheby then performed a series of experiments to ascertain the existence of organic matter in water, and the mode of detecting its products in different stages of decomposition, as ammonia, nitrites and nitrates, chlorides, oxygen, nitrogen, and carbonic acid. He also showed the mode of estimating the number of degrees of hardness water contained.

A vote of thanks was passed to Dr. Letheby for his very interesting communication, and the meeting adjourned.

THE HUNTERIAN SOCIETY.

Wednesday, January 23.

Dr. Stephen Ward in the Chair.

Dr. Peacock read a paper on

THE DIAGNOSIS OF OBSTRUCTIVE MITRAL DISEASE BY A PRESYSTOLIC BRUIT.

Dr. Peacock stated his former disbelief in the existence of any such murmur, except, it might be, in rare cases, but subsequent inquiry had led him to modify his views to a considerable extent. He narrated a case in which he had been able to make out a distinct presystolic bruit during life, and on examination after death had found well-marked mitral constriction, together with vegetations on the auricular surface of the valves. In the lungs a number of apoplectic kernels of various ages were discovered. Dr. Peacock had found these bruits to exist either with or without a systolic murmur, but, in some cases, and especially when associated with the last, their detection was very difficult, and the diagnosis of mitral obstruction by physical signs alone uncertain. It might, however, be made out by the fact that the burden of the work was thrown upon the right side of the heart, which beat louder than usual, by the tremor which sometimes accompanied the contact of the apex of the heart with the side, and by the pulse, which, as the left ventricle was unaffected but the supply of blood limited, was small and quick, but regular. The condition of the lungs is also different; the onset of the disease being more gradual than in regurgitation, the pulmonary capillaries have time to distend; hence the dyspnœa is less. There is less general venous engorgement, so that there is less dropsy, and that mostly in the lower extremities; the face is also usually paler. The prognosis is better than in mitral regurgitation, although in neither did he consider it so bad as was sometimes stated, and in both it was better than in aortic regurgitation. The treatment of the two mitral affections was rather different. In the case of obstruction, the patient was usually anæmic, and the circulation was with difficulty maintained; therefore tonics, especially chalybeates, were specially indicated. In regurgitation, again, the symptoms were generally more urgent, and the accumulated fluid had to be removed by diuretics or cathartics. Some patients lived a very long time with contracted mitral, especially young people who might have been born so, or acquired the condition soon after birth. As for himself, he was inclined to believe that rheumatism as a cause of heart complaint had been over-estimated.

Dr. Risdon Bennett suggested that in some cases the cardiac affection originated in the rheumatic diathesis, although the disease had never decidedly manifested itself.

Dr. Sutton thought that presystolic bruits were rather common. He also made some very practical observations on various cases which had come under his notice, especially one in which, although there was complete disorganisation of the mitral orifice, the bruit entirely disappeared before death.

Dr. Peacock, in reply to some questions, stated that bruits no doubt came and went with the state of health in which the patient was, that in some cases they might disappear simply because the flow of blood was so reduced as to be incapable of producing any sound. He never punctured the limbs for the escape of fluid until it was evident that they were about to burst, and then he took care not to perforate too low down.

St. Bartholomew's Hospital.—The overflowing coffers of this ancient institution have been augmented by a legacy of £100, under the will of Dr. Jeaffreson, one of the Hospital Physicians, lately deceased.

THE LONDON MEDICAL SOCIETY.

Monday, January 23.

Dr. Hare in the Chair.

At a meeting of this Society, Dr. Oppert made some observations on the construction of Hospitals, and showed plans of some of the most recent buildings of the kind.

Dr. Althaus then read a paper on the

ELECTROLYTIC TREATMENT OF TUMOURS, ETC.,

this consisting in the passing a continuous current of electricity through the structure to be operated on from the negative pole of a battery. He exhibited a very ingenious battery, and a variety of instruments to be used in this process, and showed their effects on saline solutions, albumen, and muscle. The diseases for which he thought the plan of treatment best suited were tumours, such as nævus, bronchocele, hydatids, cancer, etc., aneurisms, varicose veins and piles, serous effusions and strictures, as it caused no bleeding, little or no pain or shock, no sloughing, or other bad effect. He had used it with apparently good effect in cases of bronchocele, scirrhus, and molluscum, but thought it capable of much wider extension.

Mr. Weeden Cooke suggested that as the effects were so local, and as the introduction of the needles into the tumour would always give rise to a certain amount of irritation, the tumour, if cancerous, might grow faster than it was destroyed.

Dr. Handfield Jones had tried it for the removal of a wart, but had found the pain intense.

Mr. I. Brown doubted whether the time spent in the cure was not a strong objection to the plan in the case of such a simple operation as that for piles, which could be removed at once instead of after ten applications of the apparatus.

Dr. Sansom thought that the stimulus of the vaso-motor nerves, and the consequent diminution of the quantity of blood supplied to the part, might have as much to do with the lessening of the tumour as any mechanical or chemical action induced by the current.

MEDICAL NEWS.

King and Queen's College of Physicians in Ireland.—The following gentlemen obtained the Licence in Medicine during the months of October, November, and December, 1866:—

N. W. Allt, Rathmines; L. M. Cordner, Dublin; R. M. Craig, Dublin; S. Goodison, Enniscorthy; M. Hauratty, Phibsborough; H. J. Hazlett, Lurgan; B. Keelan, Carrickmacross; A. J. Low, St. Brelade's, Jersey; R. P. Murphy, Wexford; H. Murray, Fannet; T. Partridge, Birmingham; H. L. Smith, Borris in Ossory; J. F. Supple, Dublin; H. G. Thompson, Finstiogue; G. H. Tyndall, Gorey; N. Wade, Kilcock.

The following gentlemen obtained the Midwifery Diploma during the same period:—

N. W. Allt; G. Archdall, Fivemiletown; L. M. Cordner; R. M. Craig; H. Davy, Kimmage Lodge; M. Hauratty; H. J. Hazlett; J. J. Hurley; B. Keelan; R. P. Murphy; H. Murray; C. H. Robinson, Dublin; H. L. Smith; J. F. Supple; H. G. Thompson; P. W. Tuite, Dublin; N. Wade.

Royal College of Surgeons of England.—The following gentlemen, having undergone the necessary Examinations for the Diploma, were admitted members of the College at a meeting of the Court of Examiners on January 24:—

George William Barroll, Bedford (of St. George's Hospital); William Alfred Renshaw, Aston-on-Mersey (Manchester); James Reginald Stocker (Guy's Hospital); John Davies, L.S.A., Swansea (University College); Alexander Richardson Haughey, M.B. Univ. Edinb., Bushmill, Co. Antrim (Edinb. and Glasg.); Nicholas Marshall, St. Austell, Cornwall (University College); Daniel Costelloe, Canonbury-square (Dub. and St. Bartholomew's); Frederick Knowles, Farnham, Surrey (Guy's Hospital); Richard Lestock Edgeworth, M.B. Univ. Dub., Edgeworthstown, Co. Longford (Dublin); Thomas Mawhinny Watt, M.D. Univ. Aberd., Ballyjamesduff, Co. Cavan (Aberd., Belfast, and Dub.); Frederick Woolhouse, Sheffield (Sheffield); Robert Carlisle Appleton, Stockton-on-Tees (Newcastle); George Rootes, Ross, Hereford (Guy's Hospital); John Arnold, L.R.C.P. Lond., Demerara (St Bartholomew's Hospital); Henry Vining Bryant, Hackney-road (King's College); and Charles Tennant, Newbottle, Durham (Charing-cross Hospital).

It is satisfactory to state that out of the sixty-nine candidates who offered themselves for examination for the Diploma of Membership, only nine failed to acquit themselves to the satisfaction of the Court, and were consequently referred to their Hospital studies for six months.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 17, 1867 :—

Charles Quinton (Sydenham College, Birmingham), Brook-square, Rugeley.

On January 24 :—

Shirley Woolmer Arundell (General Hospital, Birmingham), 130, Gower-street, W.C. ; John Chisholm McDonald (Westminster Hospital), 75, Claverton-street, Pimlico ; Reginald Bligh Wall (St. Mary's Hospital), 4, Bishop's-road, Bayswater ; Nathaniel Heckford (London Hospital), London Hospital.

The following gentleman also on January 17 passed his First Examination :—

Bernard Renshaw, St. Bartho'omew's Hospital.

At the preliminary examination in Arts, held on January 25 and 26, forty-seven candidates presented themselves, of whom eighteen were rejected, and the following twenty-nine passed and received certificates of proficiency in general education, viz. :—

Robert Adams, Charles Edward Alford, Robert S. Armstrong, Henry Edward Bridgman, Lionel Beech, Worthington Epps, Christopher F. Green, Sarah Goff, A. E. Hayes, Frederick D. Hill, James Jackson, Henry M. Langdale, Thomas George James Moore, F. E. Morgan (special certificate), John Edward Morris, Frederick A. Monks, F. E. Newington, Augustus J. Pepper (special certificate), Ellin Phillips, William R. Pike, Josephus Shaw, J. Priestley Smith, William Robert Smith, W. B. Slaughter, Edwd. W. Thomson, Edwd. James Tregaskis, Henry Williams, Wm. H. Weddell, W. K. Bale Welsh.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

ATKINSON, F. P., M.B, has been appointed Senior Resident Surgeon to the Lying-in Hospital and Dispensary, Birmingham.

BARKER, J. C., L.R.C.S.I., has been appointed Junior Assistant Medical Officer to the County Lunatic Asylum at Rainhill.

CAMPBELL, JOHN A., M.D., C.M., Assistant Medical Officer to the Durham County Lunatic Asylum, has been appointed Assistant Medical Officer to the Cumberland and Westmoreland Counties Asylum.

EDWARDS, G. N., M.D. Cantab, F.R.C.P., has been appointed Physician to St. Bartholomew's Hospital, *vice* Dr. Jeaffreson, deceased.

MCDOWELL, B. F., M.B., L.R.C.S.I., has been appointed a Visiting Surgeon to the Westmoreland Lock Hospital, Dublin.

MOORE, J. DANIEL, M.D., F.L.S., has been appointed Honorary Medical Officer to the Lancaster Infirmary.

BIRTHS.

ADAMS.—On January 23, at Barnes, Surrey, the wife of James Adams, M.D., of a daughter.

BENNETT.—On January 18, at Park-road, Liverpool, the wife of J. M. Bennett, M.D., prematurely, of a son.

BLACKETT.—On January 25, at Southwold, Suffolk, the wife of E. R. Blackett, M.D., of a daughter.

BURTON.—On January 27, at Stoke, Devon, the wife of Dr. Burton, R.N., Staff-Surgeon, H.M.S. *Zealous*, of a daughter.

ELLIOTT.—On January 17, at St. Martin's, Stamford, the wife of G. F. Elliott, M.D., of a son.

HILL.—On January 25, at Lymington, Hants, the wife of W. R. Hill, M.D., of a daughter.

INNES.—On January 26, at Southsea, the wife of Dr. F. W. Innes, C.B., Deputy-Inspector-General of Hospitals, of a daughter.

POTTINGER.—On January 26, at 14, Victoria-terrace, Sheerness, the wife of R. Pottinger, Staff-Surgeon, H.M. Naval Hospital, Plymouth, of a daughter.

TRAQUAIR.—On January 23, at 1, Eccleston-square, the wife of T. G. Traquair, M.D., of a daughter.

MARRIAGES.

DENTON—JOHNSON.—On January 24, at Rotherby, E. R. Denton, M.R.C.S.E., of Leicester, to Emily, eldest daughter of T. Johnson, Esq., of Rotherby, Leicestershire.

HARPER—ROBINSON.—On January 23, at Braunton, Devon, J. Harper, L.R.C.P., M.R.C.S.E, of Barnstaple, to Augusta Mary, third daughter of Captain J. De Lacey Robinson, R.N., of Buckland House, Braunton.

HECKFORD—GOFF.—On January 28, N. Heckford, M.R.C.S., to Sarah, youngest daughter of the late W. Goff, Esq. No cards.

ORD—LEGH.—On January 24, at St. Stephen's Church, Lewisham, C. Knox Ord, M.D., Surgeon R.N., H.M.S. *Fisgard*, to Sarah Hephzibah, second daughter of E. Legh, Esq., The Limes, Lewisham, and Newington-next-Sittingbourne, Kent. No cards.

TEALE—CHILWELL.—On January 23, at Widcombe Old Church, Bath, John W. Teale, M.A. Oxon., F.R.C.S., of Scarborough, to Grace Mary, third daughter of the late R. Chilwell, Esq., Bath. No cards.

DEATHS.

ACKLAND, W., L.S.A., of Bideford, Devon, on January 17, aged 76.

BLENKARNE, H., M.R.C.S.E., at 12, Upper Thames-street, on January 27, aged 65.

EARDLEY, JOHN, M.D., L.R.C.P. Edin, of Charles-street, Westbourne-terrace, on January 25.

HASLOP, G.H, L.R.C.P. Edin., at Buckingham, on January 26, in his 61st year.

MCCANN, N., M.D., J.P., D.L., of 50, Parliament-street, Whitehall, on January 24, aged 64.

SLADE, JOHN, M.D., at Boulogne-sur-Mer, on January 27, aged 57.

SPENCER, G., Surgeon R.N., of Alfreton, Derbyshire, on January 16, aged 84.

VACANCIES.

BOLTON INFIRMARY AND DISPENSARY.—House-Surgeon.

CUMBERLAND INFIRMARY.—House-Surgeon.

WESTERN GENERAL DISPENSARY.—Physician in Ordinary.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Andover Union.—Mr. William Smith has resigned the Fourth District ; area 15,571 ; population 2861 ; salary £71 per annum. Mr. Charles Smith has resigned the Fifth District ; area 16,696 ; population 2390 ; salary £65 per annum.

Chorlton Union.—Mr. John Smith has resigned the First District ; area 214 ; population 2700 ; salary £100 per annum.

Spalding Union.—The Moulton District is vacant ; area 16,273 ; population 2889 ; salary £45 per annum.

APPOINTMENTS.

Cardiff Union.—James Milward M.R.C.S.E., L.S.A, to the Cardiff East District.

Carlisle Union.—Thomas Rigg, M.D. Edin., M.R.C.S.E., to the Burgh District.

Cricklade and Wootton Bassett Union.—Herbert Cooper, M.R.C.S.E., L.S.A., to the First District.

Epping Union.—Frederick Turtle, M.D. St. And., M.R.C.S.E., L.S.A., to the Chingford District.

Huntingdon Union.—Herbert Lucas, M.R.C.S.E., L.S.A., to the Godmanchester District.

Nuneaton Union.—Frederick Bond Eaton, M.R.C.S.E., L.R.C.P. Edin., L.M., to the Nuneaton District.

Patrington Union.—John Green, M.R.C.S.E., to the Middle District

West Ham Union.—Frederick Turtle, M.D. St. And., M.R.C.S.E., L.S.A., to the Woodford District.

Whitchurch (Salop) Union.—Robert Parker, M.R.C.S.E., L.S.A, to the Malpas District.

THE COLLEGE LECTURES.—Professor Huxley will commence his course of twenty-four lectures on the Osteology and Dentition of the *Sauropsida*, or Reptiles and Birds, on Monday next, at 4 o'clock. It will be seen from an advertisement in another column that members are invited to attend ; no cards will be issued.

THE COLLEGE LIBRARY.—A very interesting and valuable addition has just been made to the large collection of portraits in the possession of the College of Surgeons, Messrs. Moira and Haigh having presented a handsome album with upwards of 200 portraits of the Fellows of the College, with their respective autographs ; other volumes are to follow. These portraits are, of course, faithful likenesses of the distinguished originals ; some of them are gems of photographic art, and reflect great credit on this distinguished firm.

THE Senate of the University of Glasgow, at their meeting on Thursday, January 24, conferred the degree of LL.D. on R. G. Mayne, M.D., Leeds, author of the "Expository Lexicon of Scientific Terms.

STREET DANGERS.—Twenty-three cases of serious injury, chiefly fractures, were received at St. Thomas's Hospital during the night of Tuesday week last ; and many cases of accident were treated at Guy's, Westminster, Charing-cross, and other Hospitals.

THE CONTAGION OF LEPROSY.—The Continental papers announce that leprosy has broken out in the Government Hospital at Broubeck, Holland. The disease (whatever it may be) is said to have been brought from the West Indies by an old soldier, and communicated to the inmates.

AMONGST the witnesses examined at the inquest on the persons who were drowned at the Regent's-park, was Dr. Sylvester, who, with the aid of a skeleton, explained his mode of resuscitation. He said he had devoted time, health, and money to his discovery, but as yet had received no recognition of his services from the public. Dr. J. Whitmore, Medical Officer of Health for Marylebone, deposed to the foul state of the water of the lake.

WE learn that the late Dr. Martin, of Ventnor, is succeeded in his practice by his personal and much-valued friend, Dr. Maclachlan, late Physician to the Royal Hospital at Chelsea, whose health has obliged him to reside at Ventnor for the last few years, but is now sufficiently restored to allow of his resuming the active duties of his Profession.

PARIS FACULTY OF MEDICINE.—This body has presented the following lists of candidates for the two vacant chairs of Internal Pathology :—First chair, MM. Axenfeld, Empis, and Lorain ; second chair, MM. Hardy, Bouchut, and Charcot. For the chair of Operative Surgery, the following

list of names has been chosen:—MM. Legouest, Chassaignac, A. Guérin, Demarquay, Verneuil, and Giraldès. The first name on each list will doubtless be selected by the Minister of Public Instruction.

TESTIMONIAL TO MR. STATHAM.—A deputation from Mr. Statham's out-patients at the Great Northern Hospital attended on Wednesday at the Hospital to present him with a silver goblet in proof of their gratitude for the invariable kindness and attention Mr. Statham had shown them, and as a token of the sympathy they felt for him in the attack made on his Professional character in the late action of Absolon *v.* Statham.

MURDER AND SUICIDE BY A LUNATIC.—The following case shows the danger of voluntary unskilled supervision of a lunatic:—"An account of a terrible occurrence comes from Tintagel, on the north coast of Cornwall. A strong, middle-aged man named Smith, a donkey proprietor, well known to visitors, has for some weeks past exhibited signs of mental depression. He was much respected by his neighbours, many of whom took it in turn to watch his movements, as he had been heard on two or three occasions to threaten self-destruction. On Friday night one Thomas Baker was on watch, and he accompanied Smith for a walk. On reaching a point of the road open to the sea, the insane man suddenly grasped his companion, and a severe struggle ensued. Smith, however, gained the mastery, and Baker was forced down into the water. Two women were helpless spectators. In the water the struggle was renewed, the lunatic keeping his victim down until a heavy breaker came in and washed both away. The body of Smith was washed ashore on Saturday, but that of Baker has not been seen again."

TRANSLATED EXTRACTS.—From the *Aix-la-Chapelle Echo*, Jan. 24: "Munich, Jan. 19.—Professor v. Pettenkofer is back some days from his travels. It is said that he is completely satisfied with the result of his examination of the towns visited by cholera last summer; and his conference with Professors Griesinger, Wunderlich, and the Englishman, Macpherson, is said to have led to almost complete agreement of opinion. We hear that the Professor will soon lay his latest results before the Medical Society in a complete shape. At the same time an astonishing observation is conveyed to us from Vienna. Dr. Klob has, with the use of a microscope of from 800 to 1000 magnifying power, discovered in the rice-water evacuations millions of microscopic fungi, which in appearance differ little from the ordinary European forms; and that they form the basis of the frightful malady, and that cholera is easily propagated by their means, can scarcely any longer be doubted."—From the *Moniteur*, Jan. 6: "Santé Publique. They write from Leipzig to the *Augsburg Gazette*. The Professors Greisinger, Pettenkofer, and Wunderlich have had a meeting to agree about the regulations concerning cholera, which they are about to publish. Dr. Macpherson, who has specially studied cholera in India, has arrived here to assist at their conference. The four Doctors are perfectly agreed that cholera is propagated by means of subterraneous waters."

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Pusey and the Besetting Trial, &c., &c.—Next week we propose to sum up with a few observations, which we hope will wind up this matter for the present.

Mr. Christopher Heath, who has been appointed Assistant-Surgeon to University College Hospital, has been appointed also as Teacher of Operative Surgery, and not as Teacher of Anatomy, as we stated p. 32, January 12.

The late Dr. Brinton was educated at the private school formerly kept by the late Rev. Henry Smith, M.A., at Guildford House, Handsworth, near Birmingham, which he left about 1839, to be articled to the late T. Thursfield, Esq., Surgeon, Kidderminster. About 1843 he entered King's College, London, after matriculating at the London University.

Dr. Handsel Griffith's paper on hæmodromometers is very interesting. It shows the deficiencies in Volkman's well-known instrument, and describes one of Mr. Griffith's own invention, obviating the majority of these. This consists of a curved tube, and the rapidity of the flow of the blood is estimated by means of a very light ball disengaged in a peculiar fashion, and driven along by the current through a certain distance in a period ascertained by a chronometer fixed to the machine. The whole apparatus displays great ingenuity.

Corrigendum.—In the heading of Mr. Barwell's "Case of Congenital Varus followed by Tetanus," in our last week's number, the words "followed by tetanus" are to be omitted. The error arose from an oversight in the revision of the proof.

Dr. Hunter.—English Medical men have no feelings of jealousy towards such of their brethren as come armed with foreign diplomas, provided those diplomas are obtained by honest study and examination; neither do they persecute any man for his opinions. A man may say: "Free carbon in the blood, or an excess of carbon in the system, is believed to be the principal source of all infectious diseases—all epidemic maladies;" or he may say that free carbon is not the cause; or he may say either or both at one time or at several, and may subject himself to fair criticism, but nothing more.

E.C.—The equalisation of poor's-rates is not fair in itself. That it would be distasteful to Medical men living in fashionable streets is very likely. Such an argument does not affect the point at issue. It is disagreeable to have one's pocket picked, a fact which does not excuse the robber. Look in a new magazine called the *People's Journal*, published by the Christian Knowledge Society, and you will find "a peep at Lambeth," in which it is stated that the owners of the miserable Lambeth slums derive far higher profits from their property, and extort higher rents from their wretched tenants, than do the owners of the best West-end houses. The *Times* of Monday contains a complaint that tradesmen in Poplar live away, and evade their obligations to the poor of their parish. They would escape almost entirely if the whole metropolis paid their poor's-rate.

A. T.—You might save yourself and us some trouble by consulting the advertising columns of this journal, where you will find that an examination for the *L.M.* will take place on the 6th inst.

Dr. Henry.—Yes, the late Albert Smith was a member of the College, and the author of "Confessions of a Dissecting-room Porter," which appeared in an early volume of the *Medical Times*.

"PALL-MALL GAZETTE" TESTIMONIAL.—HUNTER *v.* SHARPE.

Further Subscriptions.

S. C. Hall, Esq., F.S.A.	£1 1 0
Thomas B. Anstie, Esq., Devizes	0 10 6
Dr. Odling, F.R.S.	2 2 0
W. M. Alexander, Esq.	2 2 0
Alfred Leggatt, Esq.	2 2 0
Clapham Medical Book Society, per J. Bush, Esq.	2 2 0
T. Heckstall Smith, Esq., St. Mary's Cray	2 2 0
R. Barrington Cooke, Esq., Scarborough	2 2 0
Dr. Gason, Rome	1 1 0
Dr. Ashton Godwin	1 1 0
W. Meehan, Esq.	2 2 0
Dr. Goodfellow	2 2 0
Dr. Cursham	2 2 0
Charles Godson, Esq., Barnet	1 1 0
W. Ortner, Esq.	1 1 0
Captain Maxse, R.N., Bursledon	1 1 0

Subscriptions will be received by G. D. Pollock, Esq., 27, Grosvenor-street, and T. H. Hills, Esq., 45, Queen Anne-street, treasurers; at the Argyll-street Branch of the Union Bank; and at Dimsdale and Co.'s, 50, Cornhill.

DR. PUSEY'S STATEMENTS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I was glad to see so high an authority as Dr. Beale come forward as the champion of our English youth. I do not believe the sin alluded to by Dr. Pusey to be at all general in our English schools. I have never known or heard of its existence, but should it be lurking only in one, the sooner it is known and grappled with the better. It should be "stamped out" in the manner recommended by Dr. Beale. Confession will never do it; it would, I think, tend to aggravate the evil. For two years I was at school abroad; the sad practice was introduced by one lad alone—one stunted and dirty in body and mind—he it was who drew within his devilish meshes a few, not more than half-a-dozen, of the more easily led of the younger boys. Some time before the public inquiry on the subject, and his expulsion, he was cut by nearly every boy in the place. Confession was of frequent occurrence. Where was the good result? It increased the evil, for the boys used to say, and I suppose believe, that the priest forgave them whenever they paid their fees. All must hope that Dr. Beale is right. I for one most cordially agree with him.

I am, &c. CHAS. ORTON.

Newcastle-under-Lyme, January 23.

THE EFFECTS OF CIRCUMCISION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Now that clitoridectomy has so long occupied our attention, and I trust come to an end, I must be pardoned for alluding to the subject of your correspondent, "The Besetting Trial of our Boys." I gladly substantiate the remarks of one of your recent correspondents, and am well assured, both by observation and report, that the besetting trial does not exist amongst the Jewish boys. How far this depends upon moral influences I am unprepared to state, but this I know, that the removal of a portion of the prepuce is for many years fatal to the practice, and the glans is well known to become greatly reduced in nervous sensibility. I had a long conversation with an old teacher and circumciser, and his remarks quite bear me out that the Jewish children are more free from the curse than where circumcision is not practised. I have special opportunities of learning these facts; and were I to meet with a patient who practised the abuse, I should have no hesitation in circumcising him, according to the plan adopted by the Jews, and should hope for a satisfactory result. I am, &c.

WILLIAM SOPER, Surgeon to the Jews' Hospital,

4, Clapham-rise, January 22. Lower Norwood.

P.S.—A curious fact among these children is a general enlargement of the tonsils, both male and female.

THE ATTITUDE OF THE DROWNED.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I have been much interested by the account in last week's *Medical Times and Gazette* of the inspection of the bodies of thirty-three victims of the Regent's-park catastrophe, which were conveyed to Marylebone Workhouse on Thursday last.

The statement that "the arms were all elevated and bent at the elbows," I regard as a confirmation, on the great scale, of what was before, with me, almost a foregone conclusion—viz., that this attitude is a distinctive sign of death from submersion in water of a low temperature. I have met with it in drowning, suicidal as well as accidental, occurring in winter; but in no instance of death from this cause—and my opportunities of observing have not been few—do I recollect having witnessed the phenomenon in question during warm or temperate weather.

I cannot receive the explanation suggested by your reporter. It appears unlikely that all the thirty-three were engaged in skating at the moment of the accident; and it seems still less probable that those who were so engaged should have maintained the attitude—*quoad* that of skating—throughout their death-struggle, brief as this may have been. But into the *rationale* of this peculiar elevation and flexion, or why it is confined to the upper extremities, it is beside my present purpose to inquire. I merely call attention to the matter in the hope of eliciting the experience of others of your readers regarding it. A new fact is always worth investigation, even if its practical application is not at once apparent; and that under consideration, if fully established, might prove of value in some of the ever-varying emergencies of Medico-legal Medicine.

I am, &c.

Keith, January 24. R. TURNER, M.D.

PROFESSIONAL JUMBLE AND REMEDY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—To your editorial article on Medical teaching of the 19th, by your permission, I would add a few remarks on the gradual subversion of the old grades of the Profession. The pures, so called, did hold their own in a great degree, and were certainly by birth, education, and manners superior to the bygone apothecaries and earlier class of general Practitioners; but latterly, through the facilities granted for parasitical attachment to certain diploma-selling institutions, the pures have found themselves in public recognition standing side by side with what they must deem electro-plated goods; and an increasing number, anxious to see the charm of "Dr." on their doorplate and carte de visite, have really put into the shade before the public, who are ignorant of our organisation, the more consistent Surgeon-apothecaries. It may be also said in another way that those men of more legitimate claim to this now-a-days highly sought soubriquet, Licentiates, M.B.'s, &c., assume all the public advantage of their own higher grade, the M.D.'s. Many of the upper class of the Profession, seeing these anomalies, are liberal enough to advocate a one-faculty system, since all more or less trample upon diploma distinction and practise what they like. And why should it not be so, leaving it to individual merit and ability to raise itself, and pursue any branch of the Profession it chooses? As to one title being not enough for the public, the question is already answered by all the grades at present practising all branches; and when the question is asked as to real separation of any order, it would be difficult to prove even exceptional independency. Disease or injury of body always more or less requires local and general treatment. The Surgeon of a regiment is never appointed as a Physician nominally, but to all intents and purposes he is one, and is called Doctor to distinguish him from others; also, if there be institutions through which men are to pass to qualify them to treat disease and injury of body, it may be supposed that these institutions send forth in every way efficient persons under one title. There is no special examination that I am aware of to give title to that very important specialty, the treatment of the insane, which is left to individual selection.

I am, &c.

Nailsworth, January 28. THOS. STOKES.

COMMUNICATIONS have been received from—

Mr. HANSEL GRIFFITHS; MESSRS. WOODALL AND SONS; Dr. R. TURNER; Dr. FOOTE; Dr. LUCKWELL; Mr. BRINTON; Mr. CURGENVEN; Rev. Dr. PUSEY; Mr. J. K. SPENDER; Mr. T. STOKES; OXONIENSIS; Dr. C. KIDD; Mr. RIBTON TURNER; Dr. DYCE; Mr. W. PARKER; Mr. WORTHINGTON; Miss PERCIVAL; Mrs. BAINES; Dr. ATKINSON; THE HARVEIAN SOCIETY; Dr. MURRAY; Dr. MAYNE; Dr. LIONEL BEALE; Dr. MOORE; Dr. PEACOCK; Dr. MOXON; Mr. HINTON; Dr. WILSON FOX; Mr. HAYNES WALTON; Mr. WAVEN TAY; Mr. J. CHATTO; Dr. DOBELL.

BOOKS RECEIVED—

Griffiths on Hæmodromometers—The Medical Investigator—"Nearchus" on Sea Scurvy—De la Température du Corps dans les Maladies, et en particulier dans la Fièvre Typhoïde, par le Dr. A. Lodé—Bulletin de l'Académie Royale de Médecine—The Volunteers at Brussels.

NEWSPAPERS RECEIVED—

The Glasgow Herald—The Sunday Gazette—Medical Press and Circular.

VITAL STATISTICS OF LONDON.

Week ending Saturday, January 26, 1867.

BIRTHS.

Births of Boys, 1160; Girls, 1077; Total, 2237.
Average of 10 corresponding weeks, 1857-66, 1957·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	956	924	1880
Average of the ten years 1857-66	742·6	749·8	1492·4
Average corrected to increased population..	..	..	1641
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,388	3	2	7	2	17	3	5	..
North ..	618,210	15	1	6	1	16	17	..	..
Central	378,058	10	3	1	1	9	5	1	..
East ..	571,158	12	8	9	2	25	10	1	..
South ..	773,177	10	5	13	2	12	11	6	..
Total ..	2,803,989	50	19	36	8	79	46	13	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·652 in.
Mean temperature	37·2
Highest point of thermometer	54·5
Lowest point of thermometer	22·0
Mean dew-point temperature	32·4
General direction of wind	Variable.
Whole amount of rain in the week	0·35

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, January 26, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending Jan. 26.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending Jan. 26.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	2237	1421	1880	54·5	22·0	37·2	0·35	35
Bristol (City) .	165572	35·3	124	74	‡110	55·6	24·8	38·4	1·39	140
Birmingham (Boro')	343948	43·9	253	167	187	53·5	21·0	36·3	0·53	54
Liverpool (Borough)	492489	96·4	369	285	388	..	..	..	..	..
Manchester (City) .	362823	80·9	230	205	‡332	52·5	20·0	35·6	0·65	66
Salford (Borough) .	115013	22·2	78	58	89	52·0	21·6	36·4	1·08	109
Sheffield (Borough).	225199	9·9	174	119	133	53·0	17·0	34·9	0·41	41
Leeds (Borough) .	232428	10·8	178	118	129	54·8	25·0	37·8	0·66	67
Hull (Borough) .	106740	30·0	89	49	61	..	..	..	..	..
Nwestl-on-Tyne, do.	124960	23·4	100	66	103	44·0	28·0	35·3	0·03	3
Edinburgh (City) .	176081	39·8	110	85	107	48·7	19·0	33·6	0·60	61
Glasgow (City) .	440979	87·1	354	257	359	49·8	18·2	34·6	1·88	190
Dublin (City and some suburbs) .	319210	32·8	134	‡157	203	55·1	29·5	41·6	0·80	81
Total of 13 large Towns . .	6187764	34·8	4430	3061	4141	55·6	17·0	36·5	0·76	77
					Week ending Jan. 19.	Week ending Jan. 19.				
Vienna (City) . .	(1863) 560000	..	..	..	320	..	..	§32·1	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·652 in. The barometrical reading increased from 29·31 in. on Thursday to 29·97 in. on Saturday.

The general direction of the wind was variable.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 26·0°.

APPOINTMENTS FOR THE WEEK.

February 2. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. G. A. Macfarren, Esq., "On Harmony."

4. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

EPIDEMIOLOGICAL SOCIETY, 8 p.m. Dr. Milroy, "Yellow Fever in its Relations to the Home Population." Mr. Wilson, R.N., "The Yellow Fever Epidemic in Bermuda, 1864."

ODONTOLOGICAL SOCIETY, 8 p.m. Meeting.

ROYAL COLLEGE OF SURGEONS, 4 p.m. A Lecture, by Professor Huxley.

5. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ANTHROPOLOGICAL SOCIETY OF LONDON, 8 p.m. Meeting.

PATHOLOGICAL SOCIETY, 8 p.m. Meeting.

6. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

OBSTETRICAL SOCIETY OF LONDON. 7 p.m.: Council Meeting. 8 p.m.: Dr. Woodman, "Case of Cholera during a Pregnancy." Dr. Wynn Williams, "On Diphtheria." And other Papers.

ROYAL COLLEGE OF SURGEONS, 4 p.m. A Lecture, by Professor Huxley.

7. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

HARVEIAN SOCIETY OF LONDON, 8 p.m. Mr. Teevan, "On New Aids in the Diagnosis and Treatment of Urethral Disease."

8. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.

ROYAL COLLEGE OF SURGEONS, 4 p.m. A Lecture, by Professor Huxley.

ORIGINAL LECTURES.

LECTURES ON CATARACT,

AND THE

MODERN OPERATIONS FOR ITS TREATMENT.

DELIVERED AT

King's College, London,

DURING THE SUMMER SESSION, 1866,

By J. SOELBERG WELLS,

Professor of Ophthalmology in King's College, and Ophthalmic Surgeon to King's College Hospital.

LECTURE VI.

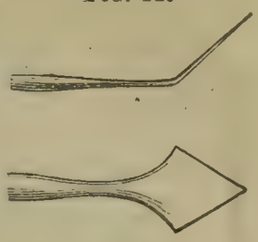
SCOOP EXTRACTION.

GENTLEMEN,—Prior to the operation, the pupil should be widely dilated with atropine, and the cataract examined by the oblique illumination, so that the size and hardness of the nucleus and the consistence of the cortical substance may be ascertained. For the size of the incision should be apportioned to that of the nucleus, and to the extent and consistence of the cortical substance. Nothing is more likely to mar the success of the operation than if the incision is too small, for then the iris and the lips of the section must be more or less bruised during the exit of the lens, considerable portions of the latter are sure to be stripped off, and, if they cannot be entirely removed, may set up subsequent inflammation. If the nucleus is small and the cortex softish, the incision should embrace about a quarter of the circumference of the cornea; but if the nucleus is large and hard—as, for instance, in the senile amber cataract—and the cortex firm, the size of the incision must be increased, and should extend to about one-third of the cornea. The section must also be large, if the cataract is overripe, and if little fatty or chippy fragments have collected on the surface or at the margin of the lens; for these are very apt to be stripped off and left behind if the exit of the lens is rendered difficult and forced from the section being too small.

The patient should be placed thoroughly under the influence of chloroform, so that he may be quite tranquil and passive, for any sudden start may endanger the safety of the eye, more especially during the period of the introduction of the scoop. It is, moreover, important that the different steps of the operation should be performed, if possible, without any interruption by the recovery of the patient from the effects of the chloroform; for if this happens after the excision of the iris, and there is any considerable bleeding into the anterior chamber, it may be impossible to remove the blood before it has become coagulated, owing to the time lost in again getting the patient thoroughly narcotised, and this will considerably enhance the difficulties of the other steps of the operation. The operation of scoop extraction is divided into four periods. 1. *The incision.* 2. *The iridectomy.* 3. *The laceration of the capsule.* 4. *The removal of the cataract by the scoop.*

1. *The Incision.*—With regard to the direction of the incision, I think it should always be made upwards if the Surgeon is a dexterous operator and has a good assistant. As it is, however, somewhat more difficult to use the knife and the scoop in this direction than if the section is made outwards, I should advise you at first to perform the latter, more especially if the operation is upon a patient in whom neither the personal appearance nor the attainment of the most perfect vision is of much consequence. But when you have acquired some dexterity and practice the section should always be made upwards, for thus the unsightliness and discomfort of the artificial pupil will be avoided, as it will be more or less covered by the upper lid. Let us now suppose that the right eye is to be operated upon by the upper section. The operator should stand behind and slightly to the left of the patient. Having fixed the lids with the stop speculum, he seizes with a pair of forceps held in the left hand a fold of conjunctiva and sub-conjunctival tissue, exactly beneath the centre of the cornea, and just in front of the insertion of the inferior rectus muscle, and thus steadies the eye and rolls it down so as to bring the upper edge of the cornea well into view. The point of a broad and slightly bent iridectomy knife (Fig. 12) is to be entered at the very edge of the upper portion of the cornea, just at the sclero-corneal junction, and then pushed slowly and steadily across the anterior chamber, being kept quite parallel to the iris until the section is of the desired extent. It is then to be slowly withdrawn, the angles of the incision being somewhat enlarged by slightly tilting the edge of the knife; or this may be done with a pair of blunt-pointed scissors. If the cornea is very small, the incision may be made somewhat in the sclerotic, but this is often accompanied by the disadvantage of bleeding into the anterior chamber from the conjunctival vessels, which may render the subsequent steps of the operation more difficult. Mr. Critchett makes the incision in the cornea, half a line from its junction with the sclerotic.

FIG. 12.



2. *Iridectomy.*—If the incision is not well in view, an assistant must fix the eyeball just below the cornea, and roll it downwards, without, however, dragging or pressing upon the eye; for if this be done the hyaloid membrane may be ruptured, and the vitreous humour escape. If the iris does not protrude through the incision, a pair of small iris forceps are to be introduced (closed) into the anterior chamber, and a fold of iris seized, drawn out through the incision, and snipped off with a pair of scissors. This may be done either at one cut, or, still better, in the following manner, as devised by Mr. Bowman:—The prolapsed portion of iris is to be drawn towards the right-hand angle of the incision, and there partially divided. The remaining portion is then to be gently torn from its ciliary insertion (slight snips with the scissors aiding in the division), and drawn towards the opposite angle, where it is to be completely divided. In this way a good-sized pupil is obtained, reaching quite up to the periphery. I think it best to remove a large segment of the iris, as it diminishes the danger of bruising the iris in the withdrawal of the cataract, and allows more scope for the use of the spoon; and if any considerable fragments of lens should remain behind, there will be more room for them to swell up in, and there will be consequently less risk of inflammation. If there is any hæmorrhage into the anterior chamber, the blood should be removed at once before it coagulates. The end of the curette is to be inserted between the lips of the incision, and a slight pressure at the same time made by the forceps upon the lower part of the eyeball. The escape of the blood may also be facilitated by gently gliding the back of the curette over the cornea towards the incision. The blood should, if possible, be removed from the anterior chamber, as it masks the further steps of the operation—viz., the laceration of the capsule and the use of the scoop, both of which require that the operator should see clearly what he is doing.

3. *Laceration of the Capsule.*—For this purpose either Graefe's cystotome or the pricker may be employed. I myself prefer the latter for this operation. The operator should roll the eye gently downwards with the forceps (held in his left hand), and pass the pricker, with its blunt part downwards, into the anterior chamber, as far as the opposite edge of the pupil, and even a little beneath the margin of the latter, especially if there be slight adhesions of the edge of the pupil to the capsule, which will be thus torn through. The point being then turned towards the lens, the pricker is to be drawn gently along on each side and in the centre, so that the capsule may be freely lacerated quite up to the margin of the lens corresponding to the incision. But the instrument must be used very lightly and delicately; otherwise the lens may be dislocated, especially if the cataract is hard. If the nucleus is large, and there is consequently only a small portion of superficial soft cortical substance, or if the cataract is immature, Mr. Bowman(a) recommends that the body of the lens should be loosened from the capsule with the pricker or a fine bent needle by being rotated on its antero-posterior axis to and fro within the capsule.

4. *The Removal of the Lens by the Scoop.*—I have already stated that Waldau's instrument is too large, and that either Mr. Critchett's or Mr. Bowman's form of scoop is to be used. The former (Fig. 13) is so constructed as to glide readily behind the posterior surface of the cataract. It is thin, flat, and concave, so as to adapt itself accurately to the posterior convex surface of the lens. At the end there is a small

(a) "Extraction of Cataract by a Traction Instrument," *Royal Lond. Oph. Hosp. Reports*, iv. 4, 348.

receding edge, which assists in fixing and holding the cataract, and thus facilitates its removal. Mr. Bowman thinks, however, that this wedgelike end occupies too much space behind the nucleus. He, therefore, prefers another form (Fig. 14),

Fig. 13. Fig. 14. Fig. 15.

the end of which is not recurved, but looks from it at a very obtuse angle, and the extreme edge is very thin. The sides, except towards the end, have no edge above the general level. In those cases in which there is no soft matter to permit room for the insertion of the scoop between the lens and capsule, he uses a different shape (Fig. 15). This instrument is nearly flat from side to side, and but slightly concave from end to end. The end has a very thin, though not sharp, edge only slightly incurved, and the concave surface at the end is roughened by transverse lines. For those forms of cataract in which, together with a large firm nucleus, there is a sufficient layer of soft cortical substance to permit the easy passage of the scoop, I generally use Mr. Critchett's instrument. When this is not the case, I prefer Mr. Bowman's second form (Fig. 15).

Great dexterity, delicacy, and care are required in the use of the scoop, which is to be lightly held between the forefinger and thumb. The eye having been fixed with the forceps, the scoop is to be introduced into the section, being turned directly towards the back of the eye, so that its anterior lip may glide past the free margin of the lens exposed by the iridectomy. It is of great consequence to remember that the scoop is to be at first directed backwards, for if it be passed forwards and downwards before its anterior lip has skirted the edge of the lens, the nucleus will be pushed before it, and even perhaps displaced behind the lower portion of the iris, the hyaloid membrane will in all probability be ruptured, and a considerable portion of the vitreous humour escape even before the body of the lens has been extracted. When the edge of the scoop has passed the margin of the lens, it is to be turned quite flat, and slowly and gently insinuated into the posterior cortical substance between the capsule and the nucleus until its further end has passed the margin of the latter. This forward movement must be very delicately performed by a slightly undulating or "wriggling" motion; for if the scoop is roughly pushed on it may carry the lens before it, and thus displace it, or the hyaloid membrane may be ruptured and the vitreous humour escape. When the lens is well grasped by the scoop, it should be slowly removed, care being taken that its anterior surface is not pressed too much forward; otherwise it will bruise the iris and cornea, a not unfrequent cause of subsequent iritis and circumscribed corneitis. If small portions of cortex have been stripped off during the passage of the lens into the anterior chamber, and lie in the latter, a slight backward movement of the scoop may be made before the cataract is removed through the incision, as this will gather up such fragments and draw them readily after the main portion, or they may be afterwards removed with a smaller scoop, slight pressure being at the same time made upon the globe opposite the incision. If the detached fragments are considerable, and cling to the edge of the pupil, or remain behind the iris, the speculum should be removed and the eyelids rubbed in a circular direction, so as to bring them into the anterior chamber, whence they may be readily extracted by the curette. This is much to be preferred to the frequent introduction of the scoop. The suction syringe may also be employed for the removal of small soft fragments. Any little portions of lens matter that may cling to the lips of the incision are to be removed with the curette, as they interfere with the union of the section, and are apt to give rise to suppurative infiltration of the edge of the incision. Should a little of the vitreous humour exude through the section with the last portion of lens, it must be snipped off and a compress applied. If the vitreous escapes directly after the division of the capsule, the scoop must be passed well behind the cataract so as to extract it, if possible, *en masse*. If the loss of vitreous does not occur until the body of the lens has been extracted, any fragments of lens that remain behind should be removed. If they can be easily reached, the curette should be employed; otherwise it is better gently to rub the lids and bring them into the anterior chamber, whence they may be readily extracted. More or less vitreous will, of course, be lost, but this is better than leaving considerable fragments behind, as they swell up and give rise to great irritation and inflammation of the iris or ciliary body. The frequent introduction of the scoop is apt to produce the same mischief, and may even be followed by inflammatory infiltration of the vitreous, which may assume a suppurative character. In the latter case we can observe, with the oblique illumination, a yellow discoloration of the anterior portion of the vitreous humour. Gradually such infiltrations may become absorbed, leaving behind them more or less dense opacities, which may be floating or fixed. Should the vitreous escape, even before the capsule is opened, Mr. Bowman advises that after the iridectomy Waldau's scoop should be introduced and the lens removed in its capsule.

The after-treatment is much more simple than that of the flap extraction. On account of the size and shape of the incision there is little danger of even partial suppuration of the cornea, or of displacement of the section; the iridectomy, moreover, prevents the occurrence of prolapse of the iris, except to a very limited extent at the angles of the incision. A light compress is to be applied after the operation, or cold-water dressing if it prove agreeable to the patient, and we have a good nurse to superintend the changing of the dressing. A strong solution of atropine (four grains to the ounce) is to be applied at the end of thirty-six or forty-eight hours, and repeated two or three times daily, or more frequently if any iritis supervene. If the atropine proves irritating to the eye, it should be changed for belladonna drops (ext. bellad. ℥ss.—℥j. to ℥ij. of water). The latter are to be applied in larger quantity and more frequently than the atropine drops. If the patient has had no pain in and about the eye, and if he is restless and uncomfortable in bed, he may be permitted to leave it the day after the operation, more especially in private practice or in special eye wards. In the general wards of the Hospital I mostly keep the patients in bed for four or five days, as they cannot be so carefully guarded against draughts or cold, an exposure to which may set up iritis or irido-cyclitis. If the case does not go on so favourably, but there is severe pain in and around the eye, together with swelling and redness of the eyelids, photophobia, and lachrymation, leeches (two to four) should be applied to the temple (about an inch from the angle of the eye), and free after-bleeding encouraged by hot poppy fomentations. If there is much œdema of the lids, they should be painted with tincture of iodine, great care being taken that it does not run into the eye. If suppurative iritis or irido-choroiditis supervenes, and the patient is in good health, rapid mercurialisation should be produced. If the iritis should be accompanied by increased tension, and the iris is bulged forward, paracentesis corneæ should be practised, and repeated if necessary. If the patient suffers much from neuralgic pains, quinine and tonics should be administered, and great relief is often experienced from subcutaneous injection of morphia. If suppuration of the cornea threatens, a firm compress is to be applied (*vide* "After-Treatment of Flap Extraction," *Medical Times and Gazette*, Dec. 22, 1866, p. 661).

(To be continued.)

An extinct gigantic Dinosaurian has been discovered in the cretaceous sands of New Jersey, twenty feet below the surface, in the top of the "chocolate bed," which immediately underlies a green stratum of great value as manure. The remains, consisting of portions of the jaw, scapular arch, and clavicles, two humeri, the left femur, with numerous phalanges, vertebræ, and other elements in a fragmentary condition, were exhibited by Professor E. D. Cope at a meeting of the Academy of Natural Sciences at Philadelphia (*Proceedings*, 1866, p. 275). He considers that the discovery of this animal fills an hiatus in the cretaceous fauna, revealing the carnivorous enemy of the great herbivorous Hadrosaurus, as the Dinodon was related to the Trachodon of the Nebraska beds, and the Megalosaurus to the Iguanodon of the European Wealden and oolite. This creature (for which the name Lælaps aquilungius has been proposed) equalled the Megalosaurus Bucklandii in size, and, with it and the Dinodon, constituted the most formidable type of rapacious terrestrial vertebrates of which we have any knowledge. Professor Cope's paper gives detailed descriptions of the mandible, femur, tibia etc.

ORIGINAL COMMUNICATIONS.

FOUR CASES OF ENTRY OF AIR INTO THE CIRCULATION.

By N. HECKFORD,
Medical Registrar to the London Hospital.

The entry of air into the circulation is generally supposed to be an event of rare occurrence. The fact, however, of four cases having come under my notice within a period of thirty months, leads me to think that it is by no means an infrequent cause of death. In cases of fracture of the ribs, with wound of lung especially, I see no reason why air should not occasionally be forced into the lacerated vessels as well as into the general areolar tissue.

In one of my cases death was instantaneous. In two others, although the exact period of the entry could not be determined, it is probable that death did not take place until some time after. In the fourth case the patient lived four hours. In this instance, judging from the comparatively small quantity of air that must have entered, and also from an absence of any symptom denoting distress, I am led to believe that the fatal result was due to another cause.

Case 1.—In January, 1865, I was requested by Mr. Loane, Surgeon, of Dock-street, to assist him in making a post-mortem examination of the body of a woman who had died suddenly during childbirth. She was 43 years of age, and this was her eighteenth confinement. She enjoyed good health, and up to the time of death nothing unusual was noticed. Labour commenced at four p.m. At three o'clock on the following morning a midwife was sent for, but did not attend in time, and thus no reliable history of the symptoms could be obtained. A female friend, who was the only person present, stated that after a few strong pains, a living child was expelled, and immediately after its birth the mother expired. According to her statement, death was instantaneous, and without the least struggling. "She turned on her back and was dead." There had not been any hæmorrhage, and the placenta was not interfered with.

Post-mortem Appearances.—The lungs were found to be somewhat emphysematous at the apices, and congested at the bases, but the latter condition was, no doubt, the result of post-mortem gravitation of blood. The bronchial mucous membrane also was congested and thickened (from old bronchitis). The heart appeared quite healthy, its substance was not fatty, and the valves were perfect. There was no atheroma of the aorta or the coronary arteries. Both ventricles contained blood, with which (from its frothy appearance) a considerable quantity of air was mixed. On making sections of the different viscera, air bubbled forth freely from the divided blood vessels, and in the arteries of the brain its presence was unmistakeable, as it could be seen intervening between columns of blood in numerous places. The various organs were otherwise in a normal condition, and the presence of air was, apparently, the only possible cause of death. This examination was made 54 hours after death, and the objection might be raised that the so-called air was nothing more than gas produced by decomposition. To this I would answer that the body was in a state of perfect preservation. It must be recollected that it was winter. The greater part of the placenta was still united to the uterine walls, but at one spot it had become detached. If, then, my supposition as to the cause of death be correct, air must have entered by the uterine sinuses corresponding to the detached portion of the placenta.

Case 2.—In July, 1864, a man was admitted into the Hospital with fracture of several ribs on the left side. The corresponding lung was wounded, and there was extensive emphysema of the cellular tissue. He died at the end of twenty-four hours. Urgent dyspnœa existed from the first, and this of course masked any unusual circumstance which may have occurred at the moment of death. At any rate, death was not peculiarly sudden. In this case also both sides of the heart contained frothy blood, and air was found permeating the tissues generally. This body was examined within twenty-four hours after death, and here the air must have entered by the wounded pulmonary vessels.

Case 3.—The particulars of this case were given me by Mr. Llewellyn, House-Surgeon. A middle-aged man in robust health was admitted for a compound fracture of the femur. The wound was comparatively slight, and there was no hæmorrhage of importance. The patient was evidently in great distress, his restlessness and anxiety being so marked as to elicit from the nurse a remark to the effect that she had "never seen a man die so hard." Death occurred an hour and a quarter after the receipt of the injury. It was thought to be due to shock, although at the time it was considered strange that the vital powers of so muscular a man should have been so easily overpowered.

The post-mortem examination was made forty-two hours after death. No internal injuries were found. Air was present in the veins. The record does not state that it was also noticed in the heart, but that the organ was empty. Mr. Llewellyn, however, acknowledges that it may have escaped observation, especially as so unusual a circumstance was not suspected. The air in the veins was seen towards the end of the examination, and after the heart had been removed. This case, therefore, is not quite conclusive.

Case 4.—About the middle of last October, while acting as Resident Medical Officer, I admitted a severe case of cholera. The patient was a woman far advanced in pregnancy. She was pulseless, blue, and cold, and her breathing was shallow and rapid. The prognosis was of course most unfavourable. Saline injection into the veins was the plan of treatment adopted. The median cephalic was the vessel opened. After the introduction of about fifty ounces of the fluid some obstruction to its flow occurred. To overcome this, the injection tube was withdrawn a little way, when suddenly a peculiar gurgling, hissing sound proclaimed the entry of air. I suppose traction on the vessel was caused by the partial withdrawal of the tube, thus inducing the condition called "canalisation." I may also mention that I distinctly felt the thrill of the air rushing up the vein. The apparatus was immediately removed and a compress and bandage applied. No appreciable aggravation of the patient's previous dyspnœa was noticed after the accident, neither was there any struggling nor additional complaint of any sort. The woman died in about four hours' time; the mode of death, however, was gradual, and did not in any way differ from that usual in cholera collapse. At the moment of death the operation of Cæsarian section was performed, but the fœtus extracted had evidently been dead some time.

At the post-mortem examination air was found in both ventricles, and also in all the vessels. As a proof of the impossibility of this being due to decomposition, it is as well to state that no such condition existed in the fœtus.

STATISTICS OF OPERATIONS FOR SCROTAL TUMOUR IN BENGAL.

Compiled from Tabular Returns by
J. FAYRER, M.D., F.R.C.S. Edin.,
Surgeon to the Medical College Hospital, Calcutta;
And GOPAUL CHUNDER ROY,
Licentiate in Medicine and Surgery, University of Calcutta, and House-Surgeon Medical College Hospital.

Since 1859 no fewer than 113 cases of elephantiasis have been admitted by Dr. Fayrer, and operated on in the Medical College Hospital, Calcutta. Of these 113 men 97 were Hindoos and 16 Mussulmans. The number of deaths after operation was altogether 21, three of the sufferers being Mussulmans and 18 Hindoos, giving a total percentage mortality of 18·58. The most frequent cause of death was pyæmia, under which nine sank; after this came diarrhœa and exhaustion, which proved fatal in seven instances; whilst shock led to death in two cases, as also did tetanus, the only remaining patient dying from gangrene.

In 1859 five cases were admitted into Dr. Fayrer's wards, all the patients coming from Bengal, and all being Hindoos. The smallest tumour removed in the course of the year weighed 12 lb., the largest 23 lb. 3 oz. In both instances the patients died after the operation from pyæmia.

In 1860 there were also five cases of enlarged scrotum admitted under the care of Dr. Fayrer, and, as before, all were Hindoos. One tumour weighed 65 lb., and its removal was followed by death from shock and hæmorrhage. Another weighing 19 lb. was cut off at the expense of the patient's life, the death in this instance being caused by pyæmia.

The admissions for this disorder amounted in 1861 to twelve, three patients being Mohammedans, the rest Hindoos.

The largest tumour removed weighed 58 lb. 9 oz.; the disease had lasted six years. The patient, a Hindoo and native of Lucknow, died after the operation, which was unusually severe, as the tumour had a broad base and was very vascular. Part of the penis had also to be removed with it. Gangrenous deposits were in this case found after death in the lungs and kidneys, and the pleura was inflamed. In another case, in which the disease had lasted eight years, though the tumour only weighed 2½ lb., the patient, a Hindoo, also died from pyæmia. No pus was deposited in any of the internal viscera in this instance, yet the right arm and shoulder were greatly swollen, and contained pus just beginning to form. A Mussulman groom was operated on for enlarged scrotum on August 6. The tumour when removed weighed 14½ lb., and on the 13th the patient died of tetanus. These were all the fatal cases, although in one instance, where the tumour weighed 9¾ lb., there existed a complication in the form of elephantiasis of the right leg, and in another the swollen parts weighed as much as 46 lb.

In 1862 no less than twenty cases came in, the ages of the patients varying from 20 to 50—two being Mussulmans, the rest Hindoos, and nearly all coming from Bengal. The tumours were mostly smaller than those already mentioned, but in one successful case it weighed as much as 75 lb. 9 oz., the entire weight of the man before the operation being only 198 lb. In the case just mentioned one of the testicles being disorganised was removed. In three instances the tumour, which in two was smaller than usual, was mostly preputial. Only two deaths occurred this year—in one case the penis sloughed off, and the patient died of exhaustion consequent on the sloughing; he had also suffered from fever and enlargement of the spleen. The other fatal case resulted from exhaustion following the formation of a prostatic abscess. In both death followed a considerable time after the operation.

In 1863 there were twenty-three persons operated on for scrotal tumour—two being Mussulmans, the rest Hindoos. Two died—one from pyæmia after sloughing of the left testicle; the other had gangrene of both testes, and on examining the body after death it was found that the heart was loaded with fat, and that its right side contained decolorised clots extending into the pulmonary artery. The liver was also fatty, and the right kidney contained a calculus. In neither of these cases was the tumour unusually large—weighing in the one case 7 lb., and in the other 8½ lb. The largest removed in this year weighed 34 lb. In this case, which resulted in a cure, the right testicle was adherent to the diseased mass, and was accordingly extirpated. In another instance, where the disease had lasted two years, and in which the tumour weighed 5 lb. 7 oz., it was found on operation that the right tunica vaginalis was ossified and the right testicle diseased. The latter was therefore cut away, but a speedy cure followed. In one Hindoo who had laboured under the disease for three years, the tumour, which consisted chiefly of a hypertrophied penis, weighed only 15 oz., whilst in another man—a Mussulman—the disease had only lasted nine days, yet the tumour weighed 1 lb. 3 oz.

In 1864 there were twenty-one operations, three of the patients being Mussulmans, the remainder Hindoos, one of the latter having suffered from the disease some twenty years. In this case the right testicle was found to be diseased, and was removed along with the tumour, which weighed 9 lb. 8 oz. The patient left the Hospital cured three months after the operation. Three of the twenty-one died, one after being two months in Hospital from chronic diarrhœa, another after being six weeks in Hospital from dysentery, and the third from exhaustion. Hospital gangrene having attacked him, his penis sloughed off; the gangrene extended, dysentery supervened, and the patient sank two months after the operation. The majority of the tumours removed during 1864 were rather small, the largest weighing 14 lb. 5 oz., most of them little more than a pound.

During 1865 twenty-two men, four being Mussulmans, the rest Hindoos, were operated on, with a fatal result in three instances. One, a man, aged 40, died six weeks after the tumour, which weighed 3 lb. 4 oz., was removed. Death was here caused by exhaustion, the case being complicated by an inguinal hernia of the right side. Another Hindoo died in less than a month after the removal of a tumour weighing some 4 lb., also from exhaustion. The remaining death was brought about by pyæmia. The patient, a Hindoo, aged 36, was relieved of a tumour weighing 6 lbs. on December 4, but succumbed on the 27th of the same month. On inspecting the body, about 8 oz. of thick pus were found in the right pleural cavity; the lungs were scattered over with dead pulmonic patches, some of the deeper ones being surrounded by a collection of pus. Both liver and spleen were healthy. Only one very large tumour (it weighed 35 lbs.) was removed this year, this being followed by a complete cure in a month after operation.

Up to the date of this communication (February, 1866) there have been seven cases of elephantiasis scroti operated on, but scarcely with such favourable results as in some preceding years, for four deaths have occurred with only one cure, the remainder being, at the date referred to, still under treatment. One death (twelve days after operation) resulted from tetanus, the subject being a Hindoo aged 50. Another Hindoo had a tumour, weighing 22 lb., removed on January 8, but died from pyæmia on January 20. The wound was doing well, when a sudden pain occurred in the right side of the chest at its lower part. Breathing became hurried, and he died in the night. No post-mortem examination could be held.

The only Mussulman admitted during the year as labouring under this disease died of pyæmia. The right lung was solidified at its posterior part, and was infiltrated with pus. The left was in the same state at its lower and posterior portion, and there was a pyæmic patch of dead lung tissue, about a rupee in size, at its margin.

Dr. Fayrer says:—"These pyæmic patches are the patches of dead lung tissue, which I have elsewhere described as so frequently resulting here from pulmonary embolism, or toxæmia in cases of so-called pyæmia. These patches, which are sometimes spoken of as abscesses, are incorrectly so designated; for, although they present in some cases a puriform appearance, there really is no pus in them at all, except in cases where, life being prolonged, suppuration has been set up in the lung tissue around the dead portion, probably for the purpose of ejecting it. The death of these patches is due either to mechanical causes, as in embolism, or to the effects of toxæmia." The pericardium contained a little fluid; the heart contained coagula, decolorised clots in the right ventricle, and recent clots in the aorta. Liver enlarged; kidneys extensively diseased. The secreting structure of the tubules thickened and ulcerated in parts. Ureters much enlarged and thickened; mucous lining in the same state as the uriniferous tubules, and blocked up by granules of small calculi. The bladder thickened; between the two coats there was a collection of pus. The mucous membrane thickened and lined with granular mudlike calculi of a brownish colour, which were adherent to this covering.

The 113th and last case also proved fatal. Eight days after operation, when the body was examined, tough white coagula were discovered in all the cavities of the heart. The right auricles were distended with these, and they were also adherent to the walls of the right ventricle, thence extending into the pulmonary artery and passing into all its minute ramifications. Similar clots blocked up the pulmonary vein, the left ventricle, and the aorta; but beyond these no other lesions could be detected.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

GUY'S HOSPITAL.

Medical and Surgical Registrars—Ward Clerks—New Plan of Reporting—Clinical Wards—Poisoning by Phosphorus—Double Attack of Typhoid—Case of Laryngeal Disease—Spiritus Juglandis—Lead Poisoning—Paralysis of one Side of the Tongue from Cancerous Disease involving the Trunk of the Ninth Nerve—Cases of Local Œdema: their Nervous or Mechanical Origin.

On the present occasion we purpose to lay before our readers a few notes upon some cases of interest which were brought under our notice in the Medical wards of this Hospital when we visited it a week or two since. It was originally our intention to have referred to the Surgical practice as well as to the Medical, but the memoranda which we were allowed to take from the Medical report books are so lengthy that we have thought it better to confine ourselves to them for the present. Hereafter, we hope to be able to give reports, not only of the Surgical practice, but also of that of the departments for

diseases of the eye, ear, and skin, all of which complaints have long been made the subject of special study and clinical instruction to the students.

We have alluded to the Medical report books at Guy's, but, in reality, report books are no longer used at this Hospital, the notes of the cases being now made on loose forms, which are afterwards arranged by the Registrars and bound together. This plan has long been carried out in the pathological department, where Dr. Wilks, and lately Dr. Moxon, have recorded with the utmost fidelity and care all the details of the observations made by them in carrying out the post-mortem examinations for the last ten or twelve years. But while the post-mortem records at Guy's have long been models of accuracy and completeness, the reports of the symptoms and progress of the cases during life have not always been equally satisfactory. In a large Medical school the reporting of cases is naturally made one of the duties of the ward clerks, who, being learners, are often hardly competent to reduce to order the numerous and complicated facts and inferences which make up an interesting case. Hence the appointment of paid Medical and Surgical Registrars is almost a necessity to an institution like Guy's, and we were among the first to applaud the authorities when, last year, they determined on creating such officers. Dr. Hilton Fagge is the Medical, and Mr. Eastes the Surgical Registrar. The Registrar is not himself expected to take the reports. This duty still rests with the Ward Clerks, of whom there are four to each Physician. These gentlemen are selected by merit among those students who have arrived at that period of their career when they become emancipated from the study of anatomy and chemistry, and are able to devote themselves to clinical pursuits. The reports, as we have already stated, are made on loose forms. These forms are divided into two columns, one of which only is written on by the clerks, the other being reserved for remarks made by the Physician or the Surgeon, and for any notes which may be jotted down by the Registrar. The forms are preserved in neat portfolios, which are kept in the wards, there being a separate portfolio for each Ward Clerk in each ward. It is, therefore, easy for the Registrar to read the report soon after the patient's admission, and to make any additions or corrections that may appear necessary. In this way, as we learn, good reports have been obtained of almost all of the 1200 or 1300 cases admitted into the Medical wards at Guy's since the 1st of June last, when the new system came into operation.

Besides the general wards at Guy's, however, there are special clinical wards, into which no cases are admitted but such as are selected as fit subjects for clinical lectures. These wards are taken during the winter session by the different Physicians in rotation; in the summer session, they fall to the Assistant-Physicians, among whom the beds are then divided. The clerks in these wards are generally among the oldest and most able of the students of their day; and their reports are naturally more perfect than those of their juniors in the general wards—indeed, the records of the clinical wards at Guy's have always been complete and reliable.

Having thus explained briefly the way in which the practice at this Hospital is recorded, we may now pass on to speak of some of the cases which were brought under our notice at a recent visit. And first we must refer to the clinical wards, which, during the last two months, were under the care of Dr. Habershon. A week or two since there was admitted into these wards a case of Poisoning by Phosphorus, which is of great interest, as being, in all probability, the first in which fatty degeneration of the liver and kidneys, as well as of the voluntary muscles, has been observed in England. To this case, however, we can only refer cursorily, for we understand that Dr. Habershon intends to bring it before one of the societies. About the same time there occurred a case of typhoid fever, which presented some remarkable features. Our notes of it are taken from the report of Mr. R. C. Lucas. M. B., aged 29, was married at the age of 17, and became a widow at 25, having had five children and two miscarriages. Six years ago she had what appears to have been a cerebral attack, and was insensible for three weeks. She had been ill for three months previous to her admission into the Hospital, suffering from headache and loss of appetite, with intolerance of light and occasional loss of consciousness. These symptoms increased in severity, and for six weeks she had been confined to her bed. During this time she had never shown any decided improvement. She wandered very much in the night. It was stated that she had previously had similar attacks, which were relieved by blistering behind the ears.

On admission, she was in a prostrate condition; the breathing was hurried; the pulse quick; there was imperfect resonance in the chest, and mucous râles were heard on auscultation. The temperature indicated by the thermometer was high, being 102·2° on January 8.

The following table gives the temperature, and the number of the pulse and respiration during the progress of the case:—

	Temperature.	Respirations.	Pulse.
January 10 . .	103·4	42	130
„ 11 . .	104·	42	126
„ 12 . .	103·	46	130
„ 13 . .	101·9	40	120
„ 14 . .	101·8	52	128
„ 15 . .	102·2	56	120

Thus the temperature, after rising slightly, gradually declined; but the bronchial symptoms and the frequency of the respiration increased, and appeared to be the cause of the fatal termination of the case.

The tongue was clean and abnormally red; the abdomen distended; the bowels relaxed; the evacuations of an ochrey colour.

No rose spots could be discovered; and thus it was not possible during the patient's life to determine whether the case was one of typhoid fever or of simple broncho-pneumonia, or whether even the typhoid condition was not to be in part attributed to exhaustion from early child-bearing and poverty. Brandy and ammonia were given, at first in small quantities, afterwards more freely. But the delirium increased, the respiration became more rapid, and she died a week after her admission.

On post-mortem examination, the characteristic ulcers of typhoid fever were found in the ileum for about ten feet of its length. The spleen was enlarged and soft, weighing ten ounces and a half. There was acute œdema of the upper lobes of the lungs, with bronchitis. The intestine presented the peculiarity that ulcers in very different stages lay side by side. This was especially the case close to the ileo-cœcal valve. Here a recently-healed ulcer had left a sinuous mark, of which the outline was yet very distinct, and the edge a little raised. But on one part of this there was an excavated space, in the centre of which was a yellow typhoid sequestrum. Other points of the bowel presented similar appearances. Within a space of two square inches there appeared to be three conditions—1. A healed ulcer, the outlines and floor still plainly evident; 2. An ulcer resting on the circular fibres, but quiescent-looking, and having no swelling about it; 3. A swollen patch, with commencing separation at its centre. It was not possible to suppose all these conditions to be of the same duration. Dr. Habershon, therefore, concluded that this case must rather be associated with those comparatively rare instances in which a patient has been known to undergo a second attack of typhoid fever before having completely recovered from the first. Even when regarded from this point of view, however, the case is of interest; for, although the most careful inquiries were afterwards made, no history could be obtained from her friends of any change in the severity of the symptoms in the course of the three months during which she had been ill. Dr. Habershon remarked that some have even declared that a third attack of typhoid fever may at once supervene, passing through all its stages. And as to typhus, there is no doubt that it may occur, as a distinct morbid change, immediately after the patient has passed through typhoid or enteric fever.

The importance of accurately determining the probable issue of acute disease before adopting active treatment was very well shown in a case which was under the care of the late Dr. Barlow in the course of last autumn. This case stands in the report as one of "pneumonia, with laryngeal affection." The notes of it were taken by Mr. S. S. Brown. We extract from them the following particulars:—

H. W., aged 6, admitted into Lydia Ward, bed No. 4. She has always been a very delicate girl, and her chest is very narrow. She has been ailing for six weeks, and her mother says that for four days she has been in nearly the same condition as at the present time. She is now suffering from great dyspnœa, at times protruding her tongue, and straining greatly in her efforts to breathe. There is slight dulness on the right side posteriorly, with some crepitation. She can swallow small quantities of liquid, but no solid food. No false membranes are to be seen on the tongue or fauces. Temperature 100·2; respiration 36; pulse 96. Ordered a mixture containing a decoction of senega, with spirits of ammonia and syrup of poppies. The next day it is noted that "the child is still very

ill. When she is excited, the respiration becomes stridulous and noisy. There is a difficulty in the air entering the chest, evidenced by the sucking in of the supra-sternal notch during inspiration. The physical signs are not very marked. The note on percussion is the same on the two sides posteriorly; but there is some dulness anteriorly on the right side, and the respiratory murmur is coarse." The case was now regarded as one mainly of acute laryngeal disease, and tracheotomy was talked of, but the mother objected strongly to having any operation performed. In the evening of the same day, however, the child was much better, and was sleeping quietly. On the following day, the second after her admission, it is noted that "she is much better. The temperature is 98·2; the respirations are 39; the pulse 101. She is quiet, and air enters the chest more readily; but when she speaks the voice is very hoarse. There is now dulness on the right side, and some bronchial breathing is heard on auscultation." She continued to improve. Two days later the report goes on to say that "she is comfortable, and her breathing easy so long as she is lying quiet in bed; but when she is moved her breathing becomes distressed, and the larynx seems to be affected with spasm. It was, therefore, impossible to make a laryngoscopic examination, which was attempted by Dr. Fagge. Her temperature is now 97·4." On the following day (the fifth day after her admission) it is noted that "she is much better; her voice is less hoarse, and her appetite is good." Two days later she began to take a mixture containing some chlorate of potash with extract of conium and pimento water in decoction of liquorice. Ultimately she did perfectly well.

During the course of last summer there was a young woman in the same ward who had completely lost her voice for a fortnight before her admission. For some years past she had occasionally passed pieces of tapeworm. Her bowels were very irregular. It was thought that the loss of voice might be due to the presence of the tænia in the intestines, and therefore a dose of the ol. filicis maris was directed to be given her, this drug having for many years past been the routine anthelmintic so far as tapeworms are concerned. The effect of this was to bring away a large worm, including the head. Two days later the patient's voice appeared to be a little louder, and she soon entirely recovered it, and was discharged cured at the end of a fortnight. Whether the successful result was due to the expulsion of the tænia or not may perhaps be doubted, but, at any rate, the facts were as we have stated them. There was not the slightest reason to suspect the existence of syphilitic disease.

Among the medicines which are employed at Guy's by Dr. Owen Rees is one which we have not seen prescribed elsewhere. It is known as the "*Spiritus Juglandis* (e foliis paratus)." Dr. Rees informed us that he had first heard from one of his private patients of this drug, which is said to be obtained from Germany. It is kept by certain of the leading London chemists. Dr. Rees has found it very useful in some cases of sickness, especially the sickness which accompanies Bright's disease. The dose is half an ounce. The spirit of walnut-leaves has a very agreeable aromatic taste, so that it is said to go by the name of "ladies' gin;" but its high price will probably prevent its becoming a common remedy.

The following case of lead-poisoning in a tailor, from biting his tape measure, is of interest, because opinions differed as to the nature of the paralysis, and because the way in which the lead was introduced into the body is one which, so far as we know, has not been previously described.

James P., aged 33, came amongst Dr. Wilks's out-patients suffering from drop-wrist, general tremor, and other nervous symptoms. He was a tailor, in the cutting-out department, and was constantly using a heavy pair of shears. A Medical opinion had already been given that the weakness of the arms was due to the use of this instrument, and was of the nature of "scrivener's palsy." On examining the man's gums, a distinct and well-marked blue line was observed, and he was consequently questioned about the possibility of lead-poisoning. On a thorough cross-examination as to his habits nothing could be elicited, but Dr. Wilks requested him to think over the matter during the ensuing week. At his next visit the mystery was solved. He said that, whilst engaged in his occupation of cutting out, he was in the habit of placing his measuring tape in his mouth. This was covered as usual with an enamel of white lead. He had also got into the way of biting the tape, so that it soon became worn out, and he was obliged to have a new one every week or two. In fact, he used up several a year. He was ordered to be galvanised, and to take iodide of potassium. Under this treatment he soon began to improve; in two months' time he was able to resume his employment, and then slowly got well. His symptoms had been coming on for nine months, and for four months he had been quite incapacitated for work.

A very interesting case, recently under observation in one of the Medical wards at Guy's, was one in which the hypoglossal nerve on one side was paralysed by a cancerous growth attacking the base of the skull, so as to involve the nerve as it passes through the anterior condyloid foramen. Paralysis of one side of the tongue is, of course, common in hemiplegia; but the paralysis in such cases is only partial, whereas when the trunk of the ninth nerve is affected there is not only complete paralysis, but atrophy also. Our report is taken from that of the ward clerk, Mr. R. Rendle.

F. C., aged 52, admitted into Dr. Habershon's ward, under the care of Dr. Moxon, who had charge of the ward at the time. Five years ago she first noticed a tumour in the breast, which was examined three years since by Mr. Birkett, who pronounced it to be malignant, and advised its removal. To this, however, she would not consent. The growth gradually increased in size until within the last twelve months, when it began to waste away rapidly. This was the time when the catamenia ceased. During the last year, however, her health has failed greatly, although the tumour has thus decreased in size. She complains of pains in her head and back, and also in the limbs, and especially about the hips and shoulders. On examining her spine, it was found that there was a remarkable deformity. The dorsal vertebræ projected, and were very tender, and the lower ribs were curved downwards, so that they descended into the venter of the ilium. They also appeared to be soft, so that the question of mollities ossium and of its relation to cancer was discussed with reference to the case. It was quite evident that the disease in the right breast was malignant. There were nodules in the skin around, and enlarged glands were felt in both axillæ.

When she was asked to protrude her tongue, it was observed that the tip was turned to the right side. This side of the tongue itself was seen to be quite flaccid, and had a wrinkled appearance; when touched, it felt soft. It was, therefore, quite apparent that the muscles on that side of the tongue did not act, and this could, of course, be attributed only to paralysis of the hypoglossal nerve. She complained of pain in the ear and over the distribution of some of the cervical nerves on that side. On galvanising the tongue, it was found that the muscles of the left side contracted visibly, but that those on the right acted very slightly, if at all. She said that for about a month she had found a difficulty in managing her food with her tongue, being obliged to keep what she was eating in the middle of the mouth. Sensation in the tongue was perfect. The muscles supplied by the descending branch of the ninth nerve were found to be as distinctly paralysed as those of the tongue itself. When she was told to raise her head while lying, it was found that the left sternohyoid started forwards, whereas the right did not show itself. The posterior belly of the right omohyoid, however, acted perfectly, as might be expected from the fact that branches of the cervical nerves supply it.

It is not necessary to give details as to the progress of this interesting case. She gradually became weaker and weaker. After a time it was evident that the right sterno-cleido-mastoid muscle also was paralysed, showing that the spinal accessory nerve was involved in the disease. Her voice gradually sank to a whisper, and she died two months and a half after her admission.

On post-mortem examination, besides cancer of the vertebræ, the breast, and other parts, a mass of cancer was found in the basilar process, extending on the right side into the temporal bone, and involving the eighth and ninth pairs of nerves. The muscles supplied by the ninth nerve were of a yellowish colour, and were obviously wasted. On microscopical examination, it was found that their striated appearance was entirely lost, and that large numbers of fat globules were interspersed between them. Some of the fibres were transparent for portions of their length, and manifested a tendency to split into discs. The right cricothyroid muscle was also atrophied; but it was doubtful how far this was due to the impairment of nervous influence, for the right side of the cricoid cartilage was also decidedly smaller than the left side, and on microscopic examination it appeared that there was incipient cancerous disease of this part. We have, however, recently (Dec. 15, 1866, p. 638) alluded to a case in which there was paralysis and atrophy of the crico-arytenoideus

posticus muscle from implication of the rootlets of the spinal accessory nerve.

Another very curious case recently under observation is one of œdema of the arms and hands alone, unaccompanied by dropsy of any other part. This patient, of whom the notes were taken by Mr. W. B. Lewis, was under the care of Dr. Moxon.

H. P., aged 35, was admitted into Stephen Ward. He is a labourer, and has been much exposed to cold and wet. About two weeks since a swelling appeared on each shoulder, accompanied by slight pain. This lasted for three or four days, when it gradually subsided, but only to return in the arms.

On admission, it was found that there was great œdema of the upper limbs from the shoulders downwards, even to the backs of the hands. There was not the slightest swelling of the face or of the legs, and there was no ascites. The most careful examination of the chest failed to yield any evidence whatever of disease of the heart or lungs. No thickening of any of the large veins could be detected, nor enlargement of the superficial veins. The two arms were about equal in size. They pitted deeply on pressure, but the skin was somewhat tense. The urine was of normal quantity, and contained no albumen.

The cause of the dropsy in this case appeared a mystery. It was difficult to suppose that it could arise from obstruction to the veins, for, the head and neck not being swollen, the only veins which could have accounted for the condition would have been the two subclavians.

Dr. Moxon ordered him a mixture containing nitre and tincture of digitalis in infusion of broom. He was allowed to have full diet. Under this treatment the swelling rapidly subsided, and in six days after his admission it had entirely disappeared. There remained for a time a slight stiffness in the muscles, and particularly in the tendons of the fingers. He was discharged on the twelfth day, cured.

The difficulty of accounting for this case by attributing it to any local changes in the veins or other structures would probably lead many to class it with those which Professor Laycock has ascribed to the influence of the nervous system. Indeed, it probably goes much further to support Dr. Laycock's views than many of those on which he himself relied. An observation made by Dr. Hilton Fagge in the post-mortem room at Guy's, in 1865, shows, however, that the nervous system is not necessarily concerned in the production of all dropsies which appear capriciously distributed. A patient came into the Hospital with aortic and mitral disease, in whom the left arm and hand were markedly more œdematous than the corresponding parts on the right side. The left breast, also, was fuller, and the left side of the face more swollen. After death, besides the valvular disease, the pericardium was found to be adherent by loose cellular tissue, and there were remains of old pleurisy on the left side. The inflammatory action had also extended to the tissues in the anterior mediastinum, above the aorta, and in front of it. All these parts (including the thymus, which was unusually distinct) were imbedded in firm fibrous tissue. The left innominate vein, in particular, was surrounded by this material, so that its walls were rigid. It contained a clot, black and soft in the centre, but firm on the surface, and adherent to the lining membrane. This clot extended upwards into the left jugular and left subclavian veins, and downwards so as to project into the commencement of the superior cava. The lower part of the clot was brown, adherent, thin, and hollowed out in the centre, so that the blood had evidently been able to pass through that part of the vein.

THE LONDON HOSPITAL.

AMPUTATION AT THE HIP-JOINT FOR MEDULLARY CARCINOMA OF THE FEMUR.

(Under the care of Mr. COUPER.)

This week we have to chronicle another amputation at the hip-joint for medullary carcinoma, performed on Wednesday by the same Surgeon, Mr. Couper, and with equal dexterity. This time it was on the right side, and in a girl of 17. The steps of the operation were the same as in the last case, excepting that the first incision was made from the inner side. There was very little blood lost, and the patient recovered well from the chloroform without sickness. Mr. Couper afterwards stated that the disease had only existed for five months, and that six months ago the patient could walk well. The knee was very much enlarged, looking somewhat like a hydrocephalic head. There was some motion at the knee-joint, and grating was not produced by movement, and Mr. Couper considered that the tibia was not involved. At first sight it looked as if the disease had not extended so high up as in the man's case, but on examination some thickening could be felt extending high up the femur, and at the operation a small portion of the disease was found to extend close to the femur as high as the anterior flap. This was removed, as was also a doubtfully affected part of the posterior flap. There was no visibly unsound tissue left. The other patient, whose case we reported last week, had complained most bitterly of very severe pain, but this patient did not, excepting at the first onset of the disease. Mr. Couper tells us that the man has done well up to the present time.

Mr. Curling thinks it only fair that we should state that in Mr. Ward's case the patient, a child, only survived the operation for two or three hours at the most. Mr. Little's also only lived a short time. Mr. Thompson's case probably did not live long. Mr. Adams's patient died on the eleventh day. The operation had been performed for a tumour of the thigh. (See the *Path. Trans.*, vol. v. p. 254.) The specimen was presented by Mr. Ward, examined by Dr. Andrew Clark, and reported on by Mr. Prescott Hewett. (See also *Medical Times and Gazette*, 1854, vol. i. p. 349, and 1857, vol. i. p. 362.)

In one of Mr. Curling's cases the patient, a woman, whose thigh was amputated for malignant disease, lived from March 4 to December 25. This was the first patient sent out of the Hospital well after amputation at the hip. She died of a peculiar affection of the right side of the chest. (See *Path. Trans.*, vol. vii. p. 357, and vol. viii. p. 383.)

In another case (necrosis) the patient, a boy, aged 5, lived four weeks and three days. (See *Path. Trans.*, vol. xv. p. 186.)

The subject of the third case (morbus coxæ, reported by Mr. Colquhoun in the third volume of the *London Hospital Reports*, p. 214) is still alive at the end of twelve months.

On further inquiry it seems probable that these are all the amputations at the hip that can be substantiated at this Hospital, making a total of nine up to the present time.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0

Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.

Post-office Orders and Drafts on Army or Navy Agents, should be made in favour of Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d. | A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d. | A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, FEBRUARY 9, 1867.

ABERRATIONS OF THE SEXUAL INSTINCT.

The sexual instinct is one of the strongest forces for good and for evil. Its good effects are seen in happy family life, and a house full of healthy and creditable children. Its ill effects! Whatever things are done by men and women that are incomprehensibly foolish or criminal, there we may predicate that an aberrant or unsatisfied sexual feeling lies at the bottom of the mischief. It is, we believe, for example, the chief origin of the secret drinking of respectable women.

Such an instinct deserves careful study, and we shall venture to lay before our readers an attempt at a compendium of the subject, viewed from a natural history light. The propositions laid down in the Marriage Service of the English Church seem to embody the common sense of the matter, wherein they state that marriage is ordained for three purposes—(1) the procreation *and* the due education of children;

(2) the avoidance of incontinence; (3) the mutual society, help, and comfort of the married pair. Any union of the sexes in which provision is not made for fulfilling every one of these purposes may be proved contrary to natural law, using that word in its widest sense.

Aberrations of the sexual instinct may consist, 1st, in tendencies to sensual gratification without any union of the sexes, as in the "besetting trial of our boys," &c.; 2ndly, in union of the sexes without due provision for the ends for which such union was intended—viz., in casual and temporary union, of which *infanticide* is the necessary result; 3rdly, in marriages artificially barren, for which, as Dr. Storer and Mr. Hepworth Dixon testify, America is gaining a bad pre-eminence; 4thly, there are aberrations of a more innocent character, because often forced upon individuals by a wrong moral or political condition of society, amongst which we may include *androgynism*, if so awkward a word may be taken to mean the intrusion of either sex, voluntarily or not, into the province of the other; to wit, when a woman dissects a dead body, or a man measures a young woman for a pair of stays. To which may be added the many strange and fantastic modes of relation of the sexes—Free Love, Pantagamy, &c., &c.—which Mr. Hepworth Dixon shows us in his work on New America—and the Manichean notion that the union of the sexes is in itself sinful.(a)

I. To begin with the first aberration. That it exists is enough for us. The extent of its prevalence is impossible to compute. Some men who have seen much of it, think it very common, and *vice versâ*. That its effects are bad no one doubts, but as to their gravity, considered quantitatively, there is, perhaps, exaggeration. Men who see nervous diseases believe it to be a frequent cause of those diseases. On the other hand, it seems to many of us that this is only another way of saying that persons of ill-conditioned nervous systems are prone to the aberration in question. If it be so common, as is sometimes alleged, it can hardly be so hurtful, or so difficult to abandon. One of the worst effects we have seen is that kind of hypochondriasis which afflicts young men, who believe themselves the subjects of all sorts of incapabilities and diseases which they read of in the advertising columns of newspapers. But then it requires no physical sin to produce this. When chastity is imperfect—that is, whenever young persons allow their minds to dwell on sexual ideas, and forget that the voluntary mental indulgence in ideas is in itself a sin, though followed by no physical act—then the reactions of an overstrained nervous system may lead to hysteria, hypochondriasis, etc., in male or female.(b) To return, however, to the "besetting trial," etc. That it exists is certain, be its quantity or effects much or little. What are the causes and remedies? The causes may be purely physical. We have seen the habit frightfully developed in a rickety, large-brained child of two, from ascarides and eczema. It was got rid of by hygienic treatment, with circumcision. We have known of some cases in early adult life, which began from similar causes. In more instances, perhaps, it begins by vicious example. But we cannot conceive of any boys of ordinary intelligence, or who mix with older and worse boys and hear their talk, who would not recognise it as a sin. Now for the remedies. We are sure that the Rev. Dr. Pusey and Dr. Meadows agree in every word that Dr. Beale and the Rev. Mr. Thring adduce in favour of the preventive effects of muscular exercise, open air, cold bathing, and other modes of promoting honest, up-looking, open-faced habits of mind and body. Then there is the silent discipline, which guards against opportunities. Thirdly, considering the tender age at which there is a possibility of the sexual idea entering the mind—full ten years before, in our civilised and crowded state, there is any ordinary hope of marriage—we hold it to be the duty of every parent, in delicate terms, to warn his children, before leaving home, against listening to nasty and prurient suggestions. He may fairly appeal to the boy's self-respect, and to the credit and purity of his home, and the precepts of temperance, soberness, and chastity, but in the quietest and least exaggerated way. Up to this point, we believe, too, that all parties are agreed. All parties are agreed, too, on the general good influence of sober religious feeling. But as to the question whether a special religious rite, such as confession, requiring for its efficacy a special mode of training, and special articles of faith in the recipient, is to be recommended or not—that is no question for a Medical journal. But we will venture to say that a self-reliant, self-respecting system, which inculcates resort to a spiritual adviser only in grave emergencies, and not as a matter of habit, is that which seems most suitable to the English. Other systems may or may not suit other people.

To complete this summary of selfish sensualities, we need only allude, in passing, to those dark crimes which, as the law says, are not to be named of Christian men, and which are shortly catalogued in the Epistle to the Romans, Casper's "Medical Jurisprudence," Gall and Spurzheim's "Phrenology," etc. They illustrate the dangers of unchaste thought, even without unchaste act. The man who gives reins to his thoughts may find his thoughts run away with him. The laws of habit, as regards chaste and unchaste thought, cannot be too sedulously inculcated on young persons.

II. *Incontinence and Infanticide.*—These we class together, as necessary accompaniments in a society where Christian shame has influence, and where unchastity is looked on as equivalent to want of character. Man and woman who run the risk of introducing homeless and nameless infants into the world—whom they dare not own or shelter publicly—are infanticides by omission if not by intention. We give due honour to the Harveian Society for attempting the problem; but all their labour and ingenuity only serve to show the impossibility of protecting infants whose natural protectors are their natural enemies. Incontinence in woman is much a matter of race, of education, of the opinions of her daily associates, of opportunity, of mental training and character. Women of the Celtic race in their original abodes, not transplanted to towns, seem singularly virtuous, spite of the worst overcrowding and mixture of the sexes. What room in a London lodging equals the Highland or the Breton cottage, or, we may say, the dwelling of any primitive race under heaven? To assume that overcrowding and want of privacy are causes of incontinence *per se* is to say that continence is unknown amongst such races; but in towns, away from home associations, amidst a more stimulating existence, these conditions give both inclination and opportunity. Amongst large masses of the lower orders of Englishwomen neither is incontinence considered any harm, nor the getting rid of the child, born or unborn. "So the baby is dead," we said the other day to a poor married woman who was "nursing" her sister's child. "And a very good job too," was the reply. "*Quid vanæ leges sine moribus?*"

Where such are the sentiments, legislation against infanticide is vain. For one child that is killed, hundreds are let die, in some decent tedious way; gruel or bread pap made with water and coarse sugar will in no long time make the child fit for "the Lord to take it." Shut up the mother in a Workhouse for four months; can you make her suckle her child? No; she will starve it if she chooses. A great State Foundling Hospital would be a perilous experiment; if tried,

(a) "All things in the world are said in some sort to seek the highest, and to covet, more or less, the participation of God himself. Yet this doth nowhere so much appear as it doth in man, because there are so many kinds of perfection which man seeketh. The first degree of goodness is that general perfection which all things do seek in desiring the continuance of their being. All things, therefore, coveting as much as may be to be like unto God in being ever, that which cannot hereunto attain personally doth seek to continue itself another way—that is, by offspring and propagation."—*Hooker, Laws of Eccl. Pol.*, i. 5, 2; Keble's ed., vol. i. p. 216.

(b) See, on this point, Bayle St. John's "Life in a Levantine Family."

it should be supported by a tax on unmarried men. Private benevolence can do as it lists. The women in certain districts of Eastern Scotland and of England are frightfully unchaste. Poverty is not the chief cause: for in manufacturing towns young girls earning high wages habitually treat soldiers or keep men as paramours. Amongst the families of the wealthy, especially in towns, there is often a want of discipline; young female servants are allowed to "go out," and so fall into bad company. We know thoroughly well that amongst certain classes a woman thinks it no sin to give the last privileges to any one who promises to marry her. The main causes of incontinence in women may be summed up in want of self-respect and self-control, and want of insight into the heinousness of the offence, whether in a religious or natural history view. We have often said to a girl "in trouble"—See what you have done! You have let yourself be the means of bringing into the world a poor child, with no father to own it, no home for it, a thing to be kicked and scouted as a bastard; does even a bird or a beast have young ones without a mate?—without preparing a nest, and lining it, to protect the young, and doing her best to feed them? So we say to young men—Do not pretend that nature prompts you to sin. "Nature" requires that the woman to whom you unite yourself should be protected and nursed in the troubles of childbirth; that the infant should be reared as becomes your son, and not be left kicking about the world. If "nature" requires you to run the risk of having a child, "nature" requires you to provide for it. Incontinence in man is in this country kept up by an unwritten code of immorality, whose force is greater at present than that of any Christian teaching which reaches the multitude. Neither are our young men taught early enough to look forward to, and work and wait for, the comforts of a suitable marriage and healthy offspring. They rather look forward to sowing their wild oats with loose women, and sobering down and living respectably another day. Then statisticians set to work to ponder on the extinction of noble families, and moralists pretend to wonder at the aberrations of wives who have married these sapless sticks.

III. Let us turn to an aberration of the sexual instinct more unnatural and detestable still, such as results in marriage without the fruits thereof. The man and woman desire the gratification of each other's society, but refuse the task which nature imposes of rearing the offspring which ought to result from this association. Such is the curse which luxury and the worship of godless intellect inflict on their votaries. We need not refer to the ill-repute of the French for the small number of children to every marriage.(c) It would be more astonishing to find such a stain upon moral New England, were we not aware that though the smaller and better part of the Americans have a real affection for the mother country, yet that the great majority are infinitely more French than English in tastes and predilections. Our readers know already that Dr. Storer and other New England Physicians have felt it necessary to lift up their voices against so gigantic an evil.(d) See, for instance, Dr. Storer's book entitled "Why Not?" (e) Unluckily the thing is not confined to Medical books. Mr. Hepworth Dixon, in that wonderfully interesting work entitled "New America," (f) has gone into it without mincing matters. Writing at Providence, Massachusetts, he speaks of "a strange and wide conspiracy on the part of women in the upper ranks—a conspiracy which has no chiefs, no secretaries, no head-quarters, which holds no meetings, puts forth no platform, undergoes no vote, and yet is a real conspiracy on the part of leaders of fashion among women."

And for what? Simply for the worship of self, for the enjoyment of all the luxuries of life, for the gratification of sense and intellect, but without the trouble of rearing children. There is no secret affected about the matter. Young fashionable American women say they won't have babies, "in pious Boston and Philadelphia, no less than in wicked Orleans and New York. It is an offence to allude to the nursery—to wish a young mother a return of the christening day." And they justify themselves.

"A woman's first duty," said one of Mr. Hepworth Dixon's lady friends, "is to look beautiful in the eyes of men, so that she may attract them to her side, and exert an influence over them for good; not to be a household drudge, a slave in the nursery, the kitchen, and the schoolroom. Children take up the mother's time, impair her beauty, and waste her life. If you walk down these streets" (those of Providence), "you will notice a hundred delicate girls just blushing into womanhood; in a year they will be married; in ten years they will be hags and crones; no man will care for them on the score of beauty; their husbands will find no bloom in their cheeks, no lustre in their eyes; they will have given up their lives for their children."

Of course this state of things tells upon the population.

"The only States," says Mr. Dixon, "in which there is a healthy rate of natural increase by birth are the rude Western ones. In Massachusetts, the religious centre of New England, the intellectual light of the United States, the young women marry, but they seldom have children. The women have made themselves companions to their husbands—brilliant, subtle, solid companions. At the same time the power of New England is passing over to the populous West, and a majority of the rising generation of Boston is either of Irish or of German birth."

That a state of things is an aberration of the sexual instinct, which sets aside the main end of sex itself, is clear, and it seems to have its root first in selfishness—in the desire to enjoy life without trouble; but it is greatly aided in America by that other sexual aberration, which seeks to put the sexes on an equality and identity so far as possible. Hence too great a stress on the intellectual, and too little development of the nutritive functions, in the American girls (in the Eastern States, not the Western). "They have," said a friend to Mr. Dixon, "no bone, no fibre, no juice; they have only nerves.

(c) Mr. Beresford Hope, M.P., in a speech at an agricultural meeting in Kent, said:—"It is a thing almost too dreadful to say, but I believe that the diminution of the population of France is a great deal owing to the fact that the parents don't like to see their land cut up into nothing, and accordingly we have families of three and four children only. Why only three or four? It is a dark mystery. Certainly human nature is human nature; but the maternal nature and the paternal nature are steeled in France to the desire of seeing many rosy infantile faces round their hearths. That is a known fact, and there are things which cannot be spoken of except very guardedly, and only in meetings of men, and I believe a great deal of it is attributable to that infamous system of the necessary division and subdivision of land and property among all the offspring. Marriages become a mere matter of bargain: the man has a third of his father's property, and the woman he takes to wife has a third or a quarter of a half of her father's property; and so it is simply a union of two misbroken halves put together. Sons' sons go on making these sorts of marriages, and thus you see how this villanous system poisons the very birth-springs of human life and human morality in every shape; and it is what we are to come to—equal division of land and universal suffrage. France got an equal division of land seventy years ago, and universal suffrage nineteen years ago. . . Freedom to make your money, freedom to spend your money, freedom to buy land, freedom to sell land, freedom to marry, freedom to make your will, freedom to travel, freedom to breathe, freedom to worship your God as you like, freedom in all things, with order and due subordination everywhere—(cheers)—that is the English system."

(d) "*Population in Massachusetts.*—Dr. Allen, of Lowell, has been investigating the changes in the population of Massachusetts, of which State he says that, in thirty or forty years, the native-born will be a minority. His figures show, not merely that the foreign population of the State increases more rapidly than the native, but that in fact the native population is diminishing year by year, and the increase is altogether foreign. In 1864 the births in the State were 30,449, and the deaths 28,723; in 1865 the births 30,249, deaths 26,152. The births exceeded the deaths in 1864 by only 1726, and in 1865 by 4097. But the foreign population have from two to three times as many births as the American, and it follows that the American deaths actually exceed the births. This is confirmed by the figures from towns where there are few or no foreigners, and the deaths every year exceed the births. Is the old Puritan stock losing its virility and running out? The town records show that in the first generation of settlers the families averaged from eight to ten children; in the next three generations from seven to eight; the fifth about five; and in the sixth less than three. The present is less than this. The old Physicians all notice this falling off, and it is remarkable that it is quite as large in the country as in the city. Does it come from our more artificial and unnatural life, producing a degenerate physical condition of women, or from a settled purpose with the married to have but few children? These are some of the questions raised by Dr. Allen. The facts deserve the attention of students of social science."—*Springfield Republican.*

(e) See *Medical Times and Gazette* for 1863, vol. ii. p. 479.

(f) Published by Hurst and Blackett, 2 vols. 8vo, 1867. See vol. ii. pp. 265, &c.

But what can you expect? They eat pearlash for bread, they drink ice-water for wine, they wear thin shoes, tight stays, and barrel skirts. Such things are not fit to live; and, thank God, in a hundred years not one of their descendants will be alive." There is no truer instinct than that which leads men to admire a deep and well-formed female bosom. It typifies the calmness, the graciousness, all that is bland and bountiful in maternity. But big foreheads, flat bosoms, skinny legs, sharp features, coarse voice, and a strong taste for criminal statistics, are the true type of the "woman's rights" system. Many attempts have been made to introduce this accursed system of limited families into England; Radical and philosophical politicians advocated it years ago; but, thank Heaven, we think that no English Physician would countenance it. We hear of it sometimes in private practice; ladies say, "I am having children so fast—can nothing be done save separate beds?" We do know instances in which some experiments were made, which nearly maddened the wives subjected to them; but the heart of English society is sound.

IV. Lastly come we to a miscellaneous set of sexual aberrations, some arising out of unhappy social circumstances, some from wild political or religious opinions. Here we cannot help remarking how intrinsically the security of all that we hold most precious depends upon a few religious opinions, so familiar that they seem to many of us mere commonplaces, things to be taken for granted. What a matter of course it seems for a man to be able to talk of *my* wife, *my* children, *my* land, *my* bankers' book, *my* mutton, *my* wine, *my* profession or business, *my* last will! Such privileges, however, really rest on our religious and political systems; and it is quite as well to be forewarned that there are systems of political philosophy which hold marriage with one woman to be exclusive selfishness, property to be theft, which deny the right to eat meat or drink wine, and to follow any special calling at will. In fact, the relation of the sexes is essentially connected with religion and politics, and varies as they vary. There is little of novelty in these extravagances. St. Paul describes them in three lines (1st Epistle to Timothy, chap. iv., verses 1—3), and every sexual and social heresy now rampant in America, including celibacy, teetotalism and vegetarianism, and spiritualism, flourished amongst heretics, and was denounced by the Church, in the first centuries. One great value of Mr. Hepworth Dixon's book to the Medical philosopher and psychologist is, that it shows in time present a vivid picture of times past. We are apt to read of ancient extravagances as if they were mere dreams long vanished. The heresies which distracted the early Christian Church and the atrocities of the Anabaptists in the 16th century, what, we may ask, are they to us? A sleepy eye may sometimes light upon the 38th out of the 39 Articles of the English Church, wherein it is stated, in pedantic phraseology, that "The Riches and Goods of Christians are not common, as touching the right, title, and possession of the same, as certain Anabaptists do falsely boast." And we may remember having read that there was a sect in the 16th century which proclaimed community of goods *and wives*, and which for a time was strong enough to propagate its opinions by fire and sword. Such madnesses, however, it is well to be reminded, spring from constant elements in human nature, and are sure to come to light at times of great political and religious excitement. Let us show from Mr. Hepworth Dixon their present rampant state amidst the unbridled licence of opinion in the United States.

1. To begin systematically, let us begin with those who denounce marriage *in toto*. God, they say, is a Spirit; the flesh, with the whole material world, is subject to the devil. So also said the ancient Manichees, and herein lies the distinction between an ascetic and a Manichee. The ascetic believes in the sovereignty of God, and abstains from things—say marriage or wine—which he acknowledges to be good in themselves, δι' ἄσκησιν—*i.e.*, for discipline, because he believes that he individually may be better without them. The Manichee (*e.g.*, the teetotaller who raves about "cussed" alcohol) abstains because he believes them bad in themselves, and generated by, and subject to, the devil. Let us see what Mr. Hepworth Dixon says of the sentiments of the American Shakers, a sect of devotees who abjure marriage, and live in communities, where they exercise themselves in horticulture and the preparation of vegetables. (It is to the Shakers that we owe podophyllin and other vegetable extracts of that sort.) One of the female saints thus explained their tenets to Mr. Dixon:—"By lust man fell from heaven; by abstinence from carnal thoughts he might hope to regain his celestial rank. No form of earthly love could be tolerated in the Redeemer's kingdom. Men called into grace must live as the angels live, amongst whom there is neither marrying nor giving in marriage. Every member of her church had been compelled to renounce his yearning after love; the wives consenting to dwell in a house apart from their husbands, the husbands in a house apart from their wives. They had put themselves this question—'If all men born into this world are born into sin, and made the heirs of death in the world to come, how can the saint, when raised from his fallen nature, dare to augment this kingdom of sin and death?'" It must be added that the Shakers permit marriage to the outside world, but consider it a state unfit for saints, and that they have kept themselves free from the beastly practices ascribed to the Manichees of old.

2. *Free Lovers.*—It may seem a jump from one pole to the other, but we may as well take as the next item in our enumeration the persons who, having cast off all allegiance to the religion, philosophy, morality, and forms of thought of the past, openly advocate *free love*—*i.e.*, the union of the sexes at will—who deny that marriage is a high, holy, or pure state; and say that a partnership in matters sexual ought to be like any other—*i.e.*, subject to such terms and conditions as the parties may be pleased to adopt, or to none.

3. *Spiritualists.*—These are the personages who believe in that sort of intercourse with inhabitants of the unseen world, which is carried on by means of table-rappings, mediums, etc. Part of their superstition is the belief in clairvoyance, and especially in the selection of remedies by their prophets and prophetesses. They denounce spirits and tobacco; declare Christianity to be an old effete religion; believe in a duality—*i.e.*, a fatherhood and motherhood—in God, and the perfect equality of the sexes on earth. As to the union of the sexes, they for the most part advocate free love.

4. Let us next take the *Bible Communists*, or *Bible Families*, or *Perfectionists*—self-supporting societies, the members of which have all things in common. They seem a degraded and distorted offspring of Antinomianism. We abridge the following account from Mr. Hepworth Dixon, as the readiest to our hand, and as the evidence of the latest eye-witness:—

The Perfectionist has a right to do what he likes. He will tell you that from the nature of the case he can do nothing but what is good. A Perfectionist knows no law; he does not live under law, but under God—that is to say, under what his own mind prompts him to do as being right. The Lord has made him free. To him the Word is nothing. No commandment in the ten, no statute in the rolls is binding on him, a child of grace delivered from the power of the law and the stains of sin. He rejects laws of God and of men—ten commandments, statutes at large, temperance pledges, and marriage vows. Noyes, the founder, on his "conversion" gorged, and drank, and frequented low women, in order to show his freedom from law and obedience to grace. But how does a man arrive at a state of grace? Simply wish and believe it, and it is done. Good works are not necessary; prayers not desirable; only faith—then the man is a law to himself.

To the well-informed English reader there is nothing new in all this; it is the same doctrine founded on the same texts

of St. Paul as was propagated by the Rev. Mr. Prince, who twenty years ago was a clergyman at Brighton of "extreme views," which views culminated in the well-known Agapemone, or Abode of Love. The only difference was that the English saints were people of easy fortune, who lived on their means; the Americans support themselves—and well too—by well-organised labour. Both agree in the precept that it is a duty to eat, drink, and love to their hearts' content—wives and children to be common, as all other property. They have a sort of domestic government, inasmuch as every member pledges himself to abide by the will of the majority.

Their tenets and customs as to sexual alliances may be gathered from a passage in a proposal of marriage made by Noyes, the founder, at the very origin of the institution:—"We shall enter into no engagements that will limit the range of our affections as they are limited in matrimonial engagements by the fashion of this world. I desire my yokefellow will love all who love God as freely as if she stood in no particular connexion to me."

The relation of the sexes is described by Mr. Dixon as "a complex marriage, including the marriage of every member of the household to every other of the opposite sex: every man becoming the husband and brother of every woman, every woman the wife and sister of every man. Marriage as a rite and a fact have they abolished as a selfish and exclusive institution."

One little bit there is in these family arrangements which fills one with admiration at its astuteness. One of their sexual rules they call by the name of the "ascending fellowship," which means that "the young are to associate in love first with those older than themselves," with "spiritual" persons who have been some time in the way of self-control. Another rule is, that no "exclusive attachments" are permitted! Verily, here is a climax to the myth of the Pilgrim Fathers! Here is a development of intellect and liberty and the rights of man! Strange stories used to be told of the rights of feudal seigneurs over the virgins of their domain, but that young men of English blood should allow the girls to "associate in love" at first with the old and moderate! and that they should renounce exclusive possession! Out upon them! we disown them as descendants of Englishmen. As for the children of these promiscuous alliances, we learn no particulars; but they seem to be common property—children of the regiment, as they say in barrack towns.

5. As the next subdivision we take the *Mormons*. We have not space to narrate their history. Suffice it to say that they are a band of religious enthusiasts who believe in a material God, and in the duty and privilege of enjoyment on earth. Their first duty is to live; the next, to enjoy life; the next, to increase the number of saints by propagation. In most secular respects they deserve high praise; they have converted a howling waste into a beautiful city and fruitful garden; they have raised more produce from a given breadth of land than any before them—even 93½ bushels of wheat from an acre; they have an orderly and contented population; drunkenness, beggary, and want are unknown amongst them; no loose women, pickpockets, or drunken and blaspheming men are seen; they don't drink spirits and don't smoke; they live at peace with the Indians around; their bishops see that their houses are clean, their land well tilled, the children taught, and the cattle housed. "Amongst the Mormon presidents and apostles," says Hepworth Dixon, "we have not seen one face on which liar and hypocrite was written; though we daily meet with fanatics, we have not seen a single man whom we can call a rogue." They have even a pure theatre. But, amidst all this, they practise polygamy. Their excuse and pattern is the polygamy of the Old Testament patriarchs; their alleged reason, a wish to provide earthly tabernacles for immortal souls—their real one, to secure political power by rapid increase of population, and to lure converts by the prospect of unlimited sensuality. Hence every man is not only allowed, but encouraged as a duty, to have as many wives as he can feed. They repudiate the notion of "desires or preferences of the flesh," but set to work solemnly, as a duty, to increase the saintly kingdom. Brigham Young, the chief prophet, has about 12 wives, and about 48 living children. The "twelve apostles" have 53 wives between them. The highest dignitaries get the prettiest women. No woman is under any compulsion—she may marry or not as she pleases. They seem to admit no union to be incestuous, and deny the harm of breeding in and in. A Mormon may live with three or four sisters, with an aunt and niece, a mother and daughter; nay, in one household in Utah may be seen the spectacle of a man living with three generations as wives. Besides regular polygamy, they have a curious system of "sealing" women to men, by which is meant a mystical union for eternity. A woman may be sealed to a living man, and may or may not live with him as wife in this world; or she may be sealed to a man already dead, and may or may not cohabit with a living man as an earthly substitute. Thus a woman went from New York to be sealed by Brigham Young as one of Joe Smith's wives for eternity, but, that the field might not lie fallow in this world, Brigham took her and had three children by her. Be it observed that most Mormons are of English or Scandinavian origin, and that nineteen-twentieths of the 2000 Mormon elders who solemnly accepted polygamy on August 29, 1852, were of English blood. Let it be added that it is only the rich and few who can afford polygamy; the great majority have no interest in it.

What, according to our oft-quoted authority, Mr. Dixon, is the effect on the women? A few female fanatics are in favour of it, but the majority really dislike it. The Mormon wives are dull and shy; they dress poorly, are quiet and subdued in manner, as if all life were preached out of them. They smile with wan and languid look, not with the bright and merry laugh of English girls. They are brought into the room to see strangers, as children are in England; there is nothing like ease and womanly bearing; no woman reigns as mistress in her own house, or sits by the side of her lord as mate and equal; she waits at table; her place is in the kitchen, nursery, laundry, or fruit shed, not the drawing-room. She is not the companion contemplated by the English marriage service, but a slave and toy—say, rather, a broodmare, a tool for propagation.

6. Having now gone the round of the grosser aberrations of the sexual instinct, let us come to *Androgynism*, or the intrusion of one sex into the other's province. The funniest example of the intrusion of men into woman's field is afforded by the Chinese in the United States, who in California and the West do the work of women by preference—wash clothes, nurse babies, and do housework; but there there is some excuse, for women are scarce. There were 730,000 more men than women in the United States in 1860. In England we see men behind counters, keeping books, measuring tape, and doing a thousand acts which might be done by women, if the latter would condescend to the habits, the good temper, and precision necessary for business, which they seldom will. The most zealous promoters of employment of women groan over the unfitness of "genteel" English women for any employment whatever. Hence the intrusion of men into effeminate occupations is at present said to be unavoidable.

But the tide is turning, and now it is woman who is the aggressor. She demands absolutely equal rights with man; his pantaloons (*fem.* pantalettes) and latch-key. She demands admission to all offices and dignities, and that she shall have the privilege of doing all that man does. Woman in America, says Hepworth Dixon, is thrown "into a thousand restless agitations about her rights and powers, into debating woman's place in creation, woman's mission in the family; into public hysteria, into table-rapping, into anti-wedlock societies, into theories about natural marriage, free-love, and artistic maternity; into anti-offspring resolutions, into sectarian polygamy, into free trade of the affections, into community of wives."

*

These moral phenomena have their starting-point in America, where they are ascribed by Dixon to the scarcity of women; consequently to their power and self-consciousness of importance. The same phenomena are felt here, but as a consequence of a diametrically opposite state of things—a superabundance of women, a want of husbands, a want of occupation and honourable maintenance for women of the genteel classes.

Now, of the evils of women, some are inseparable from their sex. Woman has the task of nourishing within her the future offspring, and if she fulfils her duties she nourishes the little one during the first nine months after birth. To perform these functions well requires a large sacrifice of time, of health (at least temporarily), and comfort; it requires a frame in which the nutritive functions have a preponderance, and in which too great sensitiveness, physical or intellectual, is a bane. So long as woman is the childbearer, she must be the weaker vessel, the stay-at-home partner; the management of household and children falls to her lot; but she has some compensation—she feels the comfort of a protector, and rejoices in her weakness. "I don't want equal rights; I like to be taken care of," was the sensible observation of a New York bride to Mr. Dixon.

Besides these inevitable evils, others, we confess, are heaped upon the sex by the selfishness and cruelty of man. It is a commonplace to say that amongst savages woman is the slave, the chattel, the toy, the beast of burden, the hewer of wood and drawer of water; but how is it among ourselves? Women get the worst of everything, more especially in the "genteel" classes—*i.e.*, those who are too proud to do "menial" work, and cannot live on their means. That stupid pride, which prompts women to shun domestic service as "low," and to take or seek any other kind of work by preference, is the root of half their social evils; and the fact that they are uneducated and unfitted for higher employment is the source of the other half. Girls, in every class, get a worse education than boys do; they learn no arithmetic, no classics; all they get is a heap of accomplishments or "useful information," music which they play by rote but do not understand, a list of names and dates called history and geography; in fact, they are qualified neither for business nor for teaching, nor yet for being companions and helpmates to a man who has his way to push in the world. We have reason to believe that there is abundant employment for women if they were inclined and qualified to undertake it.

We affirm, then, that there is great need for raising women in position and education, and multiplying lucrative employment for them within the sphere of their own sex; but we think they make a mistake in undertaking duties which are better fulfilled by men. It is an aberration of the sexual instinct in any girl to aim at occupations which are incompatible with the duties of maternity, and an equal aberration to smother those maidenly instincts which should lead her not to intrude into the occupations which custom has associated with the male sex. There is no intrinsic sin in riding astride a horse, or in wearing boots and breeches, but there is harm in violating those decent rules by which the conduct of either sex is regulated. We say it in all kindness, that for a girl to present herself at a public Medical examination is as great an aberration of sexual instinct, as it would be if a young man were to leave the dissecting room and apprentice himself to Madame Elise or Mademoiselle Couturière. For, after all, women cannot get rid of their sex. What is their real glory, their very life-purpose? To be mothers. Theologians pretend that the Jewish women longed for children because each hoped to give birth to the Messiah! This may be; but all women long for children. "There is no true woman but feels at her bosom the yearning for a baby's lips. There is no true woman but longs in her secret soul for a man's breast to lay her head on, a man's eyes to give her the one look which he gives to nobody else in the world!" So speaks an American author, Bayard Taylor, in a novel called "Hannah Thurston," which contains many a singular picture of modern American life and manners, and makes one feel that all America is not poisoned by communism and woman's rights. Read "Hannah Thurston," young ladies, and believe us that it is an aberration of the sexual instinct to choose occupations incompatible with maternity, and repulsive to the better class of men.

This article has extended to an extreme length, but we thought it better to finish the subject in one number. We hope we have shown how indissolubly the relations of the sexes are connected with religious and public polity; and we may add that any attempt to disturb either is fraught with danger to the whole social fabric. It is a significant fact that a very little licence in religion and politics may bring men to a state in which they may not call anything, not even the wife of their bosom, *their own*.

THE CHAIR OF MENTAL PHILOSOPHY AT UNIVERSITY COLLEGE.

We have up to the present time refrained from any allusion to the controversy which for many months past has been agitating one of our most important educational institutions, but now that the difficulty has received the only satisfactory solution of which it was capable, we will briefly lay before our readers a summary of the events which have taken place. The division of opinion to which we refer originated in the appointment made by the Council of University College to the chair of Mental Philosophy and Logic, rendered vacant by the resignation of the Rev. Dr. Hoppus in June last. Although this chair is not one in the Medical Faculty of the College, yet the subjects embraced are such as Medical students ought to receive instruction in, and such as they must take in for the degree of M.D. in the University of London. Our reticence therefore, hitherto, has not been the result of indifference.

University College was, as every one knows, founded a good many years ago upon what has been termed "unsectarian principles." In the words of one writer, "Religious neutrality is the characteristic quality of University College. Up to the present time, no religious tests, expressed or implied, have been imposed upon managers, professors, or students. Not only is theology, in all its branches, excluded from its curriculum, but the rigorous application of the same principle has led to a similar exclusion of moral philosophy." That is to say, certain branches of scientific truth are absolutely ignored; to the managers of the College they are as if they did not exist. The result, in the order of nature, has been what every one must have anticipated. With a view to avoid the stigma of ignoring psychology altogether, an artificial distinction was drawn between the philosophy of the mind and the philosophy of the soul, and, like all attempts to coerce nature, the attempt to divorce things which are indissolubly united has confessedly failed. On the foundation of the College, Dr. Hoppus, a "Congregational" minister, we believe, was appointed to the broken chair of Mental Philosophy and Logic, and somehow managed to balance himself upon it until last June. On his resignation, candidates for the appointment were invited to make application, and amongst those who did so were the Rev. James Martineau, an eminent Unitarian minister, a successful and eloquent teacher, and a profound metaphysician of the idealistic school of Descartes, Butler, Berkeley, and Hamilton. Another candidate was Mr. G. C. Robertson, a young man educated in the sensational school of Locke, Hume, and Mill, and bringing high testimonials from Mr. Bain, of Aberdeen, and others. In accordance with the custom of the College, the testimonials of the several candidates were referred to the Senate (the whole body of Professors) for report, and they sent up the name of Mr. Martineau as that of the most eligible candidate. And now arose the difficulty which has been hanging over the Council ever since the establishment

of the College. Mr. Martineau was an eminent sectarian divine; how could he steer clear of imparting a bias towards his own peculiar theological views while lecturing upon cognate topics? Besides, Mr. Martineau taught moral and religious philosophy not 300 yards off—at University Hall; might not students become so attached to his teaching in the College as to follow him beyond its precincts into the theatre of the Unitarian Hall? We do not say the Council argued thus, but such a probable line of thought has been suggested by some of their apologists. At any rate, on August 4 Mr. Grote moved a resolution in the Council "That the Council consider it inconsistent with the complete religious neutrality proclaimed and adopted at University College to appoint to the chair of Philosophy of Mind and Logic a candidate eminent as minister and preacher of any one among the various sects dividing the religious world." Very wisely, we think, the Council abstained from adopting this resolution; but Mr. Martineau's election was nevertheless lost, and with Mr. Martineau the College lost the services of perhaps its most eminent Professor, Mr. De Morgan, who deliberately resigned his chair of Mathematics as a protest against Mr. Martineau's rejection. Officially the Council gave no reasons, and have given none up to the present time, for the choice they have made; but a certain number of the Fellows and proprietors of the College, interpreting their acts by the motion of Mr. Grote, considered that the principles of the College had been infringed, and summoned a meeting of their body to consider the whole proceeding. Mr. Robertson was in the meantime appointed to the chair, and at the meeting which took place last Saturday an issue was raised which, if determined adversely to the Council, must have led to the resignation of the whole governing body of the College. The good sense of the majority warded off this catastrophe—one which all who are sensible of the debt which our Profession owes to the founders of University College must have deplored. There can be little doubt that the Council did sacrifice consistency to expediency in the decision they arrived at when they rejected Mr. Martineau; but the sacrifice was a necessary one, rendered necessary, to our view, by the distorted basis on which the College is founded. The fault—if a fault at all—was one that the proprietary, having the real interests of the College at heart equally with the Council, might very properly have condoned. They have condoned it, and have maintained the independence of the governing body by the votes of forty-two of the proprietary and Fellows to thirty-seven, which determined that no expression of opinion at all should be formally given. At the same time a minority of thirty-seven is large enough to express an amount of dissatisfaction which the well-wishers of the College cannot regard without concern. We sincerely hope that no further steps will be taken in this matter, and that all parties will now agree to let bygones be bygones, and only strive together in future in their endeavours to keep peace within the walls of the College, and to make the best they can of the fundamental error which has so nearly overset the fabric reared upon it.

YELLOW FEVER AND QUARANTINE.

Few indeed are they who have acquired the right to speak authoritatively upon the subject of yellow fever, and to advise as to the means by which its lodgment amongst us is to be prevented when imported from its endemic haunts to this country. A very interesting paper, embracing the principal data afforded by the experience of the last twenty years, was read by Dr. Milroy on Monday last before the Epidemiological Society, "On Yellow Fever in relation to the Home Population," which contained opinions entitled to our best consideration, and led to an important discussion relative to quarantine arrangements. Dr. Milroy first of all referred to the case of H.M.S. *Eclair*, which arrived in England in 1845, having lost nearly half the crew by the disease. After the removal of the unattacked only two or three died, the last case fourteen days after the arrival at the Motherbank. In the case of the *Growler*, all persons who were attacked after the arrival of the ship had been on board the infected vessel, and no case occurred to prove that the disease was conveyed by the mere intercommunication of the sick and healthy. In 1852 four of the West Indian mail steamers brought with them yellow fever; 98 of the crew were attacked, of whom 22 died; the total number of passengers was 330. The quarantine was eight hours, two days, three days, and four days, respectively, in the four instances, and only one fresh case occurred amongst those who landed. None of the passengers were seized. In 1861 seven vessels of war reached Halifax from the West Indies. The first, the *Firebrand*, lost 39 of 170 crew (10 died on the voyage); 79 were on the sick-list, of whom 34 were seriously ill, and the rest were convalescent. These were transferred to a hulk; the healthy were placed in the store-house in the dockyard. Subsequently 16 died on board the hulk, and two on shore. The *Spiteful*, another vessel, had 11 deaths on the voyage, and 46 on the sick-list on arrival; but Dr. Slater reported that none of the people about the dockyard or in the city were attacked. In 1861 a vessel arrived from Havannah at St. Nazaire, in Brittany, some of the crew having died of yellow fever on the voyage. Seventeen labourers were employed to discharge the cargo, and of these two-thirds were attacked, the majority of whom died. In addition, cases of the disease occurred in vessels alongside, but amongst men who had been on board the infected ship, 40 altogether, of whom 23 died; a few cases also occurred in the town and harbour. The hold of the ship, from whence the mischief sprang, was foul in the highest degree. Other vessels arrived, and precautions were taken, and only one man, a labourer, did yellow fever attack, and he had neglected to observe the rules laid down by remaining in the hold for too great a length of time; otherwise none of those employed on shore or in removing the cargo suffered in the least. In 1862 a steamer loaded with cotton arrived at Gravesend with a crew of 50 men and 53 passengers; seven or eight deaths had taken place on the voyage, the latest three or four days before the arrival in the Thames; the disease, however, did not spread. In 1865 the *Hecla* reached Swansea from Cuba, and the result we all know. Between September 15 and October 13, 22 cases of well-marked yellow fever occurred, and 7 doubtful cases, with 16 deaths, but all attacks took place in persons who lived close to or on board the ship. As Dr. Buchanan remarked, though there were at least twelve centres from whence the disease might have further spread, and circumstances were favourable for it, yet no occurrence of the kind took place.

The author then referred to the recent outbreak on board the mail steamers that arrived at Southampton at the latter end of last year—the *Atrato*, *Tyne*, *Seine*, and *Tasmanian*, etc. Of six infected steamers, amongst an aggregate of 900 people, 65 deaths at sea took place, but after the arrival of the ships no further casualties occurred. The uniform exemption of the passengers is a very striking fact, and it is highly significant in reference to quarantine that a mass of 600 people, distributed in half-a-dozen ships fouled by yellow fever, should show an almost complete immunity from the disease. It bears out the statement of Sir William Pim, that in an open and airy situation persons suffering from yellow fever may be approached and communicated with without risk of infection; and it is clear that the simple expedient of having an ample circulation of pure air diminishes the virulence and the extension of the pest. The remarks and opinions of the several speakers, Dr. Buchanan, Dr. Smart, Dr. Martin, Dr. Nicholson, and others, seemed very clearly to support the tendency of Dr. Milroy's observations that yellow fever is in itself contagious or infectious in a remarkably small degree; that it is especially unnecessary to quarantine individuals, but all attention should be directed towards the ship, which is the real infecting agent. Attention to the sanitary

condition of vessels is the essential point in the matter of preventing the spread of yellow fever. The facts brought forward by Dr. Milroy show pretty conclusively that whenever yellow fever has appeared to spread in a seaport town, its origin can generally be accounted for by direct communication between the infected vessel and the attacked. It seems clear, however, that a ship can infect a port, especially where there are low-lying parts around in a bad sanitary condition, and especially where there is a non-tidal harbour. Hence it is of prime importance not only to fumigate and cleanse the ship, but also to remove it away from the immediate neighbourhood of harbours and low-lying lands. Perhaps the best illustration of this power on the part of stricken ships to infect ports was given by Mr. Galatly at the meeting of the Social Science Association on Monday evening. It seems that prior to the American war the port of Charleston was continuously under the scourge of yellow fever. The strict blockade had the result of entirely annihilating all trace of it; and it is well worthy of remark that the disease even here did not spread inland, but selected as its haunts the parts in the vicinity of the harbour by common consent allowed to be in a bad sanitary condition.

THE BRITISH PHARMACOPŒIA OF 1867.

We have been favoured with a proof copy of the new edition of the British Pharmacopœia, and are happy to be able to speak of it in terms of the highest approbation. Unlike the former edition, there will be but one size of volume, and this, being intermediate between that of the large and small editions of the Pharmacopœia of 1864, is probably the most convenient that can be adopted, while the type is clearer than it was in either of the former volumes. All substances are arranged in alphabetical order, and under each is given a list of all the preparations into which it enters, with, in some instances, the proportions in which they are introduced. Then, again, under the head of "Liquor" we find all the officinal preparations going by that name, and so with "Tinctures," thus combining the advantages of the plan adopted in the last Pharmacopœia with those of a simple alphabetical arrangement.

Complying with the generally expressed wish of the Profession, no less than 110 substances and preparations have been added to this edition of the Pharmacopœia, forty-eight of these having been previously contained in one or other of the three pre-existing Pharmacopœias, the remainder being entirely new, officinally speaking, though in general use among Practitioners. Two new kinds of preparations have been introduced, termed "glycerines," and "vapours or inhalations." The former may in many cases be advantageously substituted for ointments, while the latter will no doubt prove very useful in the treatment of some affections of the chest. The glycerines are of carbolic acid (also introduced for the first time), gallic acid, tannin, starch, and borax; the vapours are those of prussic acid, chlorine, conia, creasote, and iodine. Effervescent medicines have not been overlooked, whether in the solid or liquid form—as potash, soda, and lithia waters, and citro-tartrate of soda. Among the new articles introduced we would particularly notice carbolic acid, carbonate of bismuth, iodide of cadmium, oxalate of cerium, blistering paper, liquor ferri perchloridi, black wash, black draught, cacao butter, Calabar bean, sumbul, the so-called chlorodyne (Tinct. chloroformi co.), Veratrum viride, and a number of new lozenges, to show how anxious the Committee have been to profit by the criticisms on their former edition.

The only expurgations have been of black catechu, Cocculus Indicus, and Pyroxylic spirit. Why not leave them? No one can say they are useless, and pyroxylic spirit we can confidently pronounce to be one of the best remedies for the sickness of uterine disease or pregnancy. Do let the Committee reconsider their proposal. Ninety-one substances have had their names altered chiefly for the sake of clearer definition—for instance, Krameria is now Krameriæ radix, Filix is Filix mas, and so on—a very slight change, but a useful one, as teaching at once what part of the plant is officinal. Twenty-four preparations have had their composition altered mostly as a result of the criticisms on the Pharmacopœia of 1864, and the name of Pulvis cinnamomi compositus is substituted for that of Pulvis aromaticus.

All these alterations are conveniently given in a tabular form in the beginning of the book.

For the first time the doses in which the preparations are to be prescribed are introduced, although this, we think, is no part of the duty of a Pharmacopœia Committee. The doses ordered are the average quantities prescribed in ordinary cases for adults, and all important changes in the strength of medicines are further indicated by foot-notes. Symbols are also given indicating the chemical composition of those substances which can be so treated, and these are in accordance with both the old and new systems of notation, the old being placed first and printed in ordinary type, the new coming after in a smaller and bolder type, but without the barred letters at one time so much used.

No alterations have been made in the weights and measures adopted in 1864, except that the Committee authorise the optional use of the old scruple (℈) and drachm (ʒ), representing, however, not integral parts of the ounce, but 20 and 60 grains respectively. The Committee further enters a strong protest against the use of the terms ounce and pound as indicating any other weight than the avoirdupois or imperial weight. To suit the convenience of the practical man, the metrical system, although not adopted for obvious reasons in the body of the book, is placed alongside the avoirdupois measures in the tables of solutions for volumetric analysis, and there are besides these the old tables, comparing the one set of weights and measures with the other, now, however, somewhat extended. The index to the whole volume is extremely full, synonyms being indicated by italics, and substances contained in the appendix being marked by an asterisk.

We cannot at present enter into a full discussion of the contents of the work, but one or two points we may refer to. Thus, in looking over the index we find that the only lotion given is black wash. Why not also include the lotio rubra, which is certainly in more general use? Why not give a formula for the lotio flava and various others that are being constantly employed? Again, the basis of the new suppositories is made very properly of cacao butter, but there are combined with this benzoated lard and white wax. Now by itself the concrete oil furnishes a most admirable basis for suppositories and pessaries. Why complicate the formulæ? These slight objections show that in all probability we have not yet got a perfect Pharmacopœia; but the Committee have shown so much zeal in the performance of their arduous task that we hope that their endeavours will be met fairly, and that *captious* criticism of their work will be unknown. As their great aim is to satisfy the Profession in the three kingdoms, might we not suggest that the new Pharmacopœia, while still in proof, should be submitted to the three Colleges of Physicians which formerly issued the authoritative volumes for each country? It might delay its appearance somewhat, but that would be no great loss if we got a Pharmacopœia which would satisfy all.

THE WEEK.

THE OPENING OF PARLIAMENT.

The speech from the Throne, which seems to have conciliated most persons, at least ought to be welcome to members of a profession whose mission it is to proclaim and inculcate the principles of sanitary and social science. The prominence given in the Ministerial programme to such subjects as the prevention of cholera by hygienic measures, the exclusion of cattle plague, improvement in metropolitan water supply, the extension of the Factory Acts, an amelioration in the condi-

tion of the sick poor in the metropolitan Workhouse Infirmaries, and a measure for the conservation of the health of merchant seamen, promises a session rich in reforms at least as real as, and, from a Medical point of view, no less urgently required than, the extension of the franchise. For ourselves, we hope much from the present Administration; and whilst disclaiming all political bias, we may safely assert that it will be a loss to the country if they are not permitted to introduce to the consideration of Parliament the measures of hygienic and social progress foreshadowed in the Royal speech. Legislation in this direction is founded, not upon abstract political theory, but upon the plain teaching of physical science, and appeals for support to the bodies of the lower classes and to the purses of the upper. As in former years, we shall provide our readers with an abstract of those proceedings in Parliament which are of most interest to our Profession.

THE CASE OF KEARNS *v.* STORKS.

This case, which promised to be of considerable Professional interest, has been settled by private arrangement between the contending parties. The action was brought by an old servant of the late Mr. Serjeant Storks against his younger son, Mr. Robert Storks, for having "falsely, maliciously, and without any reasonable or probable cause, caused the patient to be certified as a lunatic," and to be confined for four months at Charenton. The plea of justification was that the plaintiff had been of unsound mind, and that the defendant had acted on the certificates of Sir Joseph Oliffe, the Physician to the British Embassy at Paris, and of Dr. Foville. Of course we can offer no opinion on the merits of the case, as the evidence only for the prosecution had been heard when the case was stopped. It appears, however, on the surface that the plaintiff was a person of excitable temperament, and in the sequel it was acknowledged by the plaintiff's counsel that the defendant had acted with good intentions. The point we would draw attention to is that in this case the action was not brought against the Physicians who signed the certificate, nor against the defendant and the Physicians, but against the defendant for having caused the plaintiff to be certified as a lunatic. This is not the usual course pursued in such cases, but it certainly, in the majority of instances of disputed insanity, would lead to a result more in consonance with justice than that of making the Physician the sole party liable in an action for damages.

THE PORTSEA ISLAND BOARD OF GUARDIANS AND THEIR MEDICAL OFFICERS.

We have received a Portsmouth newspaper containing an account of the resolutions passed at the Portsea Island Board of Guardians, together with copies of letters addressed by the Medical officers of the Union to the Board. From these we gather that, during the late epidemic of cholera and diarrhœa, a vast amount of extra work and extra expense was thrown upon the Medical officers; that this work was performed and the expense borne by them; that, in consideration of the extra services rendered, the Board of Guardians promised to present each officer with a gratuity in addition to his salary on the cessation of the epidemic; and, lastly, that the Board now repudiate their promises and refuse any extra pay. Comment is superfluous. We know not on what pretext the Board have thus broken their engagements, but we can conceive of none—unless it were clearly proved that the Medical officers had been guilty of flagrant neglect—which could excuse them. We see that two of the Medical officers have very properly resigned rather than brook such usage. In one instance the guardians ordered the gentleman so resigning (Mr. H. B. Goold) also to give up his post as public vaccinator! Surely this is a case in which the Poor-law Board should interfere to protect public servants from being the victims of flagrant injustice. We hope, at least, that no Medical men will be found to offer themselves for the appointments thus vacant.

THE LATE DR. SUTHERLAND.

We regret much to announce the death of Dr. Alexander John Sutherland, M.D., F.R.S., which took place at Brighton on January 31. Dr. Sutherland was only 55 years of age. He was the son of the celebrated Physician of the same name, and was educated at Westminster School, whence he went as student to Christ Church, Oxford. He graduated M.B. in 1836, and M.D. in 1839, and in the following year was elected a Fellow of the Royal College of Physicians. His attention was chiefly devoted to the investigation of mental disease, and he rapidly obtained the confidence of the public and Profession in the treatment of insanity. He was Physician to St. Luke's Hospital, and his Clinical Lectures on Insanity, published in the *Medical Gazette* of 1848, bear testimony to the success with which he employed his well-cultivated intellect in the study of that most difficult of all diseases. In the same journal in 1845 he had published a paper on the Analysis of the Urine in Insane Patients, and ten years afterwards he furnished to the *Transactions of the Royal Medical and Chirurgical Society* a paper on the Pathology of Mania and Dementia. He was also a cultivator of the natural sciences, and a Fellow of the Geological Society.

CATTLE PLAGUE AGAIN.

We regret to announce that cattle plague has again broken out in Islington, and, remarkably enough, at the same establishment in which it first appeared in July, 1865. There are two sheds in Mrs. Nicholls's yard—one capable of accommodating about 90 cows, and in which the greater part of the stock was kept; the other, partially open, on the opposite side of the yard, and used as a quarantine shed. It appears from what we can learn that on November 15 six new cows were purchased and placed in the quarantine shed. They continued healthy, but were not removed. On December 24 three more cows were purchased, and introduced at once into the principal shed. One of the six in the quarantine shed was attacked with pleuro-pneumonia, and the remainder, apparently healthy, were put into the shed with the rest of the stock on Tuesday, January 22. On Sunday, the 27th—that is, five days later—one of the former six was found to be ill, and Mr. Priestman, the inspector of the district, pronounced the illness to be cattle plague. She was immediately removed and slaughtered; but a day or two subsequently other cows, showing increased vaginal temperature, were condemned as sickening with the disease. Up to Saturday last sixteen cows had been condemned, and on that day it was determined to slaughter the entire herd. It is an interesting question whence the virus was derived. Certainly not from the new stock purchased on December 24, since it was not one of these that was first attacked; nor was it from any known case of cattle plague in the district, for both the market and the neighbourhood have, we are informed, been free from any manifestation of the disease. It will be seen from a letter by Dr. Ballard, which we print in another column, that he attributes the outbreak to the use of old bricks for repaving, taken from a shed used at the last outbreak as a hospital shed. If this be the case, and his conclusion seem warranted by the facts he has ascertained, one can only wonder at the thoughtlessness of the act. On visiting the premises our reporter was struck by the evidences of carelessness in disposing of the diseased beasts. Even dogs had been permitted to be present during the slaughter of some of them, and, even if they consumed none of the flesh or blood, must have become contaminated enough to carry away with them some of the principle of contagion. Dung and offal were lying in the yard without having been disinfected, and the blood of the slaughtered beasts was exposed upon the soil where dogs and men could scarcely fail to step into it. It is most astonishing, when we consider how thoroughly the contagion in this disease has

been established, to find so little precaution taken, and so imperfect an idea prevalent as to the dangerous character of any agency which is not bulky enough to be measured with a rule or weighed in a balance. It is sincerely to be hoped that this outbreak will be limited by the measures adopted under the orders of the Privy Council; but, knowing what we do of the modes of thought of our countrymen, our fears exceed our hopes. Up to the time of our going to press, we have not been able to hear of any other cases of cattle plague in the Islington cowsheds.

THE ROYAL MEDICAL BENEVOLENT COLLEGE, EPSOM, AND THE COUNCIL OF UNIVERSITY COLLEGE, LONDON.

We understand that the Council of University College, London, at the solicitation of a former student who is in general practice and an active member of the Council of the Epsom College, are about to present to the Royal Medical Benevolent College, Epsom, four free Medical scholarships, to be open to their foundation boys upon the condition that they become matriculated students of the University of London. In addition to this noble gift of University College, the originator proposes to establish a fund which will give to each free scholar an annuity of £50 for four years, contributing himself £1000. Other members of the Profession to whom the plan has been mentioned have promised their support. We commend this method of assisting the orphan sons of our less fortunate brethren, and hope that it may be carried into effect.

THE MONTHLIES.

The *Edinburgh Medical Journal* for February opens with a very good paper by Tilbury Fox on the neglect of the study of skin diseases in England, previously read before the Medical Society of London. Mr. Junor, of Peebles, contributes an account of a case of traumatic tetanus, resulting from an extensive lacerated wound of the back of the leg, treated by infusion of tobacco applied to the wound. Time after time the application was removed and something else applied, but in each instance the attacks became worse, and the infusion had to be reapplied, but ultimately with complete success. Dr. John Duncan relates the case of a man who, from wilful neglect, was suffering from ununited fracture of the ulna. This Dr. Duncan treated by scraping the periosteum from the ends of the bones and applying a starch bandage; the result was highly satisfactory. Mr. Balfour gives an account of an outbreak of cholera near Leith, probably connected with contaminated water supply. Dr. Scoresby Jackson (now, alas! no more) contributes another interesting case of aphasia and right hemiplegia, with softening of the left cerebral hemisphere, particularly of the inferior left frontal convolution, the middle cerebral artery on the same side containing emboli in some of its branches. Dr. Matthews Duncan concludes his extremely valuable contribution on hæmorrhage from fibrous tumour of the uterus, referring in this portion principally to treatment. Dr. Buchanan, of Glasgow, gives another successful case of the removal of one lateral half of the tongue by division of the symphysis menti, and cutting down to the hyoid bone. Dr. Watson Campbell, of Dunse, says that he has been very successful in the treatment of diphtheria by permanganate of potash gargles, combined with port wine and iron internally.

FROM ABROAD.—GOSSELIN ON SURGICAL OBSERVATION.

In an interesting address on "Observation in Surgery," delivered by Professor Gosselin, on taking possession of the new chair of Clinical Surgery instituted at La Pitié, after sketching its progress from ancient times to our own, he dwells upon some of the points which especially characterise it at the present time.

"1. I may first remark that our efforts in observation are directed somewhat more towards etiology than formerly. Medical investigations have, in fact, taught Surgeons two things. First, that on the one hand the great individual causes termed 'diatheses' contribute to the development of a good number of lesions accessible to the eye and the hand, and therefore belonging to Surgery; and, on the other, the consequences of traumatic lesions and operations are modified by these same diatheses. Secondly, that certain atmospheric modifications, more easily seized than explained and analysed —such as the vitiation by the miasms which results from overcrowding—contribute to the development of some of the diseases which fall within our province, as erysipelas and catarrhal conjunctivitis. Surgeons of the present day, therefore, are well aware that it no longer suffices to establish their diagnosis and deduce the therapeutical indications, but that it is also indispensable to acquire, as far as possible, a knowledge of the great individual and atmospheric causes which may have contributed to the production of the disease. Observation conducted in this direction leads us to that portion of diagnosis which you will often hear me place side by side with the anatomical diagnosis, characterising it as 'etiological diagnosis.'

"2. With regard to the progress of Surgical affections, and especially so with those which by our operations we substitute for those already existing, observation has demonstrated to many Surgeons, and especially so to myself, that capital differences result from age. Thus large solutions of continuity, whether accidental or artificial, are more easily cured in the child than in the adult, and better in the adult than the aged, so that the judging of means of treatment must be much influenced by the class of cases in which they have been tried, and the necessary modifications adopted.

"3. Modern observers have better investigated and recognised than their predecessors the great influence which hygienic conditions exercise on the cure of Surgical affections, and especially in the case of the wounds produced by great Surgical operations. The recent discussions on Hospital hygiene have superabundantly proved that the vitiation of the atmosphere by overcrowding is one of the principal causes of complications and death; while the mode of dieting and bad food are among other causes. I have much directed my own attention to the mischievous effects of physical and moral pain in wounds and operations, and to the necessity of obviating them as far as possible. These views in therapeutics, apparently so simple, have only been arrived at by aid of multiplied observation, and it will only be by profiting by the facts we already possess, and continuing carefully to examine those which may offer themselves, that our contemporary Surgery will continue to more and more distinguish itself from that of former times by the augmented proportion of its cures. Happy I am in being able to express to you the conviction that the Surgery of the present day cures more cases than did that of times past, and that it owes this in a great measure to the rigorous observation of the hygienic precepts to which I have alluded.

"4. Finally, modern times possess in statistical observation a great means, of which Malgaigne seems to have been the creator in France by his admirable researches on the results of the great operations in Hospitals. The English and American Surgeons have largely utilised this means, of which we ourselves have only commenced within these few years to appreciate the importance. It is precisely by the aid of statistics that the hygienic views of which I have spoken have become established, and it is only through recorded and numerated cases that we have acquired a more positive knowledge of the results of the Surgical treatment of some affections, especially aneurism and strangulated hernia.

"Thus, then, the epoch to which we belong continues the practices of that which immediately precedes it as regards clinical observation based on anatomical and anatomico-pathological observation. But it also adds to this observations relating to hygiene and etiology, at the same time estimating the value of therapeutical procedures by the numeration of recorded observations. In a word, we continue to follow the footsteps of our masters as regards diagnosis and operative Medicine, and endeavour to exceed them in the means of treatment and cure. As far as I am able to do so, I appreciate the onward movement which for some years past has characterised the progress of Surgery; and in this chair you will find me invoking all the sources of observation which have been enumerated—normal and pathological anatomy for the establishment of anatomical diagnosis, etiology for the etiological diagnosis, anatomy again for treatment by operation,

statistics for the choice of means, and hygiene for the complement of therapeutics which multiplies the successful results. When I feel the need of theoretical explanations, you will find me invoking by preference those which in some way depend on observation on man or animals; and when, as will sometimes happen, observation fails me or remains only incomplete, I shall take care to let you know it, and appeal to the observers of the future for the control or confirmation of the reasoning upon which I have ventured."

REVIEWS.

The Arrest and Prevention of Cholera: being a Guide to the Antiseptic Treatment, with New Observations on Causation. By Arthur Ernest Sansom, M.B. Lond., &c. Churchills. 1866. Pp. 131.

Dr. Sansom's theory of cholera is, "that cholera is the result of a poison which manifests its effects in two different ways, accordingly as it is in immediate relation with the alimentary canal or absorbed into the circulating blood. As a primary irritant, it causes the immediate phenomena of vomiting and purging; as an absorbed poison it compromises the integrity of the great sympathetic nerve, ultimately becomes an irritant thereof, and causes the combined phenomena of true cholera, diarrhœa and collapse." He gives at p. 100 a table, in which he exhibits what he regards as the primary and secondary effects and resulting symptoms of this irritation of the sympathetic as affecting primarily the arteries of the brain, those of the lungs, the systemic arteries, and the abdominal viscera. The treatment he advises of course flows from his theory. He considers that the castor-oil treatment "has had a success above all other methods hitherto vaunted." But he thinks there is a course better for adoption even than mild purgation for the removal of the irritant. "It is better to kill the germs than to remove them." For this purpose he proposes the use of sulphite of soda or carbolic acid. His formulæ are:—Sulphite of soda ʒss., peppermint water ʒj., every two or three hours, according to severity; or carbolic acid two drops, chloroform three drops, acacia mixture ʒj., every two or three hours.

Report and Evidence of the Mortality Sub-committee. Liverpool, 1866. Pp. 304.

In November, 1865, a sub-committee of the Health Committee of Liverpool was appointed "to inquire as to the cause of the excessive mortality prevailing in the borough, and as to the best means to be adopted for mitigating the same," and, after taking the evidence of Dr. Trench, the Medical Officer of Health, of the Borough engineer, the Physicians of the Hospital and Workhouse, of several reverend gentlemen, and of others, all of which is printed *in extenso*, a report has been issued which for fulness of detail and general sanitary value stands as high as any hitherto put forward. It calls for the study of all Practitioners engaged in preventive Medicine, not only on account of the information it contains, but also because it exhibits the views of thoughtful and experienced men upon a variety of remedies proposed from time to time for admitted existent evils. When we speak thus of the Report, we of course allude mainly to the appended evidence, for the Report itself is very brief—there was no need to make it lengthy under the circumstances. What adds to the usefulness of the volume is an excellent index. Leaving such of our readers as are interested in the matter discussed to consult the book itself for the facts and views put forward by the several gentlemen examined, we shall confine ourselves to the general conclusions at which the sub-committee has arrived.

They say that the Medical evidence shows "that the high rate of mortality has been due to typhus fever and infantile diarrhœa, and that the predisposing causes of these are defective sanitary arrangements—whether in the structure or condition of the houses, or in the existence of external nuisances in their immediate vicinity—overcrowding, dirty dwellings, stagnant air; also want of personal cleanliness, insufficient food and clothing, and intemperance." They consider that the evidence shows no neglect on the part of the authorities in dealing with such matters as they are capable of dealing with, such as sewerage and drainage, water supply, etc., and adduce a striking instance of the benefits accruing from their activity. "The Sanitary Amendment Act of 1864 gave the power of dealing with courts and confined places, which has been beneficially exercised, as the evidence of Dr. Shearer shows, when, in p. 102, speaking of Robert-street and Albert-street, he says—'The trough-closets have been substituted for privies, and the buildings which obstructed the entrances to the courts have all been removed, and a very great improvement has been effected. There has not been a single case of fever, with one exception, in Albert-street during this year, and previously I was never a week out of the street. I have attended hundreds and hundreds of fever cases in that street. There was a letter in print the other day from a Surgeon who is now attending that district, in which he said that for four months there was not a single case of fever.'"—P. 8.

The proximate causes of the increased death-rate are, in the opinion of the committee, "intemperance, indigence, and overcrowding, these two latter being generally found in the train of intemperance, although all three act and react on each other as cause and effect." Hence they find it impossible to treat of them separately. They draw a sad picture of the habits of the lower classes of labourers in some of the inferior streets. Speaking further of overcrowding, they say—"Assuming overcrowding to mean not only the existence of too many people in a room or in a house, but also the massing together in narrow, ill-ventilated streets and squalid courts too great a number of houses; and also assuming, what is incontrovertible, that such overcrowding, by its effects on the physical condition of the people, tends to encourage intemperance, immorality, and indigence, the remedies appear to be to provide decent dwellings for the labouring classes; to break up those masses of crowded dwellings by driving thoroughfares through and across them to let in the light and the air; to carry into further effect the provisions of the Sanitary Amendment Act of 1864, in opening up the close and confined courts, and, if necessary, to obtain further powers; to encourage cleanliness by securing an ample supply of pure water, always available; and to get rid altogether of the midden system by converting, as quickly as possible, all privies into water-closets. The indirect, but no less constant, result of these operations will be the securing of better air, and the consequent removal of those depressing influences on the vital functions which lead to intemperance." Furthermore, the sub-committee recommend that the Council should be asked to apply to Parliament for an Act to control the sale of exciseable liquors.

The History of a Bit of Bread: being Letters to a Child on the Life of Man and of Animals. By Jean Macé. (Part I.—Man; Part II.—Animals.) Saunders, Otley, and Co. 1865.

A delightful work, which has been so well translated from the French by Mrs. Gatty that the charm of the original is preserved throughout. M. Macé addresses himself to children sufficiently old to have their curiosity excited by the marvels of organic life, and with a pleasant urbanity chats familiarly with his "dear little pupil" about "the many processes your bit of bread has to go through before it becomes a part of yourself." From man throughout the descending scale to the utmost limit of the animal kingdom it is shown that there is one law to which every living thing is subject—viz., that it must eat, and that the feeding machine is everywhere reproduced, though always becoming more simple as the species descends. It is the diversification of this feeding machine in the different species which M. Macé has developed, and his remarks on the inconsistencies of professorial classification are always *piquant*, and often forcible. "A classifying professor," he says, "is utterly merciless whether he gets hold of the poor beasts by the mouth or by the paw: they may protest with all the rest of their body against the peg on which they are hung, so much the worse for them!" Again: "We are going on quietly with the history of the feeding machine, which occupies the middle of the body, and learned men never look in that direction for the establishment of their divisions; between ourselves, it was not accommodating enough. They have fallen back upon the locomotive apparatus (movement machine) which affects the body all over, and which they have proclaimed to be the leading feature of the animal organisation, without noticing, however, that it is after all but the servant of the other. It is true that the great divisions are more easily established upon this point than the other, because the differences are more decided. It separates what the other unites, and thus it is that Nature carries on that beautiful combination which the Germans have so accurately

named 'unity in variety'—that is to say, she is always at work on the same canvas, but always embroidering it with a different pattern." Subsequently M. Macé promises a history of the "movement machine," which will complete the subject he has thus far made so attractive as that "children of a larger growth" may find therein agreeable and profitable reading. Mrs. Gatty has done wisely in not relying on her own judgment alone with regard to such of M. Macé's statements as involved anatomical criticism, and the result is a work creditable alike to author and translator, and invaluable in every family where the children are being faithfully prepared for a career of highest use.

Diabetes: its Various Forms and Different Treatments. By George Harley, M.D., F.R.S., Professor in University College, and Physician to University College Hospital. Walton and Maberly. 1866. Pp. 74.

It is unnecessary for us to review this admirable little book at any length, inasmuch as it is a reprint of what has already appeared from the pen of the author in the pages of the *Medical Times and Gazette*. We would especially direct attention to page 49, in which Dr. Harley points out what he looks upon as erroneous views as to certain symptoms of diabetes. One of these consists in regarding the excessive elimination of water as a thing to be checked. On the contrary, he points out that it is rather a fortunate thing for the patient, inasmuch as it is the means of carrying out of the system the sugar which, if retained, would only still further derange the nutritive functions. Another point he insists upon is, that diabetic patients should never be stinted in the amount of liquid they drink, so long as the want of it is perceived. Another matter relates to the amount of sugar excreted, when looked upon as an infallible criterion of the condition of the patient. "A diminution in the sugar in cases from *excessive formation* is always a good sign, but in those arising from diminished assimilation it is, on the contrary, occasionally the reverse. Thus I have again and again seen patients who were gradually succumbing from the starvation effects of a restricted diet, at once pull up and improve on a judicious mixture of vegetable food, notwithstanding that the amount of sugar in the urine was thereby greatly increased. It is the weight of the patient, not the quantity of eliminated sugar, on which we ought to rely in such cases."

GENERAL CORRESPONDENCE.

SYPHILISATION.

Letter from Mr. Henry Lee.

[To the Editor of the Medical Times and Gazette.]

Sir,—The last number of the *Medical Times and Gazette* contains (p. 113) a very short account of a very interesting experiment. A patient, who was supposed to be "thoroughly syphilised," was inoculated with some matter from a spreading sore. The consequence was that each of the inoculated points took on a similar action to that of the sore from which the inoculated matter was taken.

We have here direct experimental proof of a fact which has long been maintained by myself and others—namely, that immunity to one kind of syphilitic matter does not necessarily protect a patient's system against the effects of matter of a different nature. All who have had much experience upon this subject must now know that the ordinary secretion of an indurated sore will, when inoculated, often produce no result, while the secretion from a suppurating sore will produce upon the same patient the specific pustule. But the converse of this—namely, that a patient may become proof against any further inoculation from a suppurating sore and yet be liable to infection from other kinds of syphilitic matter—is a fact which has certainly not hitherto received in England that attention which its importance demands. Practically, some approximation to an illustration of this subject may be afforded. A patient may have a series of soft suppurating sores without any constitutional effects being produced. He may then have an indurated sore followed by the ordinary train of secondary symptoms. This I have frequently witnessed. The suppurating sores do not prevent or modify the indurated sore; and the indurated sore, on the other hand, does not prevent the repeated inoculation of the secretion of the suppurating sores.

In the experiment above referred to, as nothing is said to the contrary, we may infer that the immunity was produced by the usual mode of inoculation lately practised in England—namely, by a very slight abrasion of the cuticle with the point of a lancet. This kind of immunity, as lately shown, does not imply immunity as far as the deeper structures of the skin are concerned, nor does it imply immunity for other parts of the body, and still less does it imply immunity against the action of other kinds of secretion.

As far as our evidence at present goes, a patient might therefore be "thoroughly syphilised," as far as it could be done, by the secretion from ordinary suppurating sores on the surface of the skin, and yet be as liable as any one else to be subsequently infected with the constitutional form of syphilis.

I am, &c.

Savile-row, February 2. Henry Lee.

A PROTEST REPEATED.

Letter from Dr. George Johnson.

[To the Editor of the Medical Times and Gazette.]

Sir,—When, in the preface to my "Notes on Cholera," I extracted from Dr. Stokes the interesting passage relating to the circumstances which tend to prevent the ready reception of a new doctrine, I never imagined that the most perverse ingenuity could find in it "a comment on the inertness of mind, the indolence, and the pride of my Professional brethren." Any one who reads the passage will see that nearly the whole of Dr. Stokes's remarks are of a very general character—"There is something in the human mind which renders the reception of a doctrine, if it be a bad one, a most dangerous circumstance." The only direct allusion to our Profession is a statement that a very large number of students, both of Medicine and of Surgery, have not been taught, as Dr. Stokes says, "how to teach themselves." The writer of the leading article headed "Facts and Figures," in the last number of your journal, would certainly not dispute that proposition. Dr. Moxon has paraphrased this extract from Dr. Stokes into an offensive charge against the whole Profession, and he says that "I regard the indolence of mind, etc., of my Professional brethren as the only remaining obstacles to the triumph of my true interpretation of the chief symptoms of cholera." I do not care to characterise this statement. It is not to be found in my book, nor is there to be found in it any passage which by the boldest "paraphrase" could be so construed; yet Dr. Moxon is at a loss to know what part of his statement I object to. Is it right to take a passage, the meaning and intention of which may be in some degree ambiguous, to force upon it the worst and most offensive construction possible, and to insist that this must have been the intention of its author? The interpretation which Dr. Moxon has chosen to put upon my preface is utterly inconsistent with one passage which he quotes, and in which I say that, having discussed my theory with some of the most distinguished members of the Profession, I had met with no serious objections to it. It was on this very account—because Dr. Moxon feared that my propositions would, as he says, be left "altogether unchallenged"—that he was induced to enter the lists against me.

My remarks must, Dr. Moxon says, have been directed at "*some people*." Certainly the observations of Dr. Stokes, quoted and adopted by me, are applicable to those, whether in the Profession or out of it, who are too proud or too indolent to learn. But what right had Dr. Moxon to impute to me the suggestion that my Professional brethren as a body, or the majority of them, or even any large proportion of them, are to be included in this category? It is this part of his statement that I object to and protest against. It was calculated, if not designed, to excite prejudice, and had nothing whatever to do with the main purpose of my book.

Dr. Moxon, having made this charge of bad taste and bad manners against me, then commits himself to the following ambiguous statement:—"These propositions" (*i.e.*, mine) "are, and demonstrably are, in some cases false in point of logic; in others, at variance with truth of fact; while the remainder are invalidated by the unfoundedness of the former fallacious and unfounded sorts." That sentence has caused me some uneasiness, for I have not been able to comprehend it or the nature of the charge which is there brought against "the remainder."

Now, it is not my intention to reply to Dr. Moxon's criticisms, except in so far as this may be necessary in order to show that he has repeatedly and very seriously misrepresented me in the series of papers which have appeared in your journal.

Dr. Moxon says (*Medical Times and Gazette*, Dec. 1, 1866, p. 578), "In Section III., Dr. Johnson continues what he terms the sweeping away of what he calls orthodoxy." Every one reading this statement would naturally conclude that in that part of my book I use this expression, but neither there nor elsewhere is it or anything like it to be found. At the commencement of my preface, I say that my object is to "sweep away" an erroneous theory. And in the last chapter of my book, at the top of page 91, the word "orthodoxy" is used sarcastically with reference to those Practitioners who, in the year 1854, attacked me for what they deemed the dangerous practice of giving castor-oil when they were giving large doses of calomel. What could have been Dr. Moxon's object in taking two words out of my preface, appending to them one from near the end of the book, and so making a statement which he attributes to me? The word "orthodoxy" occurs only in that one place. Yet Dr. Moxon reproduces it no less than four times in the course of his papers; and he makes me use the word in two different senses in two different passages. Thus—"He (Dr. Johnson) assumes that 'orthodoxy,' as he terms it, affirms that the symptoms of collapse are due, etc." Here "orthodoxy" is the theorist. But in the following passage orthodoxy is the theory itself. "The setting up a theory excluding all causes except the purging, and the naming this by the rather invidious and exclusive name 'orthodoxy,'" etc. The application of this "rather invidious" name to this theory, or to any theory, is entirely Dr. Moxon's doing, and not mine, though he imputes it to me.

At p. 579 Dr. Moxon says, "Why does Dr. Johnson in his examination examine the effects of castor oil, and leave out the examination of the effects of astringents? Are the beneficial effects of the action of castor-oil so much better attested than the beneficial action of astringents that the first should be made a cardinal point in argument upon cholera, and the second left wholly out of account?" He goes on to insinuate that this examination is omitted because its results would be unfavourable to my theory. Now the fact is, that in that very chapter the mischievous effects of astringents are referred to. I say, for instance (p. 27)—"I was also deeply impressed by observing that, during that epidemic, the arrest of the purging by opiates was in several instances followed by the worst symptoms of collapse; and a painful question arose in my mind whether the collapse in such cases was not a direct result of the arrest of the purging." Then, in another section, from p. 73 to 81 inclusive, the effects of opiates and astringents are more fully considered. Yet Dr. Moxon would have his readers believe that I have entirely omitted this part of the inquiry; and he asks—"Why does Dr. Johnson, in an examination which ought to be a fair one, only take the cases he thinks in favour of his view?" So much for Dr. Moxon's fairness and accuracy with respect to this part of his criticism.

Dr. Moxon says that I am "constantly appealing to logic." If by this he means that I appeal to sound and correct reasoning, I admit the charge; but I certainly make no direct allusion to logic, and to the best of my belief the word does not once occur in my book. This is a trifling matter, except in so far as it is an indication of Dr. Moxon's tendency to make inaccurate statements.

When Dr. Moxon comes to the discussion of my theory of collapse (*Medical Times and Gazette*, January 26) and the anatomical facts upon which that theory is based, he says—"Our author obtains an unwarranted appearance of support for his theory by assuming the certainty of what is doubtful, and the universality of what is even exceptional." Again—"Dr. Johnson's theory of cholera rests not upon the description of the heart and lungs which he gives as quoting, but upon verbal and diagrammatic intensifications of that description." He then proceeds to quote from a long list of authors brief statements as to the condition of the lungs, which appear to show that my description is the reverse of the truth. Now I confidently affirm that these short and imperfect descriptions of the condition of the lungs and heart are of no value or authority, and if relied upon as the basis of a theory they are worse than useless. My reasons for this statement are briefly these:—No distinction is made between cases of death during collapse and death in the stage of reaction. No mention is made of the interval between death and the post-mortem examination. The weight of the lungs is not given, and for the most part the descriptions of the heart and lungs are so vague that it is manifest that the main and essential points were disregarded. My description of the heart and lungs is mainly condensed from Dr. Parkes, who has described the post-mortem appearances in cholera with an accuracy and a minuteness of detail which had never before been attempted. In my "Notes on Cholera" my object was to be as brief as possible, and to give no unnecessary details, lest my book should be left unread, as my larger work had been. I say at p. 85—"The account which I have now given of the pathology of cholera, although brief, will, I trust, be sufficient to convey to those who have carefully read these pages a definite idea of the doctrine which I advocate. If there be any who desire to have further details and proofs and illustrations, these may be found in a book which was published ten years ago." If Dr. Moxon had referred to that book, he would have found about four closely printed pages devoted to a description of the heart and lungs in the collapse stage of cholera. He would have found that that description, which is mainly derived from Dr. Parkes, is entirely accordant with his description, with my brief account in the "Notes on Cholera," and with my diagrammatic representation of the appearances; he would have found, too, that there is no foundation for the charge of inaccuracy and exaggeration which he so recklessly brings against me. Dr. Moxon objects to the expression "extremely anæmic" as applied to the lungs. It is a perfectly correct expression of the fact that during the collapse of cholera the lungs, as a rule, are more anæmic than in any other disease.

And now let us see how Dr. Moxon deals with Dr. Parkes. He admits that "Dr. Parkes' descriptions are given with great care and accuracy, but," he says, "that very care and accuracy which makes his descriptions important will defeat the attempt to divert or convert these descriptions to the support of our author's theory." He then quotes the following from Dr. Parkes, who says—"On cutting through the roots of the lungs, a quantity of blood usually escaped from the divided vessels, and particularly from the pulmonary artery." Dr. Moxon, after criticising my diagram, comments on this passage thus—"So, when blood comes in quantity from the divided pulmonary veins and arteries, particularly the arteries, it *does come in quantity from the veins.*" (The italics are Dr. Moxon's.) "I am glad to point this out, because my own experience coincides with this statement of Dr. Parkes, that blood comes in quantity from the pulmonary veins." Dr. Parkes, be it observed, says nothing of the pulmonary veins. Again, Dr. Moxon says:—"In short, then, it appears that Dr. Parkes' descriptions and statements concur with those of other observers in affirming that *both sets* (Dr. Moxon's italics) of pulmonary vessels are very full of blood, and therefore the excuse for such a diagram as our author gives explodes and vanishes. Indeed, my own experience would better conform with the diagram if these vessels were put into more possible proportions, but the veins made the larger." He afterwards says "that the diagram of the state of the pulmonary veins is contrary to all authors, especially to Dr. Parkes (the author quoted)."

I wish to be as brief as possible, and I will quote only the following from Dr. Parkes (p. 23):—"The right side of the heart and the pulmonary arteries were generally filled, and in some cases distended, with blood; the left side and aorta were generally empty, or contained only a small quantity of dark blood. The inference which was drawn from the state of the cavities in the greater number of cases was that the right side had continued to receive blood till in some cases it became full and even distended, while the left side had received little or no blood, but had continued to contract, in some cases even violently, on the last drop of blood which had entered it." The appearances thus described I have represented in my diagram, and this not only on the authority of Dr. Parkes, but also on the basis of my own observations, which are in exact agreement with those of Dr. Parkes. Then, as to the weight of the lungs in collapse cases—Dr. Parkes found the average weight of both lungs in twenty-two European soldiers to be 26 oz. 6 drachms. A small number of observations seem to him to indicate that the lungs are always lessened in weight in the English residents in India. "If, however, an European standard is taken, and the average weight of both lungs in adult males be considered to be 46 oz., according to Dr. Clendinning, or 43 oz. according to Dr. Reid, then the diminution in the case of both lungs in cholera (collapse) will be 17 oz. or 20 oz." This diminution of weight is afterwards shown to result from the deficiency of blood in the minute vessels of the lungs.

In one case recorded by Dr. Parkes a man died after eight hours and a half illness. The body was examined within an hour after death. Both lungs were "excessively contracted;" the right weighed 8 oz., the left 6 oz. "But from the roots of both lungs when cut, and particularly from the pulmonary arteries, a large quantity of dark blood gushed: 24 oz. were measured, but several ounces more escaped into the cavity of the thorax. All the cavities of the heart contained blood; the right auricle and ventricle were distended, as well as the coronary veins, the vena cava, and the venous system generally." Dr. Parkes thus comments on this case:—"In this case the man did not die from vomiting and purging, for these were trifling; he did not die from any paralysis of the heart, for this acted well during life, and contracted after death: *he died because the blood did not pass through the lungs, as evidenced by the quantity of blood in the pulmonary arteries.*" The italics are mine. (Parkes on Cholera, pp. 123-4.)

When all morbid anatomists recognise the fact that in the post-mortem examinations of cholera cases death during collapse must be distinguished from death during reaction, that the examinations must be made as soon as possible after death, and that the weight of the lungs must be recorded, there will soon cease to be any controversy respecting the main anatomical facts of the disease.

I quote from MM. Briquet and Mignot the statement that there is a remarkable contrast between the almost constant anæmia of the lungs and the hyperæmia of most of the other viscera. Dr. Moxon asserts that in doing this I "tacitly turn my back" on Dr. Parkes's statement that the liver and spleen are also anæmic, because it is inconsistent with my theory. Here, again, Dr. Moxon is entirely mistaken. I admit that MM. Briquet and Mignot's statement is not quite accurate as regards some of the abdominal viscera. I am now aware that in cases of death during collapse the spleen, the kidneys, and, in a less degree, the liver are lighter than normal owing to the comparative emptiness of their minute blood-vessels. But this fact, so far from being inconsistent with my theory, is a confirmation of it. It is an obvious and necessary result of the small supply of arterial blood which is received by the left ventricle and distributed through the systemic arteries.

I have now given sufficient proof of Dr. Moxon's culpable inaccuracy. I have shown that, while he unfairly charges me with an incorrect quotation of Dr. Parkes's morbid anatomy, he himself, in the most unscrupulous manner, after citing a passage from Dr. Parkes, so distorts it and adds to it that he entirely changes its meaning. I might have adduced other instances of inaccuracy and of bad taste; but enough of this. Dr. Moxon is an entire stranger to me. He only can know with what motive he undertook to treat me and my book as he has done. I cannot but think that, in his endeavour to obtain a verdict against me by unfair and inaccurate statements, he has offered a greater insult to that large portion of the Profession who constitute the readers of the *Medical Times and Gazette* than even I should have done if his reading of my preface were as accurate as it is the reverse.

Dr. Moxon assures me in the last number of your journal that nothing that he has written has come from any disrespect for me personally. I know not how this may be, but I am at a loss to understand how he can entertain any feeling of personal respect for an author whom, in a series of papers, he has accused of making exaggerated and untrue statements in order to prop up an erroneous theory.

Those who undertake to refute my interpretation of the phenomena of cholera should bear in mind that what they have to do is to refute the theory as it is propounded by me, and not some imperfect or distorted representation of it. Then, too, they have to show that the theory is inconsistent with the unquestionable facts of the disease and with the established principles of physiology. Such a refutation has not yet been given by any one of those critics who have attempted it.

I am, &c. GEORGE JOHNSON.

Savile-row, February 4.

CLITORIDECTOMY.

LETTER FROM MR. WOLLASTON F. PYM.

[To the Editor of the Medical Times and Gazette.]

SIR,—I am directed by the two senior Surgeons—Mr. Baker Brown and Mr. Philip Harper—to state that, solely in deference to the opinion of the Medical press on clitoridectomy, they have determined not to perform the operation in this institution pending Professional inquiry into its validity as a scientific and justifiable operation.

I am, &c.

WOLLASTON F. PYM, *Secretary.*

London Surgical Home, Stanley-terrace, Notting-hill, W., February 4.

RENEWED OUTBREAK OF CATTLE PLAGUE AT ISLINGTON.

LETTER FROM DR. BALLARD.

[To the Editor of the Medical Times and Gazette.]

SIR,—You will have doubtless heard of the renewed outbreak of cattle plague in the sheds of Mrs. Nicholls, in the Liverpool-road. As there was no disease in the neighbourhood at the time when the first case occurred, it became a matter of great interest to ascertain the cause. It will be recollected that this was the first establishment in London attacked in 1865, and that the proprietor lost by death and slaughter her whole stock. There were three sheds in this yard. One, the principal shed, long and narrow, capable of containing about ninety cows; another, on the opposite side of the yard, capacious and partially open, used as a quarantine shed; and, communicating with this by a door, a third shed, capacious and well-ventilated, which, during the former outbreak, was used for some time as a hospital shed, several cows being treated there. Having lost all her cows, what the proprietor did was this:—The whole of the brick paving of the long shed was taken up, the old bricks being stacked in the yard; the stalls were scraped and washed with soft soap, and the mangers, stalls, and walls limewhited. The western half of it was then repaved, partly with new bricks and partly with the old bricks that had been exposed to the air, and in the course of last year this half was tenanted by a stock of about forty-five cows, which remained healthy. The quarantine shed was not repaved, but the walls were washed with hot limewash, and that is all. The adjoining hospital shed had nothing done to it, except receiving a sprinkle of chloride of lime. On November 15 six new cows were purchased and placed in the quarantine shed, where they remained healthy, except that about a month ago one of them had pleuro-pneumonia. About this time the eastern half of the principal shed was repaved, partly with new bricks, these only being used for the central passage, and partly with the old bricks removed previously (as stated before) from the same shed—these old bricks were used in the stalls. On December 24 three more fresh cows were purchased, and, having been in quarantine at Tottenham, were placed at once in the principal shed, in some of the newly-paved stalls at the eastern half, and remained healthy. Still the renewal of the paving went on. In the course of the week prior to January 22 the stock of old bricks, I find, ran short, and the man engaged in the work inquired of the proprietor what he was to do, as they were better adapted than new bricks for the stalls. Unfortunately, I find he was directed to take up the old bricks from the paving of the hospital shed and use them. This was done. On January 22 the cows purchased on November 15 were removed from the quarantine shed into unoccupied stalls, immediately opposite those paved with these bricks; and on January 27, five days later, one of these—the last cow, standing nearest to the infected paving, and distant only about two and a half yards from it—was found suffering unmistakably from cattle plague. The stall she stood in might readily have been contaminated by the dust and dirt brought in with the bricks, or she might have walked over the newly-laid paving. Now, five days is the shortest period assigned for incubation in cases of natural infection—that is, the shortest period up to the appearance of the first apparent symptoms of illness; of course, the vaginal temperature would be elevated earlier. The correspondence, then, between this interval and the attack of the first cow is sufficiently exact to warrant us in the belief that the outbreak was due to infection derived from the bricks introduced from the hospital shed. Until these were had recourse to, no disease appeared, but it appeared as soon as a cow was placed in close relationship with them. We have here a precision almost as complete as if the whole occurrence had taken place by deliberate experiment. There has for a long time been no cattle plague in the district, and the market has also been free, nor can I discover any way in which the virus could have been introduced from without. However the disease originated, the cause must be looked for upon the premises themselves. The second and subsequent cases

occurred in the cows standing nearest to that first attacked. They were sickening on January 30 or 31, and were condemned and buried on Friday, February 1. This would seem to show that they acquired the disease from the cow first seized. My authority for dates of attack is Professor Simonds and the foreman of the establishment; the latter is my authority for the standing-places of the cows, the stalls having been marked, and the events as they happened entered in a notebook; and my authority for all that relates to the paving is the man that laid it, and who pointed out to me on the spot the exact parts of the shed paved with the bricks from the hospital shed. I submit that my inquiry results in a demonstration; it gives no countenance to the theory of spontaneous origin, but supports the view most favoured by those who know most about cattle plague, that contagion is the sole immediate cause of an attack.

I am, &c.

Edward Ballard, M.D.,
Medical Officer of Health for Islington.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

Tuesday, January 15, 1867.

Mr. Simon, President.

Mr. Simon took his seat as President for the first time, and in a well-delivered address conveyed to the members his sense of the honour they had conferred on him by his recent election. He made some allusion to the extent of his public duties, which had prevented his attending the meetings of the Society heretofore as he felt he wished to have done. He made also a very graceful allusion to his predecessor in office.

A report was read by Mr. Hulke, on a specimen exhibited at the last meeting by Mr. Bryant, and which he and Mr. Curling had concluded to be one of mixed cancer and sarcoma.

Mr. Lawson showed

A CASE OF SCIRRHUS OF THE ORBIT.

Mary H., aged 48, was admitted into the Middlesex Hospital, under the care of Mr. Lawson, January 30, 1866, suffering from a tumour in the orbit, and a large scirrhous tubercle on the side of the cheek over the parotid region. The history the patient gave of the case was that, nine months before coming to the Hospital, she first experienced a pain in the back of the eye. This continued; and about two months afterwards she noticed that the eye was prominent. The bulging steadily increased up to the time of her admission. The eye was then thrown forwards for a full inch beyond its fellow, by a hard, solid growth, which could be distinctly felt with the fingers to be filling the orbit. The surface of the cornea was ulcerated, and the eye had only perception of light. The upper lid could not close over the globe. Between three and four months before her coming to the Hospital, a hard scirrhous tubercle appeared in the skin in front of the ear, and lying over the parotid gland. On her admission, it was the size of a French bean, firmly adherent to the skin, which around it was thick and brawny. Mr. Lawson excised the globe, and carefully cut away the tumour from the orbit. Having succeeded in removing apparently the whole of it, down to the orbital walls, he then applied the actual cautery over the surface to arrest all hæmorrhage. Strips of lint well covered with the chloride of zinc paste were then applied to the bottom of the orbit and around its walls. Mr. Lawson then excised the scirrhous tubercle on the face, and applied the chloride of zinc paste. The patient progressed very favourably from this operation. Large superficial sloughs were first detached, and in about three months afterwards the whole bony orbit came away in one piece. The woman is now quite well, and although eleven months have elapsed since the operation, there is no sign of a recurrence of the disease.

Mr. Curling asked if there was much pain during the progress of the disease.

Mr. Lawson said that a solution of morphia had been subcutaneously injected, as the pain had been considerable during the detachment of the bone. No new bone had formed.

Mr. Lawson next showed a case of

BLOOD CYST IN THE THIGH,

for which amputation was performed. Mary H., aged 50, was admitted into the Middlesex Hospital, under the care of Mr. Lawson. *History.*—For the last five years she states she has suffered great pain in the lower and inner part of the right thigh, but that she never noticed any swelling until about ten months ago, when on waking one morning she felt the leg very painful, and found she had a difficulty in walking. On examining it she then for the first time discovered a large tumour, about the size of an orange, at the lower and inner part of the thigh. Since then the pain in it has been excessive—sufficient to prevent her sleeping at night and walking about by day. On her admission into the Hospital the tumour had attained the size and shape of a penny French roll. To the touch there was decided fluctuation, but there was also a sense of deep solidity. Mr. Lawson decided to puncture it, and to be guided by the result as to his further proceedings. He first made an incision through the skin, and inserted a trocar into the cyst, when about six ounces of dark blood flowed away, evidently the contents of the cyst. Its place was now supplied by fresh arterial blood, which kept the cavity filled. Mr. Lawson then laid open the cyst to examine its interior, when he found that it was filled by a quantity of vascular sarcomatous material, from which the blood flowed rapidly; he therefore at once amputated the thigh. The patient has since progressed favourably.

Mr. De Morgan related a somewhat similar case, in which there was a question of amputation, stating the propriety of removing these kind of tumours, as they may be malignant.

Mr. Moore referred to a case in which the late Mr. Liston cut into a cyst in the thigh, and upon careful digital examination there was no trace of abnormal structure. The disease, however, returned in the scar remaining after the operation. He afterwards removed the limb at the hip-joint without removing the muscles. Cancer reappeared in the stump, and subsequently in the lungs. Mr. Moore raised the question as to whether the cancer grows on the wall of the cyst, or whether the cyst is a mere accident on cancerous disease.

Dr. Peacock exhibited, for Dr. Foster, of Birmingham, a specimen of

RUPTURE OF AN AORTIC VALVE FROM VIOLENCE.

The specimen was obtained from a middle-aged man, who had strained himself severely while serving in the army. The accident was immediately followed by symptoms indicating some injury to the heart, and the patient died, under Dr. Foster's care, in the Queen's Hospital about six years after, having, while under observation, displayed characteristic symptoms and signs of obstructive and regurgitant disease of the aortic valves. The left semilunar valve was found to have one of its angles attached at a point fully a quarter of an inch below the angle of the next valve, and there were two large apertures in the curtain. The other valves and the lining membrane of the ascending aorta were also diseased, and the heart, and especially the left ventricle, was considerably hypertrophied, and the cavities dilated. Dr. Peacock said that accidents to the valves of the heart very rarely occurred, except in cases in which the organ was previously diseased; but in this instance and several others on record, there could be no doubt the organ was healthy at the time the accident occurred. Specimens of a similar description had been exhibited to the Society by Dr. Quain, Dr. Wilks, and himself; and in some of them the tear was more obvious than in Dr. Foster's case, from the period which had elapsed after the injury being much shorter than in that instance. There could, however, be no doubt the angle of attachment had been torn, though the apertures in the curtain of the valve might be the effects of after-disease.

Dr. William Ogle exhibited a preparation and drawing of the left hemisphere of a man who had lately died in St. George's Hospital with

RIGHT HEMIPLEGIA AND LOSS OF SPEECH.

The history of the case was this:—J. B., aged 45, was a wine-cooper. Twenty-five years before his death he had an attack of rheumatic fever and endocarditis. Till 1866 he had no other serious illness. On October 15, 1866, he was at work when he suddenly felt pain in the left side of the head and fell down without losing consciousness. On trying to get up he found he was unable to move his right side and unable to call for assistance. On the 18th he was admitted into Hospital by Dr. Page, and remained there till he died on December 20. On admission he was found to have all the physical signs of aortic and mitral disease, with the sharp pulse of aortic regurgitation. There was complete paralysis of the right limbs with lax muscles; incomplete paralysis of

the face on the same side. Sensation was unimpaired. He was at first unable to protrude his tongue, but after a few days this symptom passed away, and he moved his tongue with perfect freedom. There was also at first considerable difficulty in deglutition, but this also passed off almost completely in a short time. He was unable at first to say more than "yes" and "no," and though he recovered his speech in a very slight degree, his vocabulary throughout was limited to a few words, and these chiefly monosyllables. His general intellect seemed unaffected. He understood all that was said to him, made intelligible signs in answer to questions, could read so as to amuse himself, and wrote down with his left hand any words suggested to him with sufficient distinctness, though with some tendency to repeat letters. For instance, he wrote "Testetement" for "Testament." This, however, may have been the result merely of imperfect education. He died two months after admission from œdema of the lungs. *Post-mortem.*—Lungs œdematous. Aortic and mitral valves extensively diseased. Blocks of fibrine in the spleen. Dura mater adherent to skull cap. Much semi-gelatinous fluid in subarachnoid space. The surface of the brain healthy, excepting at one limited spot. This was the posterior part of the third or inferior frontal convolution on the left side. Here there was softening reaching backwards and downwards to the fissure of Sylvius. The patch was about three-quarters of an inch in depth, almost diffluent, and under the microscope showed abundance of the dark granular bodies of softened brain. On cutting the brain another patch of softening was seen in the centre of the left hemisphere, external to and rather above the corpus striatum, and extending to the posterior termination of the fissure of Sylvius. All the rest of the brain was healthy. The left middle cerebral artery was free in its main trunk, but one of its secondary branches was plugged at a bifurcation with a hard shotty piece of fibrine, which filled it so completely that when water was injected into the vessel it could not pass, though considerable force was used. The interest of this case consists mainly in its bearing on the question of the existence in the hemispheres of a special organ of speech. The case harmonises with the statement of Mr. Dax, of Montpellier, that loss of speech depends upon disease of the left hemisphere; and also with the more precise statement of M. Broca, who has attempted to locate the faculty of articulate speech in the posterior third of the inferior left frontal convolution. Dr. William Ogle had collected from his own observation and from the register books at St. George's twenty cases in which there had been entire loss of speech, or such impairment of that faculty as to constitute an important symptom. In eighteen of these cases there was also hemiplegia on the right side. In one there was co-existing spine disease and paralysis on both sides, but in this case after death disease was found on the left side only of the brain. The remaining case at first seemed an exception. There was no actual paralysis, but a rigid condition of the left arm. The patient died, and both carotids were found to be plugged with fibrine. The evidence, therefore, as furnished by the records of St. George's Hospital, is strongly corroborative of Mr. Dax's statement. In seventeen of the above twenty cases there was a post-mortem examination. In the account kept of these the separate cerebral convolutions are not distinguished from each other, and so it is not always possible to be sure of the exact site of injury. But, notwithstanding this, the accounts are sufficiently precise to show that in no less than twelve out of the seventeen cases the third frontal convolution on the left side must have been involved. In four of the cases this is plain from such terms as these—"the anterior two-thirds of the left hemisphere were broken down," "the anterior or middle lobe were softened," and so on. In eight others the convolution in question must have been involved, because the artery on which it depends for nourishment was plugged. This plugging existed in seven cases in the left middle cerebral, in one in the left internal carotid. In the remaining five cases it is probable, but not certain, that the third frontal convolution was involved. In four of these there was extensive disease of the left hemisphere; in one plugging of the basilar and doubtful softening on both sides of the brain. The result is, on the whole, in favour of Broca's view. There would seem, at any rate, to be good reason for believing that there is a central organ of articulate speech; that in the vast majority of cases this organ is situated on the left side, or is most developed on that side; and that it is in that part of the hemisphere which derives its nourishment from the middle cerebral artery.

Mr. Nunn, in support of M. Broca's theory, related a case in which complete loss of speech followed ligature of the left common carotid artery.

Dr. Conway Evans mentioned the case of a man who, nine years ago, fell down, and loss of speech followed; he could only say the word "No" for three weeks. The paralysis in this case, however, was on the left side. He recovered slowly, and was able to speak perfectly, only he had some difficulty in doing so.

Dr. Murchison mentioned the case of a young man, aged 22, with paraplegia of the left side, which was due to embolism.

Dr. Morell Mackenzie showed a specimen of a cauliflower excrescence in the larynx of a child.

Mr. Curling showed a specimen of a recurrent fatty tumour, three-quarters of a pound in weight, of the spermatic cord which had been four or five times removed.

The President remarked on the rarity of such a case occurring in the only part of the body not having fat.

Mr. Prescott Hewett asked if the tumour had been examined microscopically.

Mr. De Morgan wished to know whether it had any attachments. It had none.

Mr. Wells related a case simulating fatty tumour which turned out to be malignant. It was suggested that a committee should be appointed to report upon the specimen. Mr. Hulke and Mr. De Morgan were accordingly appointed.

Dr. Murchison exhibited a specimen of cerebro-spinal meningitis. The patient suffered from what appeared to be rheumatism and sciatica. She had considerable pain, and was very restless. At the post-mortem examination the spinal canal was found full of pus, limited to the pons. In the cerebellum pus exuded on the free surface of the arachnoid.

Dr. Hermann Weber showed a case of fatty degeneration of the liver in a child a week old, whose mother was syphilitic.

Mr. Spencer Wells showed a specimen of cystic enlargement of the kidney, which had been diagnosed as being disease of the left ovary, and alluded to the in renal tumours. The intestines are in front, which appears to be the rule in such cases. This case was one of great difficulty of diagnosis.

NEW BOOKS, WITH SHORT CRITIQUES.

Practical Chemistry. By Stevenson Macadam, Ph.D., Lecturer on Chemistry in the Medical School, Surgeons' Hall, Edinburgh. Edinburgh: W. and R. Chambers. Pp. 147.

*** A capital little treatise on the subject, containing descriptions of the principles of chemical analysis, the articles employed in it, the nature of the processes, the several groups of chemical substances, with the methods of detecting each; also the schemes adopted in systematic testing in the inorganic and organic divisions of chemistry. The directions are clear, simple, and terse, and the formulæ are founded on the new notation. The illustrations are good and sufficiently numerous. Altogether, we are inclined to regard this as one of the best chemical class-books which have come before us for some time.

The Pathology of Aphasia. By Alexander Robertson, M.D., Physician to the Town's Hospital and City Parochial Lunatic Asylum, Glasgow. Pamphlet. Reprint.

*** This is a valuable paper. It contains a very good exposition of what is known as to the morbid states associated with this peculiar condition, with some highly interesting cases from the author's practice, and original remarks on the subject they so well illustrate. This paper, and those recently published on aphasia by other northern Physicians (Dr. Sanders, Dr. Gairdner, and Dr. Scoresby-Jackson), are most valuable contributions to the study of the physiology of language.

The Policy of the Future in India: a Letter to Lord Cranborne. By William Knighton, LL.D., Assistant-Commissioner in Oudh. London: Longmans.

*** Another warning voice raised as to the unsatisfactory state of affairs in India, showing how many *apparent* and actual reasons the natives have to be discontented, as well as supplying some hints for getting rid of this state of things. The question deserves the cool consideration of every thinking man, and, as tending to clear up an affair on which we are so badly informed, the letter is likely to prove of great value.

Phases in the Developmental History of Infusorial Animal Life. By Jabez Hogg, F.L.S., &c. Reprint Pamphlet.

*** Mr. Hogg carefully sums up the arguments *pro* and *con* employed in the discussion of the spontaneous generation theory, and pronounces that the balance is in the favour of those who oppose it. He then shows how one stage of beings merges in its characters into that next above it. Altogether he furnishes one of the clearest accounts of the relations of the infusoria we have met with.

The Correlation of the Physical Forces and a Discourse on Continuity. By W. R. Grove, Q.C., etc. London: Longmans. Pp. 363.

*** The former work, so well and favourably known to scientific men, has now reached its fifth edition, and to it is now appended the excellent Address delivered by this distinguished gentleman on the occasion of his occupying the presidential chair at the last meeting of the British Association. The latter is also published separately. To try to say anything in their favour would be poor praise indeed.

Résumé du Cours d'Accouchement donné à l'Université de Gand. Par le Professeur Van Leynseele. Gand: Muquardt. London: Trübner. Pp. 459.

*** A curious style of book, quarto, and lithographed to resemble handwriting, giving an excellent outline of obstetrics as treated in Ghent by Professor Van Leynseele, intended to provide the students with a notebook for the Professor's lectures, but in reality giving far more than a mere outline of that department of Medical science.

On Insanity and the Criminal Responsibility of the Insane. By T. Moore Madden, M.R.I.A., &c. Dublin: Falconer. Pamphlet.

*** A paper read before the Medical Society of the College of Physicians, Dublin, strongly urging a revision of the law of lunacy in criminal cases, being founded on a review of the most recent illustrations, especially one of a most interesting nature which occurred in the author's own experience.

"Nearchus" writes on Sea Scurvy in the Mercantile Marine, and states that, although an old seaman, he never saw a man affected with sea scurvy, maintains that an inquest should be held on every man so dying, and narrates the plans which used to be adopted for its prevention in the South Sea whalers.

Professor Humphry sends the Index he has compiled for the direction of his pupils to the Physiological Series in the Gallery of the Museum of Comparative Anatomy at Cambridge. An admirable plan, which should certainly be followed by other teachers.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following Members of the College, having undergone the necessary examinations, were admitted Licentiates in Midwifery at a meeting of the Board on February 6:—

Arthur Hensman, Northampton, diploma of membership dated November 14, 1866; Joseph Arthur Williams, M.D. Victoria College, Toronto, Culloden, Canada West, January 22, 1867; Eli James Barrick, M.D. Victoria College, Toronto, January 22, 1867; John Cascaden, M.D. University, Toronto, January 23, 1867; Titus Cummins Crocker, M.D. Victoria College, Toronto, January 23, 1867; John Arnold, L.R.C.P., Demerara, January 24, 1867; William James Hunt, L.R.C.P. and L.S.A., Hoxton, March 28, 1858; Rowland Hill Coombs, L.S.A., Bedford, July 26, 1866; William Draper, Grantham, May 9, 1865; James D'Arcy Harvey, Plymouth, November 15, 1865; and John Widmer Rolph, M.D. Victoria College, Toronto, not a Member of the College.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 31, 1867:—

William Draper (Middlesex Hospital), Grantham; Samuel Charlesworth Hirst (Leeds Hospital), Bowling, Bradford; William Edward Ditchett (London Hospital), Louth, Lincolnshire; Henry Edward Armstrong (Newcastle Hospital), the Dispensary, Newcastle; Richard Strange Hall (Manchester Hospital), Leigh, near Manchester; William Iliffe (St. Bartholomew's Hospital), Nuneaton; Frederick Octavius Davies (St. Bartholomew's Hospital), Bermondsey New-road; Charles Berrell, King's College Hospital), Arundel-street, Strand; Robert Thos. Jenkins (Charing-cross Hospital), Brewer-street, Oxford.

APPOINTMENTS.

***** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.**

ARCHER, J., F.R.C.S.E., has been appointed Consulting Accoucheur to the Birmingham and Midland Counties Lying-in Hospital and Dispensary for Diseases of Women and Children, Birmingham.

BAUMLER, C., M.R.C.P.L., has been appointed Honorary Assistant-Physician to the German Hospital, Dalston.

DANE, T., M.R.C.S.E., has been appointed an Assistant-Surgeon to the Western Ophthalmic Hospital, Marylebone-road.

MACBETH, J., M.A., M.B., C.M. Edin., has been appointed Senior Resident Surgeon to the Birmingham Lying-in Hospital and Dispensary for Diseases of Women and Children.

MASON, F., F.R.C.S.E., has been elected Assistant-Surgeon to the Westminster Hospital.

BIRTHS.

ARMSTRONG.—On January 22, at College-square North, Belfast, the wife of W. Armstrong, Surgeon, 16th Regiment, of a son.

BLACK.—On January 27, at 70, Marquess-road, Canonbury, the wife of R. J. Black, M.D., of a son.

BROWN.—On February 2, at Eastwood, Notts, the wife of E. A. Brown, M.D., of a son.

MORTON.—On February 2, at 25B, Abbey-road, St. John's-wood, the wife of Dr. T. Morton, of a son.

PEACOCK.—On January 28, at Ford Cottage, Churchingford, Devon, the wife of A. L. Peacock, M.R.C.S., of a son.

RAND.—On January 23, at Walton House, near Ipswich, the wife of J. Rand, Surgeon, of a daughter.

SWAIN.—On January 28, at Shaftesbury, Dorset, the wife of J. H. Swain, M.D., of a son.

WOOD.—On January 26, at Newton Abbott, Devon, the wife of Dr. J. H. Wood, of a daughter, stillborn.

DEATHS.

COWARD, J. E., L.S.A., of St. Peter-street, Tiverton, on January 19.

MASON, W., M.R.C.S.E., at Horningblow-street, Burton-on-Trent, on January 28, in his 65th year.

POLLARD, C. F., M.R.C.S.E., at 26, Bromptom-crescent, on February 2, in his 50th year.

SCORESBY-JACKSON, R. E., M.D., at 32, Queen-street, Edinburgh, on February 1.

SUTHERLAND, A. J., M.D., F.R.S., at 6, Richmond-terrace, Whitehall, on January 31, aged 55.

WOODIFIELD, A. H., M.D., at Killorglin, county Kerry, Ireland, on Jan. 29, in his 39th year.

VACANCIES.

BRISTOL GENERAL HOSPITAL.—House-Surgeon and Assistant-House-Surgeon.

READING DISPENSARY.—Resident Surgeon.

STOCKPORT INFIRMARY.—House Surgeon.

WEST RIDING OF YORKSHIRE LUNATIC ASYLUM, WAKEFIELD.—Junior Assistant Medical Officer.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATION.

Barnstaple Union.—Mr. John Clarke has resigned the Eleventh District; area 28,385; population 2413; salary £56 per annum.

APPOINTMENTS.

Cardigan Union.—David Bowen, M.R.C.S.E., L.S.A., to the Newport District.

Cuckfield Union.—James Braid, M.R.C.S.E., L.S.A., to the Fifth District.

Manchester Township.—Joseph Westmorland, M.R.C.S.E., L.S.A., as Assistant at the Bridge-street Workhouse.

Tavistock Union.—Newbigin Kent, M.R.C.S.E., to the Beerferris District.

THE Prince of Wales is to be invited to act as President of St. Bartholomew's Hospital.

DR. MASSINGHAM has been reinstated in his parochial appointment by the Bethnal-green guardians.

WE have received a circular stating that in the Royal Infirmary for Diseases of the Chest there have been opened what are termed "emergency wards" for the reception of pressing cases without a letter from a governor.

DEATH FROM ASPHYXIA (?).—In the City-road, Catherine Shaw, aged two years and two months, was found dead in bed. Dr. R. Bruce said that the room did not contain sufficient cubical space for one adult, much less for the two adult persons and four children who lived in it, and that deceased died from blood-poisoning from want of proper space in which to breathe.

THE largest skeleton of the gorilla in England is in the Public Museum at Liverpool, to which it was presented by Mr. R. B. N. Walker, on his return from the Gaboon in 1862. A cast of the skull is to be given to the Anthropological Society of London. The latter institution already possesses a splendid stuffed specimen of the great anthropoid ape.

ACADÉMIE DE MÉDECINE.—M. Legouest, the distinguished military Surgeon, was at the last meeting elected a member in the section of Operative Medicine. The other candidates were MM. Chassaignac, Demarquay, A. Guérin, Giraldès, and Verneuil.

SKIN DEPARTMENT AT GUY'S HOSPITAL.—We understand that the skin clinique at Guy's is to be continued throughout the year instead of being limited to a few months in the summer, as heretofore. Dr. Hilton Fagge, who has been recently elected Assistant-Physician to the Hospital, is now the Physician to this department.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—At a meeting of this Society on Wednesday, January 30 last, George Burrows, M.D., was elected President, in the room of Martin Ware, Esq., resigned. Also, Dr. Pitman was elected a Vice-President, *vice* Dr. Burrows; and Dr. Fuller, a director, *vice* Dr. Pitman.

HYGIENE AND CHOLERA.—At the Academy of Sciences the other day, M. Dumas remarked that during the cholera epidemic of 1865 not one of the women employed in washing the linen of the Paris Hospitals (which was always in cholera cases disinfected as soon as brought from the wards) fell a victim to cholera. Moreover, only one of the employés of the *Administration des Pompes Funèbres* (who, we believe, are as dissipated a set as our own undertakers' men), amounting to nearly 1100 persons, died from cholera, the administration having rigidly insisted on the observance of the requisite hygienic precautions.

THE LATE DR. SCORESBY JACKSON, F.R.S.E.—We are sorry to find that the *Edinburgh Courant* announces the death of Dr. Scoresby Jackson, the author of the well-known work on Climate, and an excellent manual of Materia Medica. He was Physician to the Royal Infirmary, and Lecturer on Materia Medica in the Extra-Academical School of Medicine, Edinburgh, and had distinguished himself by his researches on Aphasia. Reference to one of his cures will be found in another part of our columns. He was a nephew of the late Arctic voyager, whose life he wrote.

PRESENTATION TO THE HOUSE-PHYSICIAN OF THE BRISTOL GENERAL HOSPITAL.—On the 30th ult. the students of the Bristol General Hospital held a meeting for the purpose of expressing their regret at the resignation of Dr. Walter Harris (late House-Physician), and at the same time presented him with a gold watch as a mark of their esteem and regard.

ODONTOLOGICAL SOCIETY. — At the usual monthly meeting on February 4, the new President, G. Ibbetson, Esq., delivered his inaugural address, and a paper was read "On the Use of Carbolic Acid in the Treatment of Diseased Teeth," by James Bate, Esq., of Brighton. At the previous meeting of the Society a hearty vote of thanks was unanimously passed to the retiring President, Mr. W. A. N. Cattlin, the proposer of which observed that though Mr. Cattlin now chiefly practised at Brighton, he had never once allowed the distance from town to prevent his taking the chair at the Society's meetings throughout his year of office.

DR. B. W. RICHARDSON has been proposed for election as Member of the Imperial Leopoldino-Carolina Academy of Naturalists, and Dr. Beigel has just received a letter from the President of the said Academy, the renowned Professor G. Carus, in Dresden, saying that Dr. Richardson has been elected, and that in a few days the diploma will be sent to him, being an associate of that Academy, to hand it over to him in the President's name. The Academy is the oldest in Germany, possessing valuable privileges—the only Academy, for instance, the President of which has the right to confer upon any person the title of Doctor Philosophiæ, which is then acknowledged by all learned bodies. The members of the Academy are spread all over the globe, and rank amongst them the most distinguished men. The Academy publishes every year one or two volumes of the well-known "Nova Acta," a repository of the most valuable scientific researches.

CATTLE PLAGUE.—One attack of cattle plague is reported during the week ending January 26, being a decrease of ten on the previous return. This was a fresh outbreak of the disease, and occurred on a farm in the petty sessional division of Middle Holderness, Yorkshire East Riding; the animal attacked, a bull, was killed by order of the inspector. No healthy cattle were slaughtered from having been in contact with infected animals. The report for the week ending February 2 states that on January 28 the disease appeared among the stock of a dairykeeper at Islington, in the Finsbury district of the metropolis, and during the week attacked 28 of the 46 cattle on the premises. The whole of the animals, whether diseased or healthy, have been killed. The number of animals attacked in Great Britain since the commencement is 253,860, and 52,641 cattle in the aggregate have been slaughtered healthy to prevent the spread of the disease.

HEALTHY DWELLINGS FOR THE POOR.—The Society for Improving the Condition of the Labouring Classes states that its establishments lodge a population of nearly 1700 persons, and that the average mortality in this population for the last four years has barely exceeded 17 per 1000, while the rate prevailing in the neighbourhood of the establishments has been 27 per 1000. This experiment demonstrates the soundness of the doctrine that it is possible to reduce the average mortality of our towns to a rate little exceeding the present healthy district standard of Dr. Farr, 17 per 1000, and that deaths in excess of that rate may be fairly called "unnatural," inasmuch as they are due to influences which may be readily controlled. A correspondent of the *Times* suggests that associations for providing improved dwellings for the poor should have the same powers conferred on them to purchase suitable land and houses that railway makers obtain, and that the Government should guarantee to the public investing in the debentures or mortgage of such property a minimum interest of 4 per cent. No legislation is more urgently needed than in the direction of improving the condition of the poor, not only by sweeping away the wretched hovels and dens which abound in all large towns, and the substitution of properly constructed habitations, but also of educating the lower classes up to a point at which they shall appreciate cleanliness, as it is but too evident is not the case now.

THE ST. MARY'S HOSPITAL DRAMATIC ENTERTAINMENT.—The resident Medical officers and students of St. Mary's Hospital gave a dramatic entertainment and ball last week, at the Bijou Theatre, Bayswater, in aid of the funds for the completion of the new wing of the Hospital. The pieces chosen for representation were H. J. Byron's extravaganza, "Ivanhoe," and "Bombastes Furioso." In the former piece, Mr. Percy Chatterton won continual applause, and a well-merited ovation at the conclusion of the performance, by his clever impersonation of Isaac, the Jew. Mr. R. Lewin's Wamba was evidently appreciated by the audience, although his conception of the part was certainly not based on the conventional idea of "the motley," and Mr. J. G. Randall played with care and correctness the part of Sir Bryan de Bois Guilbert. The theatre was well filled, all the arrangements were excellent, and the energy of Mr. M. M. Moore, acting manager, and of Mr. Percy Chatterton, who kindly consented to superintend the dramatic entertainment, left nothing to be desired. We are glad to learn that the evening's amusement furnished a handsome sum to the funds of the Hospital. We must not forget to mention, also, that Mr. Milner M. Moore, as Rebecca, contributed largely to the success of the entertainment.

LEGAL PROCEEDINGS AGAINST A DENTIST.—At Marlborough-street Police-court last week, Mr. Eskell, dentist, No. 13, Tichborne-street, was summoned for assaulting Mrs. Celia Brown. The complainant said she saw Mr. Eskell's advertisement in the newspapers, and went to his shop in Tichborne-street, accompanied by a female friend, for the purpose of asking him what his terms would be to put in three or four teeth. She desired to ascertain the terms first, because the advertisement stated that the charge for a tooth was 2s. 6d. The defendant asked her to sit down on a chair. She did so, telling him that nothing must be done until the terms were settled. The defendant said he only wanted to look into her mouth. She rose from the chair after the inspection, and was then induced to seat herself again. The defendant then, without saying a word, pulled out one of her front teeth. She did not want that tooth pulled out, as it was a good sound tooth. For Mr. Eskell it was represented that "he had done all he could for the advantage of the complainant." The magistrate said he was not inclined to regard the pulling out a tooth without the owner's leave as a trifling matter. If the defendant chose to settle with the complainant, he might do so; otherwise he should fine him 20s. The defendant came to an arrangement with the complainant.

A MEETING of the Council of the Metropolitan Poor-law Medical Officers' Association will be held on Friday, February 8, at 8 p.m., for the purpose of taking into consideration the report of a sub-committee on a uniformity of dietary in the Metropolitan union houses, and generally to discuss the prospects of Poor-law Medical reform in the forthcoming session. As Mr. Hardy intends to bring in his bill on that day, the Council will arrange to meet *de die in diem*, so as to be prepared to take immediate action, should the interests of their body appear in any way to be imperilled. As a substantial measure of Poor-law Medical reform is anticipated, it is very desirable that all Metropolitan Poor-law Medical officers should join the Association. Those that have not already done so may send in their names to F. Godrich, Esq., West Brompton, treasurer; T. O. Dudfield, Esq., 8, Upper Phillimore-terrace, Kensington, hon. sec.; or, Dr. Joseph Rogers, 33, Dean-street, Soho, president.

ROYAL INSTITUTION OF GREAT BRITAIN.—At the general monthly meeting, held on Monday, February 4, Earl Stanhope, D.C.L., F.R.S., Vice-President, in the chair, John Blacker, Esq.; Adam F. Blandy, Esq.; John Clarke, M.D.; William David, Esq.; Robert Ward Jackson, Esq.; Edward Smith, M.D., F.R.S.; and Captain the Hon. John Robert Vesey were elected members of the Royal Institution. The special thanks of the members were returned to the donors of the following additions to "The Donation Fund for the Promotion of Experimental Researches:"—John P. Gassiot, Esq., F.R.S. (fourth annual donation), £20; Samuel Scott, Esq., £5 5s.; William Dell, Esq., £5 5s.; Edward H. Moscrop, Esq., £25; and Alfred Davis, Esq., £21. The special thanks of the members were presented to Edmund Pepys, Esq.,

M.R.I., for his present of the portrait of his father, the late John Pepys, Esq., for sixty-six years a member of the Royal Institution. The presents received since the last meeting were laid on the table, and the thanks of the members returned for the same.

THE discovery of an ancient human skull in California, at a depth of 153 feet, in a shaft sunk in consolidated volcanic ash or lava, near Angel's Camp, Calavaras county, California, is reported in the *American Journal of Science* (No. 126, p. 424). The skull was said to be found by a miner, and has been transmitted to Professor Whitney, the State geologist, by whom the circumstances will be investigated. As the alleged position of the skull is lower than any in which the remains of the mastodon have been discovered, its authenticity is an important question. The results of Professor Whitney's inquiry will be given in the American journal.

HEALTH OF THE COUNTRY.—The Registrar-General's quarterly return for December shows that the births of 246,519 children and the deaths of 157,660 persons were registered in the United Kingdom during the last three months of 1866. The population of the three kingdoms in the middle of the year is estimated at about 29,935,404, and the rate of mortality in the quarter, corrected for defective registration in Ireland, was 21·63 per 1000, which is below the rate prevailing in England and Wales. The birth-rate of England and Wales during last quarter was 34·47 per 1000, which is unusually high. 117,187 deaths were registered in the ninety-two days ending on the last day of the old year, and the mortality was at the annual rate of 2·184. The mortality is thus lower than the average by ·021, and not higher than the mortality of the last summer quarter, when it was raised by cholera in East London, in Liverpool, and in some other towns. The chief characteristic of the season is the diffusion of cholera over the remotest parts of the kingdom, and its restricted ravages everywhere except where the people are living in the open violation of the laws of health. In London 834 deaths by cholera were returned, and in the districts around a small number; in Godstone, 5; Dartford, 1; Rochester, 2; Lewes, 6; Brighton, 3; Southampton, 2. In the Eastern and South-Midland counties the disease is scarcely noticed; in Devonshire, Exeter and its environs suffered to some extent; thus, 8 persons died of the disease in St. Leonard, 30 in Kenton, including 26 in the county lunatic asylum. The 8 deaths in St. Leonard occurred close to the river Exe, which receives all the sewage of Exeter, and is dammed up by a weir at the fatal point. The deaths in the lunatic asylum demand explanation. Teignmouth on the coast had 7 deaths from cholera; Brixham, the fishing town at the entrance of Torbay, supplied with bad water, 30; a small parish in the Crediton district called Zeal-Monachorum, on a tributary of the Tay, 15; St. George in Bedminster, 12. These isolated outbreaks were rendered fatal by local causes. In the midland counties of the north and west a few deaths are noticed. In Chester (Great Boughton) 83 deaths from cholera, 42 from diarrhœa occurred; the water, with singular irrationality, having been for some time taken at a point in the river immediately below the inflow of several of the town sewers. Cholera, which had been so fatal in Liverpool, subsided after having caused many deaths, and the epidemic caused 30 deaths in the township of Ince, where the water was bad, but scarcely touched Manchester or Salford. In Doncaster, with sewage in the waters, it raised the mortality above the average. Three fatal cases of cholera occurred at Beverley: the first case, that of a man, was imported; the others were respectively the wife who had attended the man, and the wife's sister by whom the wife had been attended. Due precautions should be inculcated in such cases. Hull and Sculcoates, which in former epidemics suffered so severely, now escaped with comparative impunity. In many towns and colliery villages of Durham and Northumberland cases of cholera occurred in considerable numbers; 107 persons died of cholera in Tynemouth and 27 of diarrhœa. The hygienic conditions are of the worst description, and the authorities often appear to slumber in the presence of dangers. While the industry of Wales is making rapid strides, its sanitary condition is rapidly deteriorating, as due arrangements are not made for the accommodation or instruction of an increasing population; and thus in a country every way by nature favourable to health, both as regards air and water, epidemics find footing and prove destructive. In Tredegar sub-district 82 persons died of cholera; in Ystradyfodwg, 24; in Aberdare, 29; in Ystradgunlais, 50; in Llangafelach, 31; in Swansea, 55; in Holywell, 39; in Carnarvon, 70; in Holyhead, where a well was polluted with sewage, 25. Following fevers and other zymotic diseases, there can be no question of the evil, which may well attract the attention of Welsh patriotism. The returns contain many examples of the efficacy of hygienic measures, and afford strong proofs of the doctrine that if England has suffered less from cholera in the present year than the Continent, or less than England herself in former years, it is mainly due to changes which all Europe can appreciate and adopt. Among other instances the Black country, as it is called, about Wolverhampton may be cited. The epidemic of 1849 and 1854 destroyed in five districts more than 3000 lives, while in the year 1866 the mortality has been inconsiderable. The water was then impure, and could only be obtained with difficulty in a country covered with pits and works. But the people with commendable energy have brought good waters from a distance, and are reaping the advantages of the change in Wolverhampton, Bilston, and the other towns. The mortality in all the country districts of England was at the rate of 19; in the town districts at the rate of 24, in 1000, but in both town and country below the average in nearly an equal degree. In the divisions the mortality of the quarter was lowest (18) in the eastern and south-eastern counties; highest in the northern counties (25), and in Lancashire and Cheshire (27), where the rate exceeded that of London (24). The thirteen great towns of the United Kingdom stand thus arranged in the order of mortality for the quarter: Bristol, 21; Birmingham, 22; Hull, 23; London, 24; Sheffield, 24; Salford, 26; Leeds, 28; Glasgow, 29; Manchester, 30; Edinburgh, 30; Liverpool, 33; Dublin, 34; Newcastle-on-Tyne, 37.—*Registrar-General's Quarterly Return.*

BLOODLETTING AT A DISCOUNT IN FRANCE.—The indisposition to resort to bloodletting which characterises modern practice in this country, whether explained by "change of type in disease" or not, prevails likewise in France, except in the practice of some old stagers like M. Bouillaud, who still, we believe, continues to hold implicit faith in his *coups sur coups*. That bloodletting has lost much of its *prestige* in France, however, is seen, among other circumstances, from the very great diminution of the consumption of leeches, which used formerly to be employed by the million, and had to be imported in large numbers from Hungary and elsewhere. Owing to the progressive diminution in consumption, not only has this become no longer necessary, but France is able to export them in large numbers if required.

COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN JANUARY, 1867.—The following are the returns of the Metropolitan Association of Medical Officers of Health:

	Total Solid Matter per Gallon.	Loss by Ignition.(a)	Oxidisable Organic Matter.(b)	Hardness.	
				Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction	23·50	1·00	0·84	14·0	5·0
West Middlesex	22·67	1·49	1·04	13·5	5·0
Southwark and Vauxhall.	19·51	1·75	1·68	14·0	5·0
Chelsea	22·83	1·50	0·72	13·5	5·0
Lambeth	22·67	1·51	0·92	13·5	4·5
Other Companies.					
Kent	27·12	1·25	0·16	16·0	7·5
New River	21·75	2·00	0·84	14·0	5·5
East London	25·26	2·49	1·08	14·5	5·5
Surface Wells.					
Leadenhall-market	114·93	5·53	2·81	62·0	25·5
Bishopsgate-street	114·83	9·07	3·06	84·0	27·0

(a) The loss by ignition represents a variety of volatile matters as well as organic matter, as ammoniacal salts, moisture, and the volatile constituents of nitrates and nitrites.

(b) The oxidisable organic matter is determined by a standard solution of permanganate of potash, the available oxygen of which is to the organic matter as 1 is to 8; and the results are controlled by the examination of the colour of the water when seen through a glass tube two feet in length and two inches in diameter.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

A Member.—The Hunterian Oration will be delivered on Thursday next at 3 o'clock, by Professor Hilton, the Senior Vice-President of the College.

An Army Surgeon.—Mr. Guthrie died on May 1, 1856, and Mr. Hodgson was elected an examiner in the vacancy caused by this event.

A Fellow.—Mr. Wormald's term of office will expire in July next.

Scotsman.—Sir J. Y. Simpson, Bart. The arrangements for the proposed testimonial are not yet matured. Until they are, the thing had better not be talked of.

Junius.—The subject is alluded to in another column. At the proper time you can nominate, with five other Fellows, the gentleman you mention; there will be three vacancies.

A Young Member.—The mace was presented to the College by George IV., through the interest of Sir Everard Home, Bart., Surgeon to his Majesty.

A Competitor.—No award has yet been made for the Jacksonian Prize.

A Member, Sheffield.—The following are the charters granted to the College:—40th George III., in which Charles Hawkins, Serjeant-Surgeon to the King, was nominated the first master, and William Long and George Chandler the first governors; 3rd George IV.; 7th, 15th, and 23rd Victoria.

Arthur.—There are a portrait and bust of Mead in the College of Physicians. His Medical talents were eulogised by Pope—

"I'll do what Mead and Cheselden advise."

And Young, the author of "Night Thoughts," said—

"Alive by miracle! or what is next, alive by *Mead*."

W. H. F.—The Soane Museum is now open. It is situated in Lincoln's-inn-fields. Cheselden was admitted a Fellow of the Royal Society at the early age of 21.

"Pall-mall Gazette" Testimonial.

The following gentlemen have consented to act as a committee:—Dr. Burrows; Dr. Black; C. H. Cornish, Esq.; Campbell De Morgan, Esq.; Sir W. Fergusson, Bart.; Dr. Harling; Ernest Hart, Esq.; Sir Charles Locock, Bart.; W. Longman, Esq.; Sir Ranald Martin, C.B.; Captain Maxse; Dr. Paget; W. H. Richardson, Esq.; T. Turner, Esq.; T. P. Teale, Esq.

Subscriptions may be paid to G. D. Pollock, Esq., 27, Grosvenor-street, W., and T. H. Hills, Esq., 45, Queen Anne-street, W., treasurers to the fund.

COMMUNICATIONS have been received from—

Ignoramus; Dr. G. Johnson; Mr. Henry Lee; Dr. Clifford Allbutt; Mr. Thimbleby; Mr. Hall; Dr. C. Baumler; Dr. Tuckwell; Mr. W. F. Pym; The Royal Institution; Mr. Poole; Dr. Carr; Dr. Marshall; Dr. Vinen; Dr. Ballard; Dr. Soelberg Wells; Mr. J. Chatto; Mr. J. Z. Laurence; Dr. Dicken; Dr. Hilton Fagge; Mr. Lydall; Mr. Curgenven; Dr. J. Rogers; Dr. Osborne; Dr. Tilbury Fox.

BOOKS RECEIVED—

Holmes Coote on Hip-joint Disease—Wright's Medical Students of the Period—The Medical Mirror—Gazette Hebdomadaire—Gazette des Hôpitaux—L'Union Médicale—The Pharmaceutical Journal—Le Mouvement Médical—Falconer on the Baths of Bath—Falconer's Hospital Economics—Lankester on Sanitary Legislation—Bryant on Ovariotomy—Second Annual Report of the Hankow Medical Mission—The Edinburgh Medical Journal—Hogg on Phases in the Developmental History of Infusorial Animal Life—Knighton on the Policy of the Future in India—The Glasgow Medical Journal—Porter on Lithotrity.

NEWSPAPERS RECEIVED—

The Portsmouth Times—The Sunday Gazette—The Scotsman.

VITAL STATISTICS OF LONDON.

Week ending Saturday, February 2, 1867.

BIRTHS.

Births of Boys, 1237; Girls, 1153; Total, 2390.
Average of 10 corresponding weeks, 1857-66, 2030·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	854	774	1628
Average of the ten years 1857-66	731·0	723·9	1454·9
Average corrected to increased population..	..	..	1600
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,388	3	2	2	2	11	4	4	..
North ..	618,210	22	7	7	1	18	21	3	..
Central	378,058	1	1	2	..	10	6	2	..
East ..	571,158	13	6	7	1	16	9	6	..
South ..	773,175	16	7	4	3	16	9	6	..
Total ..	2,803,989	55	23	22	7	71	49	21	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·871 in.
Mean temperature	46·0
Highest point of thermometer	55·0
Lowest point of thermometer	35·0
Mean dew-point temperature	42·3
General direction of wind	S.W.
Whole amount of rain in the week	0·54

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, February 2, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending Feb. 2.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending Feb. 2.	Temperature of Air (Fahr.). Highest during the Week.	Temperature of Air (Fahr.). Lowest during the Week.	Temperature of Air (Fahr.). Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	2390	1421	1628	55·0	35·0	46·0	0·54	55
Bristol (City) . .	165572	35·3	108	74	197	52·9	37·2	46·2	1·67	169
Birmingham (Boro')	343948	43·9	286	167	171	55·5	36·0	45·7	1·19	120
Liverpool (Borough)	492439	96·4	391	285	281	..	..	..	..	..
Manchester (City) .	362823	80·9	266	205	‡222	56·0	30·0	45·2	0·97	98
Salford (Borough) .	115013	22·2	99	58	69	55·5	34·5	45·2	0·96	97
Sheffield (Borough).	225199	9·9	202	119	126	53·2	37·0	44·4	0·69	70
Leeds (Borough) .	232428	10·8	201	118	142	54·5	37·5	46·4	0·29	29
Hull (Borough) .	106740	30·0	72	49	62	..	..	..	..	..
Nwestl-on-Tyne, do.	124960	23·4	106	66	76	54·0	37·0	45 3	0·14	14
Edinburgh (City) .	176081	39·8	113	85	101	52·7	37·0	44·5	1·60	162
Glasgow (City) .	440979	87·1	362	257	296	50·9	34·0	42·7	1·47	148
Dublin (City and some suburbs) .	319210	32·8	204	†157	286	57·0	34·8	46·1	0·25	25
Total of 13 large Towns . . .	6187764	34·3	4800	3061	3557	57 0	30·0	45·2	0·89	90
					Week ending Jan. 26.	Week ending Jan. 26.				
Vienna (City) . .	(1863) 560000	..	..	..	291	..	..	§ 26·1	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·871 in. The barometrical reading increased from 29·43 in. on Wednesday to 30·32 in. by the end of the week.

The general direction of the wind was S.W.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 37·2°

APPOINTMENTS FOR THE WEEK.

February 9. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

11. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

Medical Society of London, 8 p.m. Dr. Cockle, "On the Influence of the Discharges and Nervous Shock on the Collapse of Cholera."

Royal College of Surgeons, 4 p.m. A Lecture, by Professor Huxley.

12. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

Ethnological Society of London, 8 p.m. Meeting.

Royal Institution, 3 p.m. Professor Tyndall, F.R.S., "On Vibratory Motion with Special Reference to Sound."

Royal Medical and Chirurgical Society (Ballot, 8 p.m.), 8½ p.m. Dr. Dickinson, "On Amyloid Degeneration." Dr. Gibson, "On the Condition of Urine in Epilepsy."

13. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

Royal College of Surgeons, 4 p.m. A Lecture, by Professor Huxley.

14. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

Royal Institution, 3 p.m. Professor Tyndall, F.R.S., "On Vibratory Motion with Special Reference to Sound."

15. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.

Royal College of Surgeons, 4 p.m. A Lecture, by Professor Huxley.

Royal Institution, 8 p.m. C. F. Varley, Esq., "On the Atlantic Telegraph."

EXPECTED OPERATIONS.

Ophthalmic Hospital, Southwark.—The following Operation will be performed on Saturday (this day), at 2 o'clock:—

By Mr. J. Z. Laurence—Ligature of the Carotid for a Pulsating Tumour of the Orbit.

ORIGINAL LECTURES.

CLINICAL LECTURES ON THE REMEDIAL USES OF THE PRUNUS VIRGINIANA;

WITH SOME FURTHER REMARKS ON DISEASES OF THE HEART.(a)

DELIVERED AT

The Leeds General Infirmary.

By Dr. CLIFFORD ALLBUTT.

GENTLEMEN,—It is very difficult for Physicians to combine with a sound and steady temper that openness and flexibility which enables us at once to make a valuable use of old and well-tried remedies, and also to give due attention to any new drugs which may be recommended to us at home or abroad. On the one hand, it is more necessary to a steady success in therapeutics that we should know a few remedies well than that we should have a less familiar acquaintance with many; on the other hand, we must remember that no systematic search after remedies has yet been made. It would be difficult, and perhaps impossible, in the present state of our knowledge, to make any such systematic search. The very principles to guide us therein have yet to be established. This being so, many of our best remedies have been hit upon, as it were, at haphazard; and there is no reason why any number of remedies may not still be awaiting their happy discovery. *Adsit nobis dexter Apollo!*

While, then, we thoroughly acquaint ourselves with the properties and uses of those medicines which we possess, we should also be ready to test any new thing which seems to have a claim upon our notice. We shall thus learn what value it has, if any; if none, we shall be more successful than our forefathers in keeping a crowd of useless drugs without the limits of the Pharmacopœia.

Several new agents have been introduced of late, and some of them, as the *Sarracenia purpurea*, for instance, are worthless enough. Others have a real claim upon a more exact trial, as they have already gained that degree of countenance from competent Physicians which gives them a right to further proof. As examples of these, I may mention podophyllin, santonine, *Pinus Larix*, *Veratrum viride*, *Triticum repens*, *Hemidesmus indicus*, and among many more the *Prunus virginiana*, upon which last I shall lay before you the results of a series of therapeutical experiments. The only other remedy in the list which I have used with any systematic care is the *Tinctura Pinus Laricis*. This remedy I tried on a sufficiently large scale in this Hospital, at the Leeds Dispensary, and in some few private cases. Perhaps I have tried it altogether in about 100 cases. I used it in cases where the *spiritus terebinthinæ* is supposed to be useful—namely, in bronchorrhea, in genito-urinary discharges, as a vermifuge, etc. I anticipated, indeed, much good from this remedy in bronchorrhea. In these instances, however, and in all others, I have been wholly disappointed with the result. I could not be sure that I obtained even a passing success in any one case. The preparation I used was, in the large majority of cases at least, procured from Messrs. Harvey and Reynolds, and could be thoroughly trusted.

It is far otherwise with the American wild cherry, which I have now used in hundreds of cases, both in the form of infusion and of tincture. Of this excellent medicine I knew little or nothing until it was commended to me by my colleague, Dr. Chadwick. He tells me that he has used it for about fifteen years, and that he has a very high opinion of its efficacy in proper cases. He proposed it to me about three years ago, for a gentleman whom I had asked him to see with me, and who was, and still is, suffering from valvular disease of the heart with dilatation and some hypertrophy. I had the opportunity of observing the results in this and other cases during a long subsequent time. These were so satisfactory that I began to make frequent use of the remedy.

Those of you who have attended my lectures on the Materia Medica will remember that in those lectures I endeavoured to point out an interesting relation which seems to exist between tonics and sedatives. In common language we too often class tonics in the next place to stimulants. This no doubt arises from our practical habit of prescribing tonics and stimulants together, the combination being a good one. Naturally, however, the place of tonics is nearer to the class of sedatives. A stimulant acts by obtaining a transitory manifestation of vital energy at the expense of vital tension or equilibrium. The action of tonics is the reverse of this. Their tendency is not to give momentary activity, but permanent tone—to re-establish the vital tension, or equilibrium of function. A stimulant draws upon the credit of the body, if I may use such a figure, in order to meet a present need. It is, therefore, a remedy which, if long continued, does, as you know, tend to exhaust the powers of the body. Vital tension is gradually destroyed by it, and mobility and irritability take the place of stability and self-possession. The action of a tonic, on the other hand, is regulative, and, as we find in practice and understand in theory, the restoration of *tone* or *tension* is attended by a corresponding check to excitement or immediate manifestations of force as energy. Tonics, then, carefully and judiciously applied, tend to calm irregular excitation, and thereby to lay up a store of force for the body in the state of tension or equilibrium. As a matter of daily practice we know, however, that many of our drugs contain more than one principle. They often contain, for instance, in addition to a tonic constituent, some stimulant, such as a volatile oil, and the combination is generally a good one. When, however, we isolate the tonic constituent, as we do in the case of quinine—when we can, as in that case, prescribe a pure tonic—we find that the results are very far from showing stimulation, and are rather suggestive of sedation. The pulse falls, and with the increased steadiness of the circulation we see a more stable equilibrium, and a firmer state of function. Tonics in large doses may often resemble sedatives in action, and many authors have spoken with superfluous surprise of the apparent sedative properties of quinine and other pure tonics. In further illustration of this point, I may notice the sedativo-tonic properties of digitalis, and the undoubted and very valuable tonic properties of minute doses of opium.

Now, these remarks are not digressive. They are intended to explain, if possible, the kind of action which the wild cherry seems to exercise on the body. It may be thus said to have sedativo-tonic properties, and seems to have a power of calming excitement and of laying up strength, which is often very valuable to the Physician. I do not forget that the sedative property may be referred to the small quantity of prussic acid which the chemists find in the drug; but, as I may say again, I cannot accept this as the solution of the question. Partly it may be so, but chiefly, I think, otherwise.

The *Prunus virginiana*, or American wild cherry, whether directly or indirectly I scarcely know, seems to have a special power of giving tone and calmness to the arterial system. I am not disposed to think, so far as my observation goes, that this result is only indirect. The flow of blood is a general expression of the rate and intensity of functional rhythm, and so it manifests readily enough any change in the quality of that rhythm. The sedative effect, then, as seen in the arterial system, may be but the expression of a general sedation obtained throughout the body.

One of my reasons for supposing the possibility of this is, that I have found the wild cherry useful, not only in cases of cardiac disturbance, but also of general nervous excitability, of "atonic" dyspepsia, and of intestinal irritability. It seems, however, to have a more special bearing upon the arterial nervo-muscular tissues, as digitalis also has, and in proper cases it comes as a valuable substitute for digitalis when this medicine is ill borne. Many sedatives, as you are aware, tend to cause nausea or vomiting in those who take them, as do, for example, opium, chloroform, tobacco, and many others. Digitalis in its degree shares with them that peculiarity, and you will find in practice many persons who cannot bear digitalis, even in small doses, on account of the nausea which it causes in them. We may often avoid this ill effect by judicious exhibition and combination, but sometimes no care can prevent it. In such constitutions or states of disease the wild cherry is of great value. In doses under half a drachm of the tincture and under one ounce of the infusion, it is, so far as I can tell, invariably well borne. On the other hand, it is not equal to digitalis in the special relief which we need in extreme cases. It is, indeed, rather to be used in the continuous treatment which follows the removal of the worst symptoms. The wild cherry is not an heroic remedy, and yet it is not an insignificant one. Moreover, it is a perfectly safe one. I have never seen a case among the many which I have

(a) The original divisions of the Lectures have not been retained, and some few things have been added.

treated where the infusion or tincture of the wild cherry has been followed by any poisonous consequences. On the contrary, I seldom prescribe it in suitable cases without receiving a spontaneous tribute from my patient to the success of the medicine. In doses larger than those I have mentioned, however, I have found that the valuable properties of the drug were not obtained, and, indeed, that in more than one instance increased distress, and sometimes even sickness, seemed to result from the use of it. When doses beginning at fifteen or twenty drops of the tincture and half an ounce of the cold infusion do not make some change for the better, I now lay aside the medicine till a more convenient season. Medicines, like mortals, are not at all hours infallible.

As I constantly say to you, we have in heart diseases to deal primarily with a mechanical disorder. In a large number of cases the vital changes are secondary and derivative, so that we should restore perfect health to our patient could we fit new valves to his heart, as we fit new washers to our stop-cocks.

If, then, we are to go to the root of the matter, we must carefully regard the mechanical state. We must consider what this is, how it has been modified, and how we may cause it to approach the normal state. In the healthy state we see the power and the weight exactly proportionate the one to the other. The strength and advantage of the heart is exactly equal to the weight and resistance of the blood to be lifted. If, then, the application of the power to the weight is deranged, we know that the power is applied at a less advantage, and the weight therefore relatively increased. Here the stethoscope is invaluable as an aid. A Physician may treat diseases of the lungs without a stethoscope, and may seldom fall into error; not so diseases of the heart. Here the first condition of success is to learn the exact mechanical conditions under which the heart is working, and these conditions are revealed to us by the stethoscope with delicacy and precision. In aortic regurgitation, for instance, there is the same weight of blood to be lifted, but that weight is relatively increased by the recoil upon the heart. The aortic valves give the same assistance to the heart that a roller drag gives to a horse drawing uphill. If, then, we find these valves to be inefficient, we are unable to restore them, and we are obliged to meet the difficulty in one of two ways—we must increase the power or diminish the weight. To impoverish the blood must always be postponed to other steps, if others are admissible. In aortic regurgitation, we prefer, therefore, an increase of the power beyond the normal standard to a diminution of the quality and weight of the blood below the requirements of nutrition. In aortic disease, by a system of tonic and nutritive treatment most carefully initiated and most closely watched, we endeavour to encourage hypertrophy of the ventricle, and so to make shift with something more like the due relation between the power and the weight.

Again, inefficiency of the heart is often one of the phenomena of general constitutional feebleness. In such cases, which are common, the weak flabby muscle is unequal to its task, and faintness, vertigo, and syncope follow a more or less prolonged interval of cardiac oppression, palpitation, and dyspnœa. Here, gentlemen, the same kind of treatment is required; and you must carefully watch such cases from the beginning, establishing your tonics and other supports in good time. If too long an interval elapse, the overtasked organ gradually gives way, some permanent dilatation of the chambers ensues, and the mischief may be irremediable. On any out-patient morning I can show you perhaps three or four women suffering from permanent dilatation of the heart and its consequences, which has been the work of years of neglect. In these cases the valves are often quite competent, and you may therefore hope to give marked relief, but for want of timely recourse to the Physician many a woman or weakly man slips into lifelong suffering.

On the other hand, the happy effects of timely and proper treatment are at once manifest.

You may find some little difficulty in getting steel and tonics well borne at first. If the derangement has been long in progress, you will only succeed by the most patient and dexterous manœuvres. At last, however, you will probaby gain a footing for them, and you will date a great change from that moment. You will see from that moment a change in the visible muscles by which you may infer similar changes going on in the heart which is invisible. A drooping girl, pale and white-lipped, may be placed under your care. She will complain of pain and oppression about the heart, of frequent palpitations, of nervous startings, and of wild leaps of the heart awaking her of nights. She will complain of more or less constant headache, of tendency to fainting, of vertigo, and of all the rest of the symptoms which point among other things to an overtasked heart. On listening to the organ you will find its sounds thin and snapping,(b) loud bruits, perhaps, about the base of it and in the neighbouring vessels. You will find also great unsteadiness, so that the speed of its action is accelerated by the slightest emotion, varying even with the mere movement of your stethoscope from place to place on the chest. On feeling the pulse you will find the muscular coat of the arteries, like its continuation upon the heart, to be soft and feeble.

Having ascertained all this, now observe the voluntary muscles, and you will see them affected in like manner. There is a general atony. The muscles may not be deficient in volume, but are deficient in tension or tone. The feet are not lifted briskly, but are slipped along the carpet, the knees are "like water," the shoulders fall forward, the arms hang listlessly, there is no grasp in the fingers, and the patient, if examined while standing, will soon sink into a chair. Look now a little further, and note in the facial what you have noted in the bodily muscles. The head is hung a little forward, the muscles about the orbits are relaxed, giving a weary look to the face and blinking the brightness of the eye; the muscles of the cheek allow the lower jaw to drop a little, so that the mouth never closes firmly, and the lower lip, if full, hangs a little outward. Now I need not occupy your time with this description of a very familiar thing, were it not that the condition of these facial muscles is so good an index to that of the cardiac muscles. That muscle no longer lays well hold of the blood; its grasp, like that of the hand, is weakened, and I agree with several observers who think that valvular murmurs and deranged rhythm may be, and often are, caused by such a relaxation—that is to say, by want of steady and firm closure of the orifices. Such murmurs we may hear in those convalescent from tedious illnesses, and they disappear as vigour returns.

Now give your patient half an ounce of the cold infusion of the wild cherry three times a day, and as she gradually mends, make your way upward through small doses of quinine, through the milder steel preparations, and so up to the best of them—the reduced iron.

Before the lips have lost their pallor you will see if good is being done by the "improved expression" of your patient. She has begun to "look better"—that is, her facial muscles are braced up. She enters your room with a more elastic step, the knees are steadier, the muscles upon the cheek are firmer, the jaw no longer drops, the head is raised, the eyes open and brighten, and the wandering and inexpressive look becomes full and straightforward. On feeling the pulse the muscular coat is there also firmer and more elastic, and the vessel is fuller and less compressible. The action of the heart, too, is calmer and quieter, the murmurs about the base are less intense, and the sounds are not so thin in quality. When you note all this you may push the steel until the conjunctivæ lose their pearliness and the cheeks redden, and if you wish your cure to be permanent, and the heart to be re-established in vigour, forbid any intermission of your remedy for three months at least.

Chlorosis must be eradicated with steel, as syphilis by mercury or scrofula by cod oil and iodine. Many a woman carries to her grave a thousand bodily troubles which form part of the chlorotic series, and ought to have been prevented in girlhood by a long course of the proper specific.

In aortic disease, then, you do not hesitate to endeavour to strengthen the ventricle to meet the increased weight to be lifted, and so in anæmia chlorotica, the weight remaining the same, you have to bring the power up to the point whence it had fallen.

In obstruction at the orifices without regurgitation we have a like problem to work out, but it can only be done by great watchfulness and patience. The narrowing of the orifice is practically an increase of the work to be done—of the weight; and it may be so great that any increased cardiac effort, being unable to overcome the resistance, causes only additional distress. Such cases are painful ones, and we have to act in them with great caution, strengthening the chambers as far as we dare, and, at the same time, approaching equilibrium from the other side by lessening the volume and richness of the blood. This we do by cautious use of mild saline purga-

(b) The beautiful preparations of the valves of the heart as dissected by Dr. Pettigrew, at the College of Surgeons, give us quite a new notion of their mode of action. We can now readily understand, for instance, how it is that lax walls and lax orifices give rise to "thin and snapping" sounds in the organ.

tives, of diuretics, by dry cupping, and similar measures. If we succeed thus in restoring the mechanical equilibrium, we may sometimes see the curious sight of depletory measures curing anæmia.

I have more than once pointed out to you, both in my in- and out-patient practice, those murmurs strongly insisted upon by Dr. Gairdner and others, and which are perhaps more common than they are supposed to be. I refer to those in which the contraction of the auricle, usually noiseless, becomes audible on account of some obstruction at the mitral orifice. These murmurs, as I have shown you at the bedside, begin in the pause and run up to the usual first sound of the heart, which itself may be clear. About two years ago I met with eight or ten cases of this kind, and began to think them common. Of late, however, I have met with very few. One of these cases I had in the house for some time; it was a well-marked instance, and was examined by a considerable number of observers. The only murmur was a rather loud one, coincident with the auricular systole, and most clearly heard at the apex. M. G., aged 23, an intelligent young woman, employed as a lady's maid, was admitted into the General Infirmary under my care. Her father died of heart disease in middle age; family history otherwise good. She had been ailing seven or eight years with obscure symptoms. Her appetite failed, her strength failed, her "nerves" became excitable, she had a tendency to dizziness or syncope, and soon after began to suffer from palpitation, dyspnœa, and other signs of cardiac discomfort. No cough, or a very slight one, no anasarca or other symptoms of great venous congestion beyond a dusky complexion, bluish lips, loss of appetite, occasional constipation, and other slight abdominal derangements. The pulse was small, weak, and slightly jerky. Heart not much dilated. There was a distinct murmur, chiefly audible at the apex, running up to the systolic sound, and ceasing at the commencement of it. This murmur filled about half of the pause. No murmur over the base or in the great vessels. I had great difficulty in bringing tonics to bear in this case, the smallest doses causing oppression and discomfort. I began gentle courses of quinine or steel, and withdrew them several times. Digitalis was inadmissible, as it caused sickness and depression. I tried in vain also, by diminishing the weight and quality of the blood, to gain a footing for tonics, but failed to my great perplexity. Fortunately, I now hit on the wild cherry. I began with half an ounce of the cold infusion twice a day, and increased the dose to one ounce three times a day. The effects, though slow, were certain and encouraging. The heart became quiet and steady; the pulse increased in volume, and became less jerky and less excitable. The blood was better aerated, and reached the brain more fully and regularly. The appetite improved, and the patient rose from her bed and began to walk about the wards, and even to go up and down stairs into the garden. I now in fear and trembling ordered pil. ferri co. gr. v. every morning after breakfast. It was well borne, and in a week I ordered a second after dinner, and soon after a third in like manner, being careful to keep the excretions free. From this time M. G. improved rapidly; she left off her attendance and returned to her situation, her mistress saying that she had not been in such health for years.

The perfect closure of the mitral orifice against regurgitation was the condition of this success, as it left us at liberty to strengthen the chambers of the heart (the left auricle with the rest) without danger of arresting the venous current. I fear, however, that in M. G.'s case the narrowing of the orifice must be far advanced, seeing that the establishment of the tonic treatment was so difficult. I may add that no case could better show the great value of the stethoscope. By it only could I have known that there was no mitral regurgitation whatever, and that I might therefore, without danger, persevere in trying carefully to strengthen the propelling power, and so to overcome to some extent the obstacle to the passage of the blood. I have notes of five other cases of this form of disease, three of which were treated with the wild cherry, but none were so difficult to treat as the foregoing. In all the rest I succeeded in a week or two in establishing the tonics, and in thereby restoring something more like a mechanical equilibration between the power and the weight. I need scarcely warn you that the narrowing of either mitral or aortic orifice may have gone so far that to increase the propelling power is only to increase oppression and distress. In such cases it is difficult to give abiding relief. Slighter degrees of mitral stenosis, however, often exist, I am sure, without being sufficient to cause a murmur.(c)

(To be continued.)

ORIGINAL COMMUNICATIONS.

FUNDAMENTAL STRUCTURE AND ARRANGEMENT OF A NERVOUS APPARATUS.

(With Plate III.)

By Dr. LIONEL S. BEALE, F.R.S.,

Fellow of the Royal College of Physicians, Physician to King's College Hospital, and Professor of Physiology and of General and Morbid Anatomy in King's College, London.

Of Nerve-centres.

The essential structural elements of every nerve-centre are *nerve-cells* and *nerve-fibres*. The nerve-centres or ganglia of man and the higher animals are highly vascular, and, there is reason to believe, receive a large supply of arterial blood; but there are nerve-centres consisting of only three or four cells, which have no special capillaries.

In and around nerve-centres which are fully formed is a little connective tissue, and the proportion of this increases as the ganglion advances in age. It is not an *essential* structure, nor is it required for the support of the nerve-cells and nerve-fibres, as some have supposed; for in the ganglia of some of the lower animals connective tissue is not to be found, and in no ganglion is it present at an early period, when the cells and fibres are softest, and therefore in greatest need of a "*supporting framework*." The "connective tissue" is probably but the remains of nerve-cells, nerve-fibres, and vessels which were in a state of functional activity at an earlier period of life.

Concerning the relation of the *cells* of a nerve-centre to the *fibres*, there is the greatest difference of opinion among observers, and some anatomists still maintain that there are nerve-cells destitute of fibres altogether, while many conclude that, of the numerous fibres proceeding *from* some nerve-cells, several are not nerve-fibres at all. It has been supposed by some that a cell may influence a fibre which passes near it; but others have held that, for a fibre to be influenced, it must be structurally connected with the cell. It is not, however, my intention in this paper to attack the views of others I desire only to state as briefly and as clearly as I can the conclusions forced upon me by many years' careful investigation of the minute structure of nerve-centres in man and the lower animals. The facts upon which these conclusions are based are detailed at length in memoirs published in the *Philosophical Transactions*, the *Proceedings of the Royal Society*, the *Transactions of the Microscopical Society*, the *Archives of Medicine*, and the *Medical Times and Gazette*.

The conclusions at which I have arrived may be briefly expressed as follows:—

1. Every nerve-cell is connected with at least two nerve-fibres.

2. Where many fibres or processes proceed from one cell, every one of these passes into, or is continuous with, a nerve-fibre.

3. The nerve-fibres, or processes, are structurally continuous with the nerve-cell, and they are, as it were, drawn out from it.

4. The fibres proceeding from a nerve-cell pursue opposite directions, and although two fibres may run parallel to each other, or one be coiled round the other, for a certain distance from the cell, they soon diverge and pursue *opposite* directions.

In the nerve-centres of vertebrata there are two distinct classes of nerve-cells—1. Spherical or oval cells; 2. Angular or stellate nerve-cells.

The first class are found in all the sympathetic ganglia, in the ganglia on the posterior roots of the nerves, and in the cerebellum.

The second class are found in the brain, medulla oblongata, and spinal cord.

In the lowest animals spherical and oval nerve-cells are alone found, and in the lower vertebrata the caudate nerve-cells are small and few in number.

(*The sequel next week.*)

(c) Since this lecture was in the hands of the printer some very interesting remarks by Dr. Peacock on mitral obstruction have been published—vide *Medical Times and Gazette*, February 2, 1867. It is a pleasure to me to find that my own views of its nature and treatment correspond in their degree with his.

A SCIENTIFIC INQUIRY INTO SOME OF THE CAUSES ALLEGED TO PRODUCE ASIATIC CHOLERA.

By the Rev. SAMUEL HAUGHTON, M.D., F.R.S.,
Fellow of Trinity College, Dublin, and of the College of Physicians, Ireland.

(Continued from page 85.)

1. *Astronomical Causes possibly Capable of influencing the Spread of Epidemic Diseases.*—In the present state of science, no one, whose opinion is worthy of respect, pays any attention to conjunctions of the Planets, quarters of the Moon, configurations of Saturn with the tail of the Dragon, and other such theories of the causes of pestilences as satisfied our easy-going ancestors, and filled the pockets of the quacks of those days, who placed themselves under the protection of Saturn, and robbed the general public in company with usurers, hypocrites, devotees, and others entitled, with the astrologers, to claim the aid of that venerable planet.

Yet there are astronomical causes capable, perhaps, of influencing the constitution of certain regions of the atmosphere, in certain years, which are deserving of attention in an inquiry into the possible causes of the spread of epidemic disease.

The investigations of modern astronomers have taught us to regard the interplanetary spaces as possibly filled, in certain regions, with masses partly solid and partly gaseous, circulating round the sun in definite streams or bands, and intersecting the orbit of the earth at definite points, which are either fixed or which undergo slow movements of progression or oscillation—like the nodes of the planetary and lunar orbits.

These streams of interplanetary matter seem to be, in most cases, the remains of some ancient comet, reduced to the form of paving stones with permanent gases intermixed; for in the great majority of well-ascertained bands of meteoric stones their motion is retrograde, which excludes them from the class of planets, and brings them into the category of comets.

One of the oldest of such streams of meteoric stones observed, is that which goes popularly by the name of "St Lawrence's Tears," and occurs on August 10 of each year, with a periodic interval of maximum brilliancy not yet clearly ascertained. St. Lawrence was put to death by being roasted on a gridiron suspended over a slow fire, and the shooting stars of August 10 have been for ages called his "tears."

Another band of shooting stars crosses the earth's path on November 13, and seems, in modern times, to have superseded the stars of August 10 in importance. Its period of maximum brilliancy seems to be 33 to 35 years. On November 13, 1799, and 1833, showers of fire-balls and shooting stars were witnessed during the night; and are confidently expected, in conformity with the prediction of the celebrated astronomer, Olbers, to return again on November 13, 1867. Although 1799, 1833, 1867, are regarded as the periods of maximum brilliancy, the years preceding and following those years are supposed to show a larger number than usual of these remarkable phenomena; and we have, indeed, already had a foretaste of what the meteoric shower of 1867 will be from what was seen in Europe on the night of November 14, 1866.

The accompanying diagram (Fig. 1) shows the relative positions of the meteoric streams of August 10 and November 13,

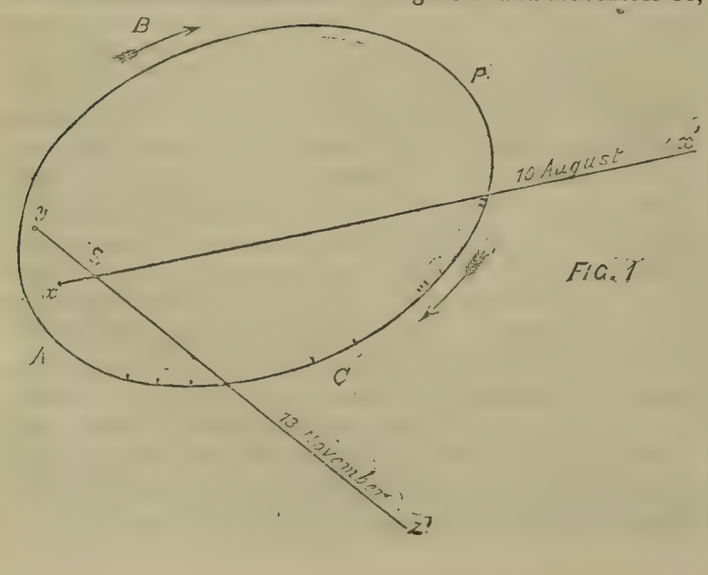


FIG. 1

supposed to revolve round the sun, *S*, in orbits whose *perihelia*, *x y*, lie completely inside the earth's orbit, *A B P C*, and whose *aphelia*, *x' z'*, lie at unknown distances outside the orbit of the earth.

In the case of the stream of shooting stars called "St. Lawrence's tears," of August 10, no periodicity has been satisfactorily ascertained, although it doubtless exists, and therefore the position of the aphelion, *x'*, is regarded as quite unknown; but if we adopt 33 years as the period of the stream of November 13, we must suppose that the stones are unequally distributed in different parts of the solar or cometary ring formed by them, and that the earth meets the same set of shooting stars every 33 years, they having in the meantime described 32 or 34 revolutions.

Some persons, considering that cholera and influenza first appeared in Ireland, in modern times, in 1832, that cholera again appeared in 1849 (after 17 years' interval), and again in 1866 (after another period of 17 years), have inclined to the idea that possibly some connexion might exist between the periodic recurrence of the November shooting stars, and the gaseous remains of the comet that produced them; and the periodic "pestilential constitution of the air," that produced in Ireland "Asiatic cholera" in 1832, and "black death" in 1866.

Although the influence of such periodical astronomical causes in aiding the conversion of endemic disease into epidemic disease, cannot be denied—simply because it can neither be proved nor disproved—yet it is inconsistent with the rules of inductive science to admit a cause for a phenomenon which is only a possible cause, so long as a probable cause exists, whose influence is real. We are, therefore, entitled to reject such causes, so long as we are prepared to assign more probable causes for the phenomenon, which in the case of cholera is always possible; and, even at the best, the astronomical causes of cholera would reduce themselves to meteorological causes of wide-spread influence; for it is only by influencing the constitution of large regions of the atmosphere that meteoric showers, or other astronomical influences, could make themselves felt.

As a matter of fact, the first case of Asiatic cholera in Dublin, in 1866, appeared in the person of a woman, named Magee, who imported the disease from Liverpool, on July 26, and carried it with her to the house, 22, City Quay, where she died; having previously conveyed the disease to a little girl, named Mary Anne Meyler, who also died within a few hours. This child's father, Andrew Meyler, was suddenly seized with cramps and purging in the street at 4 a.m., while carrying home his child's coffin, and died at 7 p.m. of the same day (July 31). His widow, Elizabeth Meyler, was taken ill shortly after his death, and was admitted into Sir Patrick Dun's Hospital at 11 a.m. of August 2, where I learned from her own lips the foregoing particulars.

The disease contracted by Ellen Magee in Liverpool, and thence imported into Dublin, was in its turn originally imported by the ship *Helvetia* into Liverpool by German emigrants, and I have no doubt could, if we possessed the requisite knowlege, be traced backwards, in lineal ascent, to its origin, in some poor Hindoo, on the banks of the Ganges, as certainly as the pedigree of a horse or dog of repute can be traced to his remote ancestors, celebrated for their skill in running, or for their cunning in killing rats.

The Asiatic cholera, thus introduced by Ellen Magee, spread rapidly over Dublin from case to case, and killed more than 1193 victims before the close of the year.

So long as we possess such a history of the introduction of Asiatic cholera into Ireland in 1866, we are entitled to reject possible astronomical modes of its causation.

(To be continued.)

WE have before us the Fourteenth Report of the United Kingdom Alliance for the suppression of intemperance by law. The members are no doubt very sincere, but sincerity sometimes takes awkward shapes, and if the rule of a majority be unpleasant, how much more so is the domination of a small but noisy party! A feeling of amusement, mingled with pain, comes over us in perusing these pages; but what do our readers say to the following paragraph?—"The want of a true knowledge, in the ranks of the Medical Profession, of the effects of alcohol, has for a long time been recognised with concern;" but a certain Dr. Lees has come forward, and we shall no longer be left in the dark.

NOTES ON THE DERMATOLOGY OF EGYPT.

By TILBURY FOX, M.D., M.R.C.P.,
Physician to St. John's Hospital for Skin Diseases.

(Concluded from page 113.)

Parasitic diseases, both animal and vegetable, are very common in Egypt. Fleas, bugs, and pediculi abound to any conceivable degree. The prurigo pedicularis is an almost necessity here. One is horrified at the popular practice of hunting for the living amongst the folds of the garments. It is conspicuously and leisurely performed, as if with the evident intention of attracting attention and approval. But, what is still worse, there is not always sacrifice of life on capture of the vermin; it is quietly placed on some safe spot away from the body; and I have seen Turks apparently comparing notes, and exulting over the possession of the finest specimens. Scabies is abundantly common, especially amongst the lower orders and in the army. It is said that there is greater difficulty in Egypt than in Europe in discovering the acarus. This may be due in some degree to the indistinctness of the furrow, in consequence of the colour of the skin, and the fact that search is not made particularly in the neighbourhood of the wrists. Scabies, I am assured, is often contracted in Egypt from the implantation of the acarus transported from the camels, who are very prone to be infested by this disease. I can give no personal guarantee for the truth of this assertion. Scabies, however, very frequently assumes an impetiginous or ecthymatous appearance. *En passant*, I may mention that internal parasites are of frequent occurrence. Filaria medinensis is noticed, and Dr. Paterson thinks that "trichinosis" is not infrequent. Pork is not so very much used, and of course only by the Europeans. Any one, however, can see, with his own eyes, the most questionable sausages, which make one wonder how the people ever escape a very epidemic of disease. Some very suspicious cases of poisoning, which might fairly be attributed to trichinosis, have occurred from time to time. Vegetable parasitic diseases are likewise well illustrated in Egypt, and it is not difficult to account for this. The hair is cut short, thus affording the parasitic germs easy access to the hair follicles; there is warmth and moisture, both climatic, and also, in addition, that brought about by the peculiarity of head-dress; there is also a strumous habit—not over-marked, certainly—and more active, perhaps, than all uncleanliness. Favus is very common. In the military Hospital, indeed, a special ward has been established. It attacks the soldiers in large proportion, the means of contagion and inoculation amongst them being very perfect and free; affecting, therefore, besides children, adults in a more marked manner, and to a greater extent than is admitted and recognised in England, and patching over various parts of the body generally, as well as the head. In estimating the occurrence of favus, it is within the range of possibility that impetiginous disease may sometimes be mistaken for it. Some of the neglected cases of impetigo—and I have seen many—at the first glance look exactly like old cases of favus; but I have also seen many cases of true favus, though it was with some difficulty that the natives could be prevailed upon to give me an inspection, the young natives have such a runaway dread of the actual touch of the European. Its parasitic nature has as yet been recognised fully only by the European or those taught at European schools; therefore its nature is regarded in various lights. Some think it local, others the result of some special blood state *sui generis*. Dr. Pruner Bey fully taught and wrote of its vegetable nature, and recommended as the great agency in cure the free use of iodine. Favus, true to its behaviour elsewhere, attacks the lower orders by preference, and markedly selects Circassians, Syrians, and Fellahines, or native peasantry. It is very obstinate and difficult of cure; it is also clearly communicable, and the authority quoted has put on record the instance of a European girl who got favus of the thigh from the head of an Arab. Sycosis is tolerably common in the intemperate. Its nature is not defined. The sebaceous element of the derma is sufficiently active in Egypt, as might have been anticipated, and the glands are often more or less enlarged; but it is to be observed that acne is not very frequently seen, except amongst the Europeans, and acne rosacea attacks those amongst the latter who indulge in spirit liquors, and, according to Dr. Pruner, in the Syrians and Armenians who use fermented liquors.

It may be supposed that a mass of interesting detail might be contributed in reference to the subject of elephantiasis; but though much material exists for scientific work, workers are wanting. The misnamed Elephantiasis arabica, properly Bucnemia tropica, or Barbadoes leg, is here. At Cairo at the present time there are several well-marked instances. It commences in the ordinary way by acute lymphatic inflammation. When the scrotum is the seat of disease, we get enormous tumours—one very large one I saw at Damascus—the Egyptian sarcocele. The vulva is not unfrequently affected in females. True elephantiasis takes the tubercular form; the anæsthetic is rarely, if ever, seen. It is more common amongst men than women, amongst the inhabitants of the country rather than those of cities, and particularly the native peasantry. In towns the Jews and Copts suffer in a decided degree, and these really constitute the fish-eating population. I was very much struck with the condition on more than one visit of one part of Cairo, which was horridly offensive, and found that the peculiar smell was due to the fish which were being preserved. The Copts and Jews eat salted and preserved sardines—"raschal" the compound is called. Another kind is "melohah," small fish salted; it is very bad. The natives also eat sometimes a compound made in the same way as the others, called "fasiah" or "fasciah." I saw several cases of elephantiasis in Cairo. It affects, amongst the blacks, the Abyssinians, and it has also, according to Dr. Pruner, a liking for military fellahs. In some parts of Syria leprosy abounds, but I have elsewhere communicated some observations touching the disease as occurring in Palestine and Syria. Morphæa does not appear to be a recognised form of disease. In regard to elephantiasis, it is quite clear that intermarriage has a great share in the propagation of the disease. The mention of elephantiasis calls up to mind its many semi-allies, which possess the tendency to hypertrophic growth and subsequent ulceration. The Arabs are not at all prone to diseases of an ulcerative type, in consequence, it is supposed, of their living so much in the open air. Pellagra is occasionally seen in Egypt. Dr. Pruner noticed claveryaws, the disease of Surinam, and an affection in the slaves in Abyssinia exactly like the sibbens of Scotland. The Aleppo evil is observed in people who have left Syria, and come to reside in Egypt, and it is affirmed that the disease may develope in those who have quitted Aleppo for forty years. It is also seen in those who come from Scinde, and are passing through or are settled in Egypt. I saw a case in progress of cure at Damascus. The Aleppo evil is produced apparently by the use of water which has remained in a semi-stagnant condition and is more or less charged with vegetable matter. At Jerusalem there are no fresh springs. The rain is collected in large tanks, which supply all the water the inhabitants make use of. This tank water, freely charged with leaves, dead locusts, mosquitoes, and other things, has produced tubercles which have a great tendency to ulcerate, the sore refusing to heal for months, but quickly disappearing on change of residence. A few cases of this kind have occurred, and apparently in the way mentioned.

I could find out very little about the Yemen ulcer. From the little information obtained, it would appear to be a form of scorbutic gangrene. Lastly, with regard to syphilis and its cutaneous manifestations. In its primary form, the disease has been much upon the increase of late years, and this is fairly ascribed to the free introduction of poison by the European. Not only is syphilis becoming more common, but, according to all accounts, more marked and severe. Originally, the primary form appeared to be merely "abrasion;" but it would now seem to be indisputable that Hunterian chancre is more prevalent. This is certainly true as regards Cairo, and secondary manifestations are more frequently met with than formerly. It is only fair to mention that some of the natives ascribe the increasing preponderance of the malady, not only to the influence of the European, but also to the fact that astringents are more freely used, and the belief obtains that speedy healing up of the ulcer favours the outcoming of secondary manifestations. The latter observe the usual types, and in addition superficial ulcerations are observed in the folds of the toes in natives. This is due to, or provoked by, friction and exposure. Some of the fellahs appear to convert their feet into hands, in so far as handiness is concerned.

Pian has been looked upon by some as a form of syphilitic disease. This view cannot be substantiated, and is probably erroneous; but of one thing we may be certain, that the more the colour of the individual is pronounced, the more the vegetations take on some such aspect as in pian. In Abyssinians, however, the derma often takes on a morbid action, so as to give rise to pian without any evidence of the existence or play

of syphilitic action. Tertiary disease is rare, and of course the more decided expressions, such as caries. Be the explanation what it may, it is certain that, up to within a recent period, syphilis and its various resultants formed no part of the history of the diseases of Egypt, and that its present tendency to assume a severe garb and a greater increase in frequency is due to the influence of Europeans.

There are some very curious cases of syphilis which deserve mention, arising from certain malpractices well-known in the East. Syphilitic disease about the anus is frequent, and whole families have been infected about the mouth beyond a doubt. These are facts which rest upon the testimony of those who have had ample opportunity of seeing and watching them. I can conceive but one result from the freer introduction of syphilitic poison into the Egyptian community, and that is the development of severe forms of primary, secondary, and even tertiary disease. Certainly, civilisation and its attendant debauchery, free living, and excess, have as yet had little sway; but, indeed, the stamina of the population will not be able to give any great amount of resistent or healing power, if the demand ever be made upon it by such a persistent and potent agent as the syphilitic poison. The treatment of syphilis is very little mercurial. The folk appear to be easily susceptible to the influence of mercury; but let me pray the reader not to imagine that herein is any argument in favour of the proposition that all the graver forms of mischief are due to the exhibition of mercury—nay, the graver phases promise to visit ere long, and that without mercurial influence. Burdock takes the place very much of sarza, and it is said to be most efficacious in treatment.

43, Sackville-street, Piccadilly, W.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

ST. THOMAS'S HOSPITAL.

The Buildings and Grounds—Arrangements of Library and Museum—Special Lectures on Pathological Chemistry—Out-patient Practice—The Wards.

Fractures of Patella; Treatment—Simple Fractures of Leg; Peculiar Case—Compound Fractures—Extension Treatment Fractured Femur—Amputation of Thigh—Pyæmia; Case Recovering—Fractured Skull—Case of Depression without Head Symptoms—Fractured Base—Excision of the Knee-joint—Anchylosed Knee—Treatment of Scalds and Burns—Breast Tumours—Peculiar Case of Lumbar Abscess.

The so-called temporary Hospital of St. Thomas's is a spacious and elegant building holding between 200 and 250 beds, and fitted with accommodations for patients probably equal to those of any Hospital in the metropolis. It is placed in the centre of a large and well-wooded garden, which covers about fifteen to eighteen acres, and was formerly the old pleasure grounds of the Surrey Zoological Gardens; and part of the walls of the building represent the remains of the old music hall, which in earlier times has rung with the music of Jullien, and in later with the voice of Spurgeon. Its consecutive application to three such different purposes is suggestive of the three degrees of comparison. What may be its fourth when St. Thomas's is removed to Stangate is at present a problem.

In front of the Hospital is a large lake covering three or four acres, and good use has been made of this during the late frost, the truth of the maxim "*mens sana in corpore sano*" being recognised by the Hospital authorities as well as by the students. For further muscular development a gymnasium has been erected in the grounds, and it is not found that football or cricket, or the like amusements, interfere with the regularity of attendance at the lectures. It is to be wished, however, that the freedom of Saturday afternoons were recognised generally in the Medical schools.

The school buildings are erected apart from the Hospital, and, though not pretentious in appearance, are well adapted for their purpose. The library and museum are in one, and this arrangement appears very beneficial in allowing a ready reference to specimens while students are reading, and in making them generally acquainted with the specimens, which many rarely visit if the preparations be buried in separate buildings.

Besides the ordinary courses of lectures there is a series, peculiar to this Hospital, delivered every Winter Session upon pathological chemistry by Dr. Thudichum, and a large and well-fitted pathological laboratory is under his charge. The institution of these lectures is an important feature in the progress of chemistry and pathology, conjointly, in the present day.

Of the special departments of out-patient practice, we may remark that there is one for skin diseases under the care of Dr. Bristowe, one of the Physicians, which is very numerously attended. As many as between 100 and 200 patients are seen every Wednesday afternoon, and among them may be observed many very valuable cases.

As a rule the out-patient practice is extremely well attended by the students.

The ophthalmic department is under the charge of the Assistant-Surgeons, Mr. Sydney Jones and Mr. Croft, and the former has beds in the Hospital for such cases, and holds in addition the chair of Ophthalmic Surgery in the school.

Of the wards themselves a few words must be said. There are three large ones, and to the "Accident Ward," the smaller of the three, there is appended a small one containing four beds for special cases, such as delirium tremens.

Besides these there is a Casualty Ward apart from the building appropriated to erysipelas and similar diseases of a highly contagious nature. The Accident Ward contains thirty-six beds. The other two wards contain nearly 100 beds apiece, and are probably some of the largest ever built. The upper or female ward is very imposing in appearance, being about 168 feet long by 75 feet wide, and its roof, which is arched, rises to about the height of 36 feet along the centre.

Each of these large wards—the male and the female—is divided along the middle by a low partition, which separates the Medical from the Surgical beds, and, by means of this nominal division, there are made on the male floor a King's and an Edward's ward, and upon the upper, or female, a Queen's and an Elizabeth's.

It will be seen that there are no special wards for syphilitic cases, which is certainly to be greatly regretted.

The visits of the Surgeons and Physicians are made early in the morning, varying from 9 to 9½ a.m., and all dressing is completed by noon, so that the afternoon is left quiet to both patients and nurses.

From the following statistics it will be evident that the Surgical out-patient practice, so far from diminishing at the present Hospital, has rather exceeded that at the old Hospital. The number of Surgical out-patients at the old Hospital during 1860 was 29,623; ditto, 1861, 28,859; ditto, at the present Hospital, 1864, 32,104; ditto, 1865, 33,510. The average weekly number during the summer is about 500, and that during the winter about 400, and of these nearly 100 are ophthalmic.

Of the Medical out-patient practice we cannot give the statistics, but the cases are almost as numerous and well-selected.

In Accident Ward may be seen an excellent collection of useful Surgical cases, some of them of great clinical value; and it would repay a stranger, really interested in Surgery, to make a visit here and accompany the Surgeon in his morning rounds.

There are six cases of fractured patella, among which we include two of ruptured union of previous fracture; and of these two latter, one appears to be an instance in which union had taken place by bone, for the patient declares that no line of fracture remained, and during manipulation, when he was admitted, distinct bony crepitus between the two fragments was heard by the dresser, Mr. Pern. Another of the six is a case of vertical fracture from direct injury. The method of treatment generally adopted at St. Thomas's for the ordinary transverse form of fractured patella is, after allowing a short time for the subsidence of any synovitis which may be present, to adapt a leather or gutta-percha cap splint out of which a circular piece has been cut just large enough to retain the two fragments, which have been brought together by horse-shoe-shaped straps. A Liston splint is applied, and the limb raised at the foot. In some cases only the long pieces of strapping running from each side of the shin to above the upper fragment, and a shorter piece pulling upwards the lower, are made use of. M. Malgaigne's hooks do not find favour at St. Thomas's.

Apropos of fractured patella, there may be seen several

very good preparations of this injury in the museum, illustrative of the mode of union. These Mr. Wm. Adams, in a great measure, added, when Curator, and upon them he founded a paper in which he showed that in the greater number of cases union occurs, not by a distinct fibrous band, but by an expansion from the strong lateral aponeuroses of the knee joint.

Of simple fractures of the leg there are twenty-one cases (fifteen male and six female), including fractures of one or two bones.

One of these is peculiar and of doubtful nature. A loose piece of bone stands up on end between the tibia and fibula. The tibia is traceable in perfect continuity to the internal malleolus, and the fibula to the external, but the latter is evidently much narrowed. It seems, on the whole, probable that the case is one of vertical fracture of the lower end of the fibula, together with a small piece of adjoining tibia, the separated piece being tilted end forwards. The mode of injury countenances this view, the man's foot having been violently twisted under him during the slippery frost of the 22nd ult.

In another there is a double fracture of the tibia, with fracture of the fibula and extensive bruising, in a man accustomed to more than a pint of gin a day. This case is not unlikely to turn out ill, more especially as a bandage had been left by his Medical attendant until lines of bullæ appeared on the leg.

Of compound fractures of the leg there are at present four cases. For two of these amputation—in one case primary, in the other secondary—of the lower third of the thigh has been performed, and they are doing well. The other two remain with suppurating wounds, in which necrosing portions of bone lie.

In the treatment of compound fractures where there is much displacement, and in the treatment of any fractures where there is much tendency to shortening, Mr. Simon has introduced a very simple mode of extension, at the suggestion of a Confederate Surgeon who was visiting the Hospital in the summer, and the plan has proved very efficacious. It consists in fixing a long piece of strapping on each side of the calf, leaving a large loop beyond the heel, into which loop a small cross-bar of wood is placed. Extension is then made from this piece of wood by the ordinary pulley apparatus. By this appliance pressure on the foot is avoided, and sores are not likely to be formed on the heel or instep. The wounds, if any, can be dressed easily without removing the apparatus, and the condition of the limb throughout is always under view. Counter-extension is made by means of a perineal band.

Fractured femur is present in six cases, and of these one is comminuted above the condyles, another is fractured just below the trochanters, a third is a case of non-union in an old man aged 73, and a fourth, under the care of Mr. Le Gros Clark, is a case of peculiar interest, being fracture almost vertically through both trochanters, complicated apparently with dislocation of the head into the dorsum. The others are cases of simple fracture in the middle third of the shaft.

There are four instances of fractured humerus, one being compound, and a second involving the elbow joint, both of which are also in Mr. Le Gros Clark's beds.

Two cases of amputation of the forearm, one for disease, and the other for injury, are to be seen under Mr. Sydney Jones's care.

On the 7th of this month Mr. Solly amputated the thigh of a man who was admitted a few days before with suppuration in the knee-joint. This suppuration was the consequence of a cut, of no great size, on the inner side of the knee a month previously. The matter had been allowed to continue without vent until he was admitted. An incision was then made, and one of Chassaignac's drainage tubes was inserted, but on the day of amputation the patient was so rapidly worse that the operation was necessarily resorted to. He continued in a rather unfavourable state until the 12th, when he had the first rigors of pyæmia, but on the 11th there was a little hæmorrhage from the stump, readily stopped by exposure and cold. The amputated knee presents some rather interesting features. Besides the suppuration in the joint, and consequent erosion of the cartilage, there is a line of carious bone on the inner side of the internal condyle, exactly opposite the original wound in the thigh, so that it appears not improbable that the bone itself was injured by the axe.

Apropos of injuries to the knee-joint, Mr. Jones mentioned in the theatre a case in his own practice in which the ligamentum patellæ had been divided, so that the inner surface of the patella could be readily exposed, and in this case a quantity of tobacco had been stuffed into the wound to arrest the bleeding; yet this man now walks about with a perfectly sound joint.

A most important case also is one of hernia, where, after operation, suppuration burrowed towards the scrotum for some time. On January 26 severe rigors set in, with profuse sweatings and the cadaverous hue of pyæmia. These continued daily until the 28th, when a purulent deposit appeared in the calf of the opposite leg. Since that time, however, no more shiverings have occurred. The swelling of the calf has subsided to a hard lump, and he is in a fair way towards convalescence.

Of fractures of the skull there are several very interesting cases. In one of them, a child aged 5, a patient of Mr. Solly's, there was, on admission, a large, jagged, dirty wound, from which a piece of scalp, of the size of a man's palm, had been torn. In this wound the parietal bone was exposed, stripped of its pericranium, fractured, and depressed to the depth of one-third of an inch behind. There were, however, no symptoms of compression, and the mere fact of depression was not enough to warrant operation, in Mr. Solly's opinion. The child was therefore watched, and the wound simply dressed. No untoward symptoms afterwards set in beyond a good deal of fretfulness, but at the end of ten weeks the whole of the outer table which had been injured separated, and the child is now convalescent. The large amount of bone injured, and of skin torn away, even apart from the fracture and depression, would seem to make this case a very serious one, while the amount of depression, not attended with any material symptoms of brain mischief, is a very interesting feature, evidencing the great extent of injury to which the skull and its contents in a child may be subjected with impunity.

Three cases, in which fracture of the base has probably occurred, have also been admitted during the last two or three weeks, and of these one has been discharged within the last few days. In all three cases there was copious serous oozing from the ear, without laceration in the neighbourhood, and this continued for three, ten, and twelve days respectively, but in only one has there been facial paralysis, and that only after eight days. Very slight head symptoms attended any of them.

During the course of the past year there were two cases of this injury cured, but in both of these there were paralysis of the portio dura and deafness. In three other cases, a large amount of injury to the brain, added to the fracture, was the cause of rapid death.

Among other injuries now in, is a case of dislocation of the forearm backwards with fracture of the radius, and two of emphysema from fractured ribs, under Mr. Simon; and two of severe wound of the eye, in one of which extraction by Schuft's method was performed by Mr. Jones.

Of several severe lacerated wounds, among which we include a gunshot wound, the most interesting has been under Mr. Clark's care, and has just been discharged well. It was a case in which, after falling upon a spike and wounding the scrotum, tedious suppuration took place in the groin, the cause of which was not sufficiently obvious until six weeks after admission, when a piece of corduroy, exactly fitting a hole in his trousers, was removed from the abscess.

There is a large number of cases of bone and joint disease. Mr. Solly has two good instances of contracted knee, not following disease of the joint, which are doing well.

Mr. Clark has a case of excision of the knee-joint for necrosis of the tibia, now convalescent, in which the limb is quite firm, and the shortening not more than one and a half inch. The operation was performed four months ago; the man has been up and about for the last month. There is a very minute sinus remaining, and his health is greatly improved.

The Surgeons of this Hospital were among the earliest to advocate this operation—excision of the knee-joint—as a far more satisfactory and rational treatment for diseases of the knee-joint than amputation of the thigh, and the success which has attended the operation with them fully justifies their support. Although convalescence is not so rapid as after amputation, this is fully balanced by the usefulness of the limb which is given; and on the question of the length of time necessary for recovery, cases can be quoted from this Hospital which went out well at the end of eleven and thirteen weeks, and several in which the patients were discharged, or were walking about the wards, or union was perfect, within fifteen to twenty weeks.

Under Mr. Simon's care is a girl whose knee is fixed by bony anchylosis, reported to have resulted from suppuration following scarlatina three years ago, but the union, by unfortunate management, had been allowed to take place in such a manner that the leg is flexed forwards upon the thigh to about 20° from the straight line. Very slow improvement has resulted from the pressure apparatus hitherto.

Mr. Simon has also a child under his care in whom incomplete separation of the upper epiphysis of the tibia, from caries, was followed by suppuration in the popliteal space and great prostration. The thigh was then amputated by the circular method, and marked improvement followed immediately.

Of scalds and burns St. Thomas's has its full complement, and the treatment invariably adopted for these, when admitted directly after the injury, is to whitewash the parts with a paste of whiting and vinegar. This is covered with a layer of thin linen, and the whole enveloped in cotton-wool. The patients themselves acknowledge the immediate relief which this affords, and the parts usually do well. The crust which forms is left on until it crumbles off, when a fresh layer is put on; but when a granulating sore occurs, the ordinary forms of dressing are substituted.

There are five cases of breast tumours, three of them adenocele and two scirrhus, and in all of them operation has been performed. In the case last operated on—that of scirrhus in a stout, powerful woman—a violent pugilistic fury almost discomfited House-Surgeons and persuaders during the first attempt to administer chloroform, and delayed the operation, but she eventually took the chloroform very well, and was kept under its influence till the operator, Mr. Jones, had closed the wound in safety to the patient and to himself.

Mr. Solly has under his care a peculiar carbuncle of the knee, the appearance of which on admission would have misled an ordinary observer, and induced him to diagnose some form of tumour. The present aspect of the wound, however, fully justifies Mr. Solly's diagnosis.

The same Surgeon has some interesting cases of spinal disease, and Mr. Simon has one of lumbar abscess, in which the injections of a strong solution of chloride of zinc into the back give rise continually to severe burning pain in the œsophagus and pharynx, with vomiting of a large quantity of clear fluid. It was conjectured from this that a communication existed between the abscess cavity and the œsophagus, but hitherto no chloride of zinc has been detected in the sputum.

Under Mr. Simon also is a boy, in whom a sinus nearly over the femoral artery, about two inches below Poupart's ligament, leads to a psoas abscess; while another, over the front of the great trochanter, leads to a cavity probably communicating with the hip-joint. It is an interesting question whether this hip-joint suppuration and the superficial abscess may not have resulted from direct communication with the psoas abscess.

Mr. Simon has also an important case of malignant disease, for which he had removed the whole of the upper jaw.

Among other cases under the same Surgeon may be mentioned wryneck operated on, large exostosis of the femur removed, amputation of the thigh for obstinate necrosis of the tibia, and an intractable syphilitic ulceration of the thigh.

Mr. Solly also has a case of cancer of the tongue, in which he used the galvano-caustique with decided success.

Mr. Sydney Jones has had a case of radical cure of hernia, in which, after some time, the hernia appeared again, though less inconvenient in size; and another patient with vesico-vaginal fistula not yet operated on.

KING'S COLLEGE HOSPITAL.

MORNING MEDICAL CLINIC.

There are just now under Dr. Beale's care two important cases of paralysis affecting nearly the whole body.

Case 1.—The first patient is a healthy-looking man, 35 years of age, a sailor (L. A., vol. x. p. 245).(a) It appears that about two years ago a bag of rice, weighing a hundredweight, fell from a height of thirty feet, and struck him on the back of the neck while he was in the hold of a ship. He was stunned for a short time, but soon recovered, and was able to continue his work. After the accident he had slight pains at times in the shoulders and neck, but three months since he was surprised to find that his left arm and the same side of the neck were becoming stiff. The surface felt benumbed, and the sensibility of the skin was much impaired. The muscular power soon became perceptibly weaker. Gradually the right arm and corresponding side of the neck became similarly affected, and in tha course of a month both arms were completely paralysed. The legs next became affected with the same gradual progressive paralysis—diminished sensibility preceding loss of power. There neither is, nor has been, any paralysis of the sphincters. The patient usually eats and sleeps well, and from the appearance of his face no one would suspect he was seriously ill. No unnatural projection can be detected in the cervical or dorsal region, but the movements of the head have always been limited, and Dr. Beale thinks it better not to attempt to move the head by force in case the symptoms should be due to some tumour pressing upon the upper part of the cervical region of the cord, or to disease of one or more vertebræ or adjacent textures.

As the man had had syphilis twice, it was thought not improbable that some syphilitic tumour had grown either from the periosteum, dura mater, or in the cord itself. Iodide of potassium was therefore given for a month or five weeks, at first in five-grain doses thrice daily, and afterwards in ten-grain doses, but the paralysis steadily progressed. Neither this treatment nor large doses of iron, which were subsequently tried, seemed to influence the course of the disease in the least. At present the patient's general health seems good, and he eats well. He has lost flesh since his admission, but the muscles of the limbs are still firm and of fair size. The paralysis of the limbs is complete, save that he still retains the power of slowly and feebly flexing and extending the fingers of the right hand about a quarter of an inch. When a pin's point is pressed against the skin of the index finger, he has an impression that his arm has been touched. The chest, which is large, rises and falls only about half an inch during respiration, and the breathing is more feeble and the expansion decidedly less on the right than on the left side.

The urine always contains earthy phosphates. Mr. Berrell has made some analyses, which yield the following results:—

December 10, 1866.—Determination of Phosphates.—Urine passed in twenty-four hours 1208 c.c.=42·5 oz.; specific gravity 1032·6; alkaline reaction; deposit of phosphates.

Total Quantity of Phosphoric Acid.

	Grammes.	Grains.	In 1000 parts.
As alkaline phosphate .	·7996 =	12·33	..
As earthy phosphate .	·2745 =	4·23	..
	1·0741 =	16·56	·78

January 8, 1867.—Urine passed in twenty-four hours 1215 c.c. = 43 oz.; specific gravity 1018·9; alkaline reaction; deposit of phosphates.

Total Quantity of Constituents.

	Grammes.	Grains.	In 1000 parts.
Urea	31·59 =	487·43	25·51
Uric acid	·477 =	7·36	·38
Chlorine	5·89 =	90·88	4·76
Phosphoric acid—			
As alkaline phosphate .	1·094 =	16·88	·88
As earthy phosphate .	·607 =	9·36	·49
Total . . .	1·701	26·24	1·37

The condition of the patient has altered very slightly during the last three months. The case is one which excites much interest.

Case 2.—The second case of paralysis is in the Twining Ward, E. L. (vol. ix. p. 256, vol. x. p. 287), a good-looking girl, aged 16, who has been in the Hospital for the last ten months. A few months before her admission numbness came on in the right hand and fingers, which soon extended up the arm. The right leg became similarly affected soon afterwards, and then the left hand and fingers. On her admission there was partial loss of sensibility and power in both hands and fingers. The fingers were semi-flexed, but by slight force could be readily straightened. There was also diminished sensibility in the legs, but she could walk with assistance. The muscular power became gradually less, and in the course of about two months the legs were completely paralysed. Considerable reflex action could be excited by tickling the soles of the feet. For a short time she suffered from retention of urine, and passed her stools under her; but from these symptoms she has quite recovered.

(a) The notes of this and the following case were taken from the note-book of Mr. Perrin, one of Dr. Beale's clinical clerks.

At the present time she can move the arms about pretty freely; she cannot straighten her fingers, which are in a permanently flexed position, and she has very slight power of squeezing with the hands; the legs are completely paralysed. There is no paralysis of the sphincters. She eats and sleeps well, and is now becoming very fat. The urine is natural. This patient has been at different times placed under courses of iron, iodide of potassium, bichloride of mercury, strychnine, various tonics, preparations of valerian, etc., without any apparent effect.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0

Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.

Post-office Orders and Drafts on Army or Navy Agents, should be made in favour of Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d. | A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d. | A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, FEBRUARY 16, 1867.

COMPETITION.

Every one knows to his cost the state London was in when snow and the parochial authorities got joint possession of the streets. Nobody could move at will. In Medical education we have come to much the same sort of block. Councils, licensing boards, and curriculums cripple us. The only difference is this: the snow was the act of God, and the heavy fall of curriculums, rules, and regulations is the act of College bumbledom. In the course of nature the snow has gone, and we hope some day the jumble of mayors, aldermen, and vestries will be transformed into the likeness of the one omnipotent Hausmann. To melt away the curriculums, to reanimate our examiners, and to give freedom to teachers and learners, is what we want to do. As matters stand, there is no such thing for either class. For the student there is only one narrow way to scramble from apprenticeship to membership. You might as well try and put Gladiateur through his paces along Cheapside, or run the Derby beneath the dome of St. Paul's. Among schools and Professors we have the anomaly of competition under monopoly. The fate of wasps in a bottle is an almost used-up scrap of illustrative popular science, and men on a raft adrift in mid-ocean soon show what human nature comes to. A few students and a few fees to divide every year, eleven schools—little and big—to share them, which out of the eleven are to go to the wall, and what will they do to avert their fate? The spectacle is a sorry one, but it is worth while to look at it—competition under monopoly.

The story of the monopoly is overtold. We all know that nobody can give Medical lectures of any use for examinations besides recognised lecturers. "No lecturer will be acknowledged by the Court who is not connected with a recognised Medical school." All the London Medical schools are now Hospital appendages; and their regulations have been made by Boards consisting virtually of Hospital officials. Dr. Hall Davis was the last surviving specimen of the extinct class of independent lecturers. He gave way to fate a few years ago with a verdict of "Starved out." The statistics of his five last classes would make a curious scrap for Medical history. Medical teaching is now a Hospital monopoly. Eleven close schools have it all to themselves. The competition among them has been running on long enough for us to become familiar with its incidents and peculiarities. A fresh heat takes place every year over the old course of twelve subjects and twelve hundred lectures. Training begins as soon as the Summer Session is done, and the ear-weary students are dismissed to cricket, croquêt, or the paternal pestle and mortar. Meetings to revise prospectuses take place. New Deans are appointed in the hope of turning up a Barnum, and new dodges are discussed. Sometimes the fees are raised; sometimes they are lowered. Sometimes it is determined to adopt a dry, severe tone of announcement; sometimes an unctuous, trumpety style is tried. Sometimes it is to be all standing upon merits; sometimes the post carries what it is hoped may be irresistible appeals into the bosoms of British families. The supplement of the *Times* begins to tell its yearly tale. Cheap little advertisements first show themselves with the bare mention of the schools. By-and-by comes the full blossom of the names and titles of the staff and lecturers, with lists of all sorts of -ological lectures. Some schools content themselves with this and the Medical journals. Others, more venturesome, try a flight in the pet pages of literature, science, and religion, or dive into the recesses of provincial gazettes. Time at length brings on the 1st of October. All are at the starting-point, and the race fairly begins with a kind of paddocky personal show-up of the lecturers and the "introductory" canter. Now is the time for Deans to try their skill in booking men and pushing into their place in front or ruck. We talk of competition, but the thing is a fiction as regards the field. Weight of purse gives length of stride, and carries the favourites, Guy's and Bartholomew's, far ahead of all. Orthodoxy and latitudinarianism bring the godly and the godless colleges pretty nearly neck and neck behind the leaders, and the other odd seven tail off according to unknown circumstances. The queer part of the affair is, that all go backwards, downhill, and run for worse than nothing. The blue ribbon is disgrace, and the stakes emptiness.

In plain words, the struggle of the schools is to secure the greatest number of entries, and the way they take of coming at their object is by reducing the fees as low as possible, and returning as much of them as they can induce the students to take. As might be expected, even this does not answer, and the lowest bid fails to secure the largest classes. A few figures from the prospectuses are necessary for the exhibition of this self-immolating absurdity. They enable us to make out that the schools as a body voluntarily give back among the attending students, in money, prizes, and appointments, as much as one-tenth of the value of the gross yearly receipts. This is bad enough as an average bait, and indicates something commercially wrong. Where is the merchant that could do it without drifting into bankruptcy? But what are we to call it—frantic folly, or practical joking?—when all time, labour, and material, and nearly all the net profits are laid at the feet of those who will stoop for them? Everybody could foresee that, sooner or later, some wag or fool would bring things to this pass. It is the old coach-day tale of sixpenny fares and a dinner on the road. The session of 1866-7 furnishes us with this crowning absurdity. We do not wish to go one letter or one figure beyond book, and we need not do so for demonstration of the fact; but we hope that the exposure will save the Profession the further ridicule and contempt which must come out of such proceedings.

The number of entries at the several schools is known everywhere by the published returns. One of them had last October an entry of thirteen students. The printed prospectus of this school states (p. 18) that "the general fee for attendance on the Hospital practice and lectures required of Licentiates of the College of Physicians or Apothecaries' Company, or of Members of the College of Surgeons, is 100 guineas." The gross receipts were, therefore, £1365. The average deduction at all the schools for Hospital fees and

working expenses is found to be nine-sixteenths of the whole. The nine-sixteenths in this instance amount to £765. Taken from £1365, a sum of exactly £600 is left for division among the lecturers. Now, on p. 7 of the same prospectus we see that five resident appointments are annually given to students who have complied with the established regulations, and on p. 10 it is declared that the money value of each of these five appointments may be reckoned as at least £100. The Medical officers, while repudiating the prize system as applied to the classes, also propose to present a prize of twenty guineas for the encouragement of clinical work. Take £520 from the lecturers' balance of £600, and we have a residuum of £80. There are sixteen lecturers at this school, and the sixteenth of £80 is just £5, and no more. And what does that sum represent? The "money value" of some thirty-six lectures which, we suppose, are not improvisations, take an hour each in delivery, and, at the lecturers' own estimate, are worth precisely two shillings and ninepence farthing apiece. The question naturally arises, even in the uncalculating student's mind—Can this be a profitable investment? And only thirteen out of 366 think so. We have heard of but one thing rising in absurdity above this—to wit, that one of these same sixteen lecturers has been known to offer a course of lectures for nothing, and has deservedly found himself at the appointed hour *vis à vis* in the theatre with the College porter. Such is competition under monopoly. We need not ask an accountant which, or how many, of the eleven must go to the wall, nor look beyond prospectuses and advertisements to see what they are all doing to avert or invite their fate.

THE BRITISH PHARMACOPŒIA OF 1867.

On coming to a more minute examination of the proposed Pharmacopœia, we find several points worthy of notice. Thus we notice the old malt vinegar back again instead of French vinegar, a change, we think, for the better; the class *Aceta*, which in the last edition of the Pharmacopœia was left out in the cold, is again represented by the Acetum Cantharidis and the Acetum Scillæ, the former being very slightly stronger than the old London preparation, but weaker than either that of Edinburgh or Dublin. Speaking of the acids, the plan usually adopted in the present edition is to give a process which *may* be followed; but, at the same time, tests for ascertaining the substances' purity are laid down, so that, if it answer the requirements there enumerated, every manufacturer is left to prepare it as he chooses. Looking over the volume, we observe that the formulæ alluded to as being given in both the old and new notations are not invariably placed in the same situation—a circumstance we regret, were it only for the sake of symmetry. In the list of acids we observe that in certain instances the process of preparation is prescribed in the Pharmacopœia, and in others only given optionally; could there not be a little more uniformity in this respect also? In the present edition the Aconitum of the former is transmuted into Aconiti Folia, but the officinal portion—viz., the fresh leaves and flowering tops—remains unaltered. Again, in the case of Ether full directions are given for its preparation, and an additional form, Æther Purus, is given in the body of the work, with directions for its rectification. Under the head of Ammonia we regret that we do not find all preparations containing it; thus all the Liquors are found under that head, and no reference is given to them when other compounds of ammonia are mentioned. Sal Ammoniac gets another change of name; this time it is Ammonii Chloridum, which we hope it will retain. Bitter Almonds are now officinal as well as the sweet variety, but only for the preparation of the fixed oil. The rule observed in the case of the preparations of ammonia is again broken through in the Anethi Fructus and the Anthemidis Flores, as they are termed, coming under A, instead of placing the one under the head of fruit, the other under the head of flowers; yet, curiously enough, neither of the oils or other preparations are here given. In the case of antimony, care must be taken not to confound Antimonium nigrum of the new Pharmacopœia with anything except the prepared sulphuret of antimony of the old. Strangely, no formula, either according to the old or according to the new notation, is given for water, although it is probably of all substances the one best adapted to show the difference between the two. Besides the simple alkaloid Atropine, we now find a preparation of it—the sulphate—which has long been in the American and Prussian Pharmacopœias, and which, being far more soluble than the pure alkaloid, will be found more useful in practice. The term Bismuthum album is very properly expunged; in its place we find the Bismuthi Subnitras, and, along with this, probably a still more useful preparation, the Carbonate. We regret that we do not find an officinal solution of Bromine, recent Surgical experience speaking so highly in its favour as an application to sloughing sores. The term Bucco is no more, Buchu being now used both as English and Latin. The source of Calumba is changed, at least in name, from Cocculus palmatus to Jateorrhiza Calumba, and J. Miersii and the species of Garcinia which yields gamboge has been fixed as G. Morella *var.* pedicellata. Of Chlorinated Lime we had before only a solution; now we have, in addition, one of the new inhalations (Vapor Chlori). The Aqua Camphoræ is still made on the old system of simple solution in water, requiring at least two days for its preparation; in practice, however, we think that the plan recommended in the U. S. Pharmacopœia may be adopted with advantage, especially when time is limited. This plan is to take the camphor and reduce it to powder by grinding with a small quantity of spirit, after which it is to be thoroughly rubbed up with a little carbonate of magnesia, and the water gradually added. After filtration the product is ready for use. The same plan is applicable to the preparation of other waters when an oil is obtained from the crude material. Why not have given a formula for Essence of Camphor? Canella alba is restored to the Pharmacopœia, as is the Vinum Rhei (Ed. and Dub.), in which it was contained. Under Cantharides we find as officinal a substance long used in actual practice—blistering paper—there is also a change of nomenclature which we must condemn. The strong blistering preparation of 1864, known as the Linimentum Cantharidis, is here termed the Liquor Cantharidis, so that a mistake between the tincture and it is rendered still more probable. We also find a new preparation of collodion, termed Flexible Collodion, consisting of this substance mixed with Castor-oil and Canada balsam; it will no doubt be very useful. Confection of Opium is replaced. Among the Decoctions, we find that Decoctum Aloës has been again altered in strength to something intermediate between the preparations of 1851 and 1864. The Emplastrum Belladonnæ has been improved by the rejection of the Resin Plaster; and a new plaster, the Emplastrum Cerati Saponis, has been added to the list. Two very good preparations have been restored; these are the Essences of Anise and Peppermint (Dub.), but their strength is very properly doubled. The Extract of Aconite is still a watery one, and therefore less certain than one prepared with alcohol. The most important addition to this group is that of the Extract of the Calabar Bean made with spirit. There is a change in the nomenclature of some of the preparations of iron; thus the old Peroxide is now termed the Hydrated Peroxide, the substance used as an antidote for Arsenic being now called Ferri Peroxidum humidum. The new term Glycerine seems to us very awkward, however convenient the substances themselves may be, and we think the word Glycerole is preferable. The unfortunate substances Calomel and Corrosive Sublimate have again had their names altered to Hydrargyri Subchloridum and Perchloridum respectively. In connexion with the former, we have Black Wash rendered officinal for the first time, and with the latter the old Compound Liquor reinstated in its place. The old Compound Infusion of Gentian is also restored, the preparation of 1864 being now termed the Compound

Mixture. We find Lettuce officinal again, but only as Lactuca virosa; an extract is also given. That awkward preparation, the Aqua Laurocerasi, is still retained, and, what is still more extraordinary, its dose is not given; in fact, the only "water" whose dose is given is Aqua Camphoræ, but the quantity prescribed in the one case is far from being that in which the other should be ordered.

THE METROPOLITAN POOR BILL.

As the natural corollary to last year's agitation on workhouse matters, comes Mr. Gathorne Hardy's Bill. It comes, too, as the inevitable offspring of the reports of the Medical officers and inspectors of the Poor-law Board, and the results of their experience are visible in the practical nature of many of its clauses. How it will fare at the hands of parochial authorities remains to be seen. They may be reminded that the Bill has not about it much of their "bugbear," innovation; that, in fact, it merely proposes to carry out, to some extent, the proposals which formed the basis of all modern legislation on the subject—viz., to provide that better and more complete classification of the inmates for which provision was from the first intended.

It was the treatment of the sick which first called public attention to the matter, and Mr. Hardy's proposals in regard to them appear judicious and well-considered. First of all, the fever patients and the small-pox cases are to be drafted off into District Asylums. The Small-pox Hospital is full, and patients with this disease are, contrary to all sound policy, now obliged to be admitted into the sick wards of Workhouses. Of these two classes there appear to be at the present time some 700 or 800. Other Asylums are also to receive the insane. The Bill provides for the formation of districts by the combination of unions and parishes; and for each of those districts a suitable building will be provided. The necessities of the patients in regard to Medical attendance and medicines are to be met by the appointment of such a staff of officers with such salaries as the Poor-law Board from time to time by order direct. But, as the Bill also gives to the managers such powers as to the appointment, payment, and control of officers as were hitherto possessed by Union guardians, the Central Board will probably not interfere by order, except in flagrant cases of underpayment. Certain of the expenses are to be provided for by a common fund to be raised by a rate over the whole metropolis. Hitherto the services of officers, and especially Medical officers, have been very inadequately remunerated. Now, if those to whom is entrusted the carrying out of the measure are but judiciously liberal, we believe they have it in their power to make it a genuine success; and we would urge upon them the vital importance of attaching to the new appointments which the Bill will necessitate such salaries as will secure good men—men who will take a real interest in their work, and make these district Asylums and the Infirmaries in fact what the Bill makes them in theory—schools of Medicine.

Whilst on this point, we hope the claims of existing Medical officers of Workhouses to any new appointments will be considered. There is but little doubt that the treatment of the sick in the London Workhouses has been good, spite of defective space and organisation; and that it has been so is due to the personal attention of the existing officers. Such men as French, Bloxam, Rogers, Symes, and Godrich would do honour to any Hospital, as Practitioners or as teachers.

The Bill provides for the establishment of dispensaries to be controlled by a committee, each member of which is to be either a guardian or a ratepayer assessed at not less than £100. The guardians are to find suitable places at which the poor can attend for the advice of the Medical officers, and are also to provide medicines and Medical and Surgical appliances. The dispenser and the district Medical officers are to be appointed by the dispensary committee, subject to the orders of the Poor-law Board. The Bill, however, makes careful provision for the continuance of present officers. Their duties and remuneration may be modified, but by the Poor-law Board, *not by the guardians or dispensary committee.*

On a consideration of those clauses of the Bill which affect the sick, and with which we are mainly concerned, we are of opinion that in many points it will have the effect of improving the condition of Medical officers. It will at all events, by removing from the Workhouse Infirmaries the insane and the fever and small-pox cases, place more room at their disposal, and so give them a better chance of successfully treating the remainder. It transfers much of the control of their appointments and salaries from the guardians to the Central Board. This cannot but prove a useful change, as it will place him in a position sufficiently independent to allow of his suggesting such improvements in his arrangements for the sick as his experience may suggest. This, we all know but too well, has been heretofore next to impossible, and attempts of the kind have led to persecutions which showed that boards of guardians wanted but the power, not the will, to remove the officer whom they considered inconveniently zealous.

It must be added that the fate of the Bill, so far as regards details, depends on the vitality of the present Government. It is understood that Mr. Villiers has a measure in preparation, which would be forthcoming on a change of Administration, and which would probably be less favourable to existing Medical interests.

THE WEEK.

THE NEW DIRECTOR-GENERAL OF THE ARMY.

It is said in circles usually well informed, that Sir James Gibson will retire, and be succeeded by Dr. Logan. This appointment will be approved of by the great body of members of the Army Medical Department.

EPIDEMIC INFLUENZA IN LONDON.

Practitioners at the West-end speak of a rather considerable epidemic of influenza which has prevailed during the last three weeks, although it does not seem to have yet made any show in the Registrar-General's weekly return. Violent catarrh and great sense of muscular fatigue are the early symptoms; and these are followed by neuralgia in the head and face, which requires the liberal administration of quinine.

POOR-LAW MATTERS AT CARDIGAN.

There is a workhouse at Cardigan, of which Mr. David Mathias was till lately Medical officer, at the magnificent salary of £10 *per annum.* He also holds one of the outdoor district appointments of the union. During the last summer, when cholera was prevalent in the neighbourhood (and we know better than we ever did the peril which this implies to all within its reach), Mr. Mathias was indefatigable in his exertions day and night to stamp out the pestilence. For this he gets no thanks; so, finding that his Poor-law appointments do not pay, he had the audacity to ask for a small increase of his salary as Workhouse Medical Officer. This was too much for the guardians, and was refused; whereupon Mr. Mathias resigned the workhouse. Then the guardians not only (as we learn) employ an unqualified man to attend the Workhouse, at double Mr. Mathias's salary, but they endeavour to turn him out of the District which he holds, and to induce some stranger to come and compete for these appointments. Whilst at the Medical Council and Medical Schools every effort is being made to improve the qualifications of Medical Practitioners, it is simply suicidal on the part of the public to discourage the better informed, careful, and conscientious members of the Profession by these miserable proceedings. First-class students will not enter the Navy as it is; what class of Practitioners are likely to be attracted by the Cardigan guardians?

*

CHOLERA IN ENGLAND.

We have waited for the return of the Registrar-General of the deaths in England during the autumn quarter (ending December 31) of last year, in the expectation of finding therein statistics which would enable us to complete the partial view we gave, in a former number of this journal,(a) of the progress of epidemic cholera throughout England and Wales in 1866. But, for some reason or other, the very useful tabular statement of deaths from cholera and diarrhœa which was given in the quarterly return for June, has not been repeated for the last quarter, and the statistics of the epidemic must therefore, we suppose, remain incomplete until the detailed abstracts of deaths for the year 1866 are published, unless a special report on the subject be called for, which, we fear, is not likely. There is, unfortunately, a tendency in the public mind to forget all about dangers which have become merged in the irrevocable past; hence we have always protested against the practice of withholding the results of official inquiries until such time has elapsed as is requisite for the publication of an elaborate report, especially when the additional delay caused during the recess by the etiquette of Parliamentary presentation is taken into account. An interval of twelve or eighteen months is sufficient in this high-pressure age to obliterate even the lessons which a severe epidemic teaches. When cholera is at work amongst us, we are all wonderfully zealous, because it is a present source of danger; but as soon as the dread visitant has departed, its terrors fade from public recollection. It is, therefore, in every way much to be regretted that means are not available for gathering up the threads of fact and hypothesis *pari passu* with the progress of an epidemic, so as to allow of a much more speedy application of whatever principles of action result from close observation and record of immediate and concurrent circumstances bearing on the nature and treatment of disease. However, we are accustomed to wait patiently for measures of sanitary reform, and we are not without hope that some day we shall have a Department and a Minister of Public Health to see after these matters, and the sooner the better.

We wish it to be understood that we are not imputing blame to the Registrar-General in the foregoing remarks; we know enough of his department to be aware that it is taxed to the utmost in ordinary times, and can hardly be expected to cope with exceptional requirements. And, indeed, the last quarterly return does in some measure give the information we want, inasmuch as those localities where cholera has prevailed are generally mentioned in the Registrars' notes on the health of their districts, but the numbers of deaths from cholera in some places are evidently not given with sufficient accuracy to warrant their final acceptance; and with this proviso we subjoin what may be considered as an indication of the extent to which the epidemic has been fatal throughout the country. The returns of diarrhœa are too fragmentary to warrant us in making use of them. The "divisions" represent the several groups of counties arranged topographically for registration purposes.

Divisions.	Population 1861.	Deaths from cholera returned in Registrars' notes		
		Sept. quarter.	Dec. quarter.	Total.
England and Wales . ..	20066224	10365	2465	12830
I. London	2803989	4714	834	5548
II. South-Eastern Counties	1847661	737	24	761
III. South Midland Counties	1295515	65	14	79
IV. Eastern Counties	1142562	454	13	467
V. South-Western Counties.. ..	1835714	375	144	519
VI. West Midland Counties	2436568	82	20	102
VII. North Midland Counties.. ..	1288928	44	8	52
VIII. North-western Counties	2935540	2022	395	2417
IX. Yorkshire	2015541	240	33	273
X. Northern Counties	1151372	118	356	474
XI. Monmouthshire and Wales ..	1312834	1514	624	2138

These figures show how the epidemic has shifted its quarters during the six months. Thus, in the three months ending September 30, London contributed nearly half of the total deaths, the north-western counties of Chester and Lancaster one-fifth, and Wales one-seventh; in the subsequent three months the declining force of the disease was very marked in London—where it has in fact become extinct, at least for the present—but the northern counties and Wales suffered much more severely than in the preceding quarter. The counties in which the disease has been most active during the last quarter are Devon, Chester, Lancaster, Durham, Northumberland, Monmouth, Glamorgan, Flint, Denbigh, and Carnarvon. The major part of the deaths appear to have occurred in the earlier part of the quarter, the disease having, as usual, subsided towards the close of the year. The germs are, however, evidently widely sown, and it remains to be seen whether, with the advent of spring and summer, they will spring from their present dormant condition into active operation, or, by vigilant sanitary precautions, be effectually repressed.

(a) *Medical Times and Gazette*, No. 853, p. 475.

NAVAL MEDICAL SERVICE.

It is reported that the Admiralty have relinquished their scheme for obtaining Assistant-Surgeons by making pecuniary advances to Medical students. The proposed measure itself bore evidence of the straits to which the ill management of the Medical service has reduced the Admiralty, and also of the ignorance which prevails in high official circles as to the feelings and requirements of our Profession. As a means of attracting men to the service, we believe it would have proved utterly inoperative, and would have been received rather as an insult than as a benefit by the whole class of Medical students. The only mode by which the Navy can be rendered a popular service is by improving the position and prospects of the Medical officers. The recommendations of the Royal Commission once adopted, and sufficient guarantee given of the good faith of the Government, the British Navy and Army would speedily be the most popular Medical services in Europe.

KEARNS *v.* STORKS.

The following letter from Sir Joseph Olliffe, in reference to his share in confining Mrs. Kearns at Charenton, has appeared in the *Times*:—

"*To the Editor of the Times.*

"Sir,—I hope I may be excused for intruding a few lines on your valuable space with reference to the report in the *Times* of 'Kearns *v.* Storks.' I allude to the statements of the plaintiff in her evidence in court as to what took place on the occasions on which I saw her professionally.

"These statements are incorrect in important particulars, and are refuted by the deposition given by me under the commission in the cause executed at Paris. As, however, the commission was taken at the instance of the defendant, and as his case was not gone into, the facts deposed to by me are not before the public. Although I have little fear that in England the rule, '*Audi alteram partem*,' will be forgotten, I think it right to mention the fact of my deposition, so as to guard against the possibility of error or misconstruction.

"I would only add, that the French Physicians who examined the plaintiff here, and whose depositions were also taken under the defendant's commission, are of the highest standing in the Profession in France, and of special authority in cases of mental disease.

"I have the honour to be, Sir, your obedient servant,

J. F. Olliffe, M.D.

"2, Rue St. Florentin, Paris, February 8."

The matter, unfortunately, is likely to give rise to further litigation. The plaintiff's solicitors (Messrs. Elcum and Hocombe) have replied by forwarding to the same paper a letter, in which they threaten Sir J. Olliffe with legal proceedings at the patient's suit for wrongly certifying her of unsound mind.

POLYANDRY IN CEYLON.

"POLYANDRY exists in the interior of Ceylon up to the present day, though the system will die out in the course of a few years, marriages in accordance with it being made illegal by a recent law. According to the law of inheritance in Ceylon, every child not disinherited in the parent's lifetime is entitled to a share in the parental estate; consequently estates become subdivided until one share is found insufficient to support a family. Whereupon two or more brothers (sometimes as many as seven) agree to take a wife in common, the children being considered the offspring and inheriting all the property of the joint husbands, who are called by the children their eldest, second, youngest father, etc. There is perhaps another reason for this system: that in ancient times, when the compulsory service exacted by the native kings was very heavy, a man would be absent from his home for months together, and, but for the device of a joint-husband, would have no one to whom to entrust the care of his wife and lands." The foregoing memorandum has been sent us by a civil servant of the Crown well acquainted with Ceylon, as an addendum to the list of sexual aberrations. It shows that, as the son of Sirach said, all things are in pairs: polyandria in Ceylon counterbalances polygynia in America.

FROM ABROAD.—JUBILEE OF PROFESSOR HEBRA—JUBILEE OF THE BELGIAN ACADEMY OF MEDICINE — LOSSES OF THE PRUSSIAN ARMY DURING THE WAR—DISCUSSION ON NURSE CHILDREN.

ONE of those pleasing incidents of German university life that characterise the affectionate relations which prevail between professor and pupils among our German *confrères*, recently occurred at Vienna. Professor Hebra having just completed twenty-five years as perhaps the ablest teacher of skin diseases who has ever existed, it was resolved by his present and former pupils to take the occasion of this jubilee and to give him an ovation. On the Professor entering the theatre where he had taught for so many years, he was received with loud cheers by a crowded auditory, and his assistant, Dr. Kohn, delivered an oration setting forth in emphatic terms how much dermatology stood indebted to his labours, and presented him with an address enclosed in a luxurious and artistic envelope. In reply, Hebra dwelt upon how much he owed in the beginning of his efforts at the reformation of dermatology to the stimulus he derived from Professor Skoda's critical and creative mind. In reviewing the progress of dermatology, he observed that the so frequently denied, but now universally admitted, itch-insect is really the starting-point in the improvement of our knowledge of the pathology of the diseases of the skin. Through the demonstration of its unsightly presence, the psoric diathesis, and with this a whole series of other diatheses, were ascertained. We are at present, he observed, only at the A B C of dermatology, and must learn to read the skin; and from many examples it clearly results that dermatology in the future may present important indications concerning diseases of internal organs. The speaker could only wish that in the future it may engage the earnest attention of Physicians. In the evening, a more limited number of Hebra's admirers celebrated the event by a banquet.

The Belgian Academy of Medicine has also just been celebrating the jubilee of its twenty-fifth anniversary, under the presidency of M. Vleminckx, who, indeed, has held that office ever since the foundation of the Academy by Leopold I. This eminent Surgeon, being also an influential member of the Chamber of Deputies, has been highly instrumental in getting carried out the views of the Academy upon hygienic and Medical subjects by effective legislative measures. The Academy has, indeed, never been a mere consultant body, like the Paris Academy, deliberating upon matters officially brought under its notice by the minister of the day, and advising him upon them. It has exercised a very active part in initiating such measures as it deemed called for in view of protecting or improving the public health and condition. To such initiative on its part have been due enactments respecting the health of miners, the sale of poisons, the registration of deaths, the domination of syphilis, etc., etc. As regards this last affection, its efforts have been so successful that Belgium is now the country in which it commits by far the fewest ravages. The Academy, in fact, seems to be pursuing a highly prosperous and useful career, although it must be admitted that the discussions which take place within its walls would profit not inconsiderably if much more condensed, some of the members seeming endowed with an almost fatal facility of speech.

The following prize questions were announced at the meeting:—1. "Cancers called Surgical, especially regarded from a therapeutical point of view." A gold medal of the value of 1200 francs. 2. "A chemical and pharmaceutical examination of *Tanacetum vulgare*." A gold medal of 500 francs. Essays for these two prizes are to be sent in by April 1, 1867. 3. "Examine what are the functions devolving upon the various portions of the encephalon, taking, as the basis of these investigations, experiments on living animals, clinical and necroscopic observations, and the conclusions furnished by histology and comparative anatomy." A gold medal of 1500 francs. 4. "The chemical history of digitaline." A gold medal of 500 francs. Essays for these two questions by April 1, 1868. 5. "An exposition and discussion of the prophylactic measures which facts and experience show capable of being opposed to the invasion and propagation of the cholera." A gold medal of 1000 francs. 6. "Exhibit the symptoms, causes, anatomical lesions, and nature of epizootic contagious typhus (cattle plague), as observed in the various species of animals capable of contracting it; and detail the differential characters of the various typhoid affections with which it may be confounded." A gold medal of 1200 francs. Essays for these two questions by January 1, 1869. All essays to be written in Latin, French, or Flemish, and forwarded to the Secretary of the Academy, Place du Musée, Bruxelles.

The details of the strength and losses of the Prussian army during the war of 1866 have just been published. It appears that the total number of troops under arms was 363,109, consisting of 281,565 infantry, 39,108 cavalry, 32,236 artillery and pioneers, and 10,200 rifles (Jäger) and sharpshooters. There were 7091 superior and 356,018 subaltern officers. Of these, 2910 men were killed, 15,554 wounded, and 3022 missing—*i.e.* 8·01 per 1000 killed, 42·83 per 1000 wounded, and 8·32 per 1000 missing. A larger proportion of officers were killed than of the soldiers; for, adding the whole killed and missing together, there were 26·65 per 1000 officers to 16·13 per 1000 soldiers. Deaths from cholera and other diseases are not here counted, although those which subsequently died in Hospitals from wounds are included. The conclusive battle of Königgratz (obstinately termed Sadowa by our newspaper writers), on July 3, was attended with great losses—viz., officers, 249 wounded, 75 killed, and 3 missing; soldiers, 6455 wounded, 1097 killed, 1817 missing.

The discussion on the mortality of nurse-children in France has been closed at the Academy by the appointment of a special committee for the purpose of collecting all the evidence and data which exist upon the subject, and reporting thereon. The eminent names selected form a guarantee that this committee will prove a good working body. They are those of MM. Blot, Jacquemier, Broca, Husson, Devergie, Guérin, Devilliers, and Bergeron.

In the mean time, the Society for the Protection of Infants has held its anniversary meeting, under the presidency of M. Barrier, with great *éclat*. According to the report of M. Mayer, the indefatigable Secretary, and, indeed, the originator of the Society, efficient Medical inspection has been organised under its auspices in thirteen of the departments.

So slow, however, is the public in taking advantage of the benefits offered that only 800 out of the 18,000 annually sent from Paris into the country have as yet been brought under such inspection, which is entirely gratuitous. M. Mayer observed that the great difficulty to be contended with is the indifference and apathy of the families of the children, and the primary object of the Society is to rouse the maternal instinct into activity. To this end, among other means, it offers a prize of 500 francs for the best essay on "Maternal Suckling in relation to the Mother, the Infant, and Society." M. Mayer was not so successful in defending his project for the establishment of "maternal suckling colonies," which has been vigorously attacked by the critics as purely Utopian, and likely to do harm by agglomerating women and children in case of epidemic visitation. The proceedings terminated by the distribution of two prizes of 200 francs, and two of 100 francs, to nurses who had performed their duties in a pre-eminently satisfactory manner.

PARLIAMENTARY.—BILL FOR REMEDYING THE DEFECTS IN THE MANAGEMENT OF THE SICK POOR OF THE METROPOLIS—MR. GATHORNE HARDY'S STATEMENT—CRIMINAL LAW REFORM—RELIGIOUS TESTS IN THE UNIVERSITY OF DUBLIN—SCURVY ON BOARD THE "DREADNOUGHT."

THE principal event of special interest to the Medical Profession which has occurred during the present Session of Parliament is the introduction of a Bill by Mr. Gathorne Hardy, "for the establishment in the metropolis of asylums for the sick, insane, and other classes of the poor, and of Dispensaries, and for the distribution over the metropolis of portions of the charge for poor relief, and for other purposes relating to poor relief in the metropolis."

Mr. Hardy introduced the Bill in the House of Commons on Friday, Feb. 9. After a few prefatory remarks he called attention to the fact that a Committee upon the question of poor relief in the metropolis had begun to sit in 1861, and reported in 1864, and that no facts tending to implicate the management of the metropolitan workhouses, or the infirmaries for the sick poor, had been brought before them. The Committee, in their report, expressed satisfaction with the Medical treatment of the poor, and considered that it required no alteration. The report, however, stated that the present system was inadequate for the classification of the poor, and recommended that more power should be given to the Central Board. At the end of 1864 the cases of Timothy Daly and Gibson occurred, and these were followed by the inquiries at the Strand Workhouse and at Rotherhithe. These cases created a great sensation—perhaps a greater than was justified.

"When one considers that in the metropolis there are thirty-five workhouses, containing a population of from 25,000 to 30,000 persons, it would not strike one as remarkable that there should have been four cases in which great hardship and wrong had been inflicted. No doubt many things were revealed which showed that there was necessity for interference, but these particular cases, seen, as it were, in a kaleidoscope, through the comments of the press, caused a sensation which, if not unreasonable or unnatural, was disproportioned to the circumstances under which they occurred, and blame was imputed to the guardians, not only of the workhouses in question, but of the workhouses of the country generally. Every one must admit that the office of a guardian is one of great difficulty and delicacy. He is subjected to continual pressure by the ratepayers; in London he is watched with excessive scrutiny by the press, particularly after the occurrence of cases like those named. Through these discussions he becomes more fearful of acting on his own responsibility, and he exhibits a vacillation which otherwise he might not betray."

Mr. Hardy then passed under review the *Lancet* inquiry, of which he spoke in terms of approval, and the investigations undertaken by Dr. Edward Smith and Mr. Farnall by direction of the Poor-law Board.

"The report of Mr. Farnall was based on one supposition, and that of Dr. Edward Smith on another. Mr. Farnall adopted the statement of eminent Medical men, who said that 1000 cubic feet of space was required for each inmate of a sick ward; and Dr. Smith only tested the wards by the requirements of the Poor-law Board, which were that there should be 500 cubic feet of space for each inmate. But from both reports it was perfectly clear that the infirmaries were overcrowded, that the nursing and the appliances were defective, that the ventilation was deficient, and that great reforms were needed."

On Mr. Hardy's accession to office he did what he could by temporary measures to mitigate existing evils, and he spoke in terms of approval of the spirit in which suggestions he had made had been carried into effect by the guardians.

"At the same time," he said, "the two inspectors who had charge of the metropolis—Mr. Corbett and Dr. Markham—were most indefatigable by night and day in visiting workhouses, consulting guardians, and endeavouring by firmness and conciliation to obtain the remedies that would mitigate the evils which had been justly complained of, and simultaneously procuring information to enable me to propose legislation on this very important subject."

The resulting improvement in the condition of the workhouse infirmaries had been acknowledged by Mr. Ernest Hart. As Mr. Hardy was advised by Dr. Markham that there was nothing definitive on which to proceed with regard to the cubical space required, he determined to obtain an authoritative opinion upon the subject.

"I applied to the President of the College of Physicians, Sir Thomas Watson, and I cannot sufficiently express my gratitude to him for the zeal and ability with which he applied himself to this subject, as though it were the only one before him. Dr. Acland, of Oxford, also, with no other object than the public good, undertook to take part in the deliberations of the committee. Dr. Sibson, Mr. Chas. Hawkins, Mr. T. Holmes, Capt. Galton, Dr. Randall, Dr. Smith, Dr. Markham, and Mr. Corbett visited the workhouses not only by day, but by night, testing the atmosphere of the sick wards, and thus obtaining the data upon which conclusions might be founded. They did not treat the question simply as one of theory, but went fully into the subject, ascertaining the kind of diseases prevalent in the workhouse infirmaries, and directing their attention to the removal of certain classes of sick—for example, small-pox and fever patients—from those infirmaries altogether, whose absence would, of course, make a material difference in the calculation.'

One remarkable point elicited by the inquiry was the absence of puerperal fever and hospital gangrene, notwithstanding the overcrowding and deficient cubical space. Since the workhouses were built opinions had altered on the subject of cubical space, and even on the employment of paid nurses. It was only in February, 1850, that the Poor-law Board had actually urged the guardians of Croydon not to appoint too many paid nurses, in a letter from which Mr. Hardy read the following extract:—

"Three at least of the paid servants in this Hospital must be discontinued. In the greater number of country unions there is no paid nurse, and in none, it is believed, more than one. In pronouncing upon this point the Poor-law Board attach more weight to the results of experience than to the opinion of the Medical officers of the Croydon Workhouse, though supported by that of three of his Professional friends. If, for instance, the infirmary of the Wandsworth and Clapham Union Workhouse can be, as it is, perfectly well managed under one paid nurse, why should the Medical officers say that five paid nurses are required in the much smaller infirmary of the Croydon Workhouse?"

The following are the conclusions at which the Committee have arrived:—

"The Committee, after full and anxious consideration of the subject, have recommended that a space of not less than 850 cubic feet on an average, with six feet across the beds, should be provided for each sick inmate; of not less than 1200 feet for each offensive case in the separation wards; a minimum of 1200 cubic feet for each lying-in woman, and of 500 cubic feet for the chronic and infirm. They have not recommended any alteration of the space of 300 cubic feet at present allotted in the dormitories of healthy inmates."

But a great point on which success turns is ventilation. The

Scale, $\frac{1}{1500}$ of an English Inch |_____| × 700.

Large caudate nerve cell, with smaller cells and nerve fibres, from a thin transverse section of the lower part of the grey matter of the medulla oblongata of a young dog. The lines of dark granules resulting from the chemical action of acetic acid are seen passing through the very substance of the cell in very definite directions. Thus the cell is the point where lines from several distant parts intersect (Diagram, Fig. 39). It is probable that each of these lines is but a portion of a complete circuit (see Diagram, Fig 40). *a a a*, large fibres which leave the cell *b*, a fibre from another cell, dividing into finer fibres, exhibiting several lines of granules. *c c c*, fibres from a younger caudate nerve vesicle. *d*, fine and flattened dark-bordered fibres. *e*, three fine nerve fibres running together in a matrix of connective tissue. *f f f*, capillary vessels.

Fig. 39.

A diagram of such a cell as that represented in Fig. 38, showing the principal lines which diverge from the fibres at the point where they become continuous with the substance of the cell. These lines may be traced from ONE FIBRE ACROSS THE CELL and one or more of them may be followed into EVERY OTHER FIBRE which proceeds from the cell.

Fig. 40.

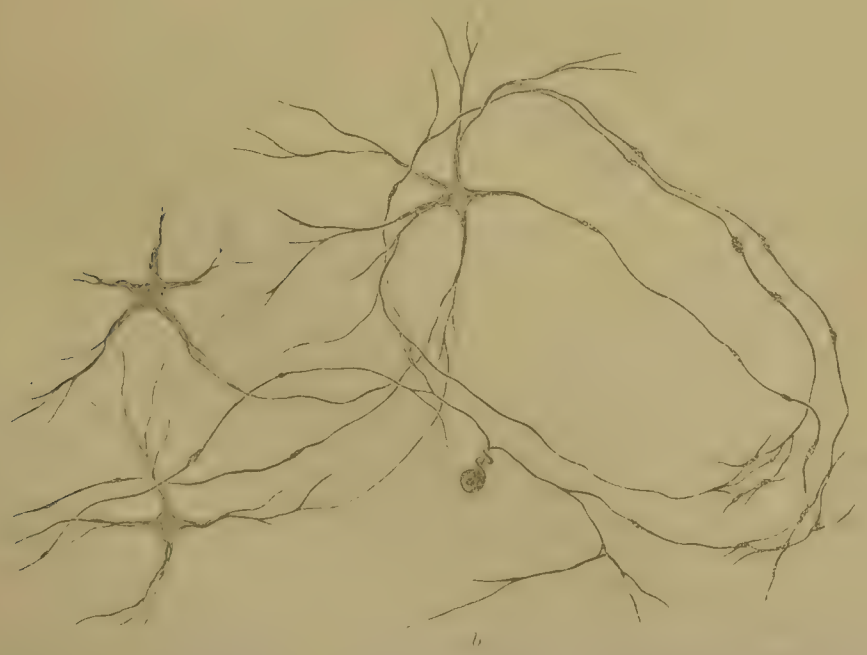


Diagram to show possible relation of fibres from caudate nerve cells of the spinal cord, and fibres from cells in ganglia, as, for example, the ganglia on the posterior roots. *a* is supposed to be the periphery; the cell above *b* one of those in the ganglion. The three caudate cells resemble those in the grey matter of the cord, medulla oblongata, and brain.

Fig. 41.

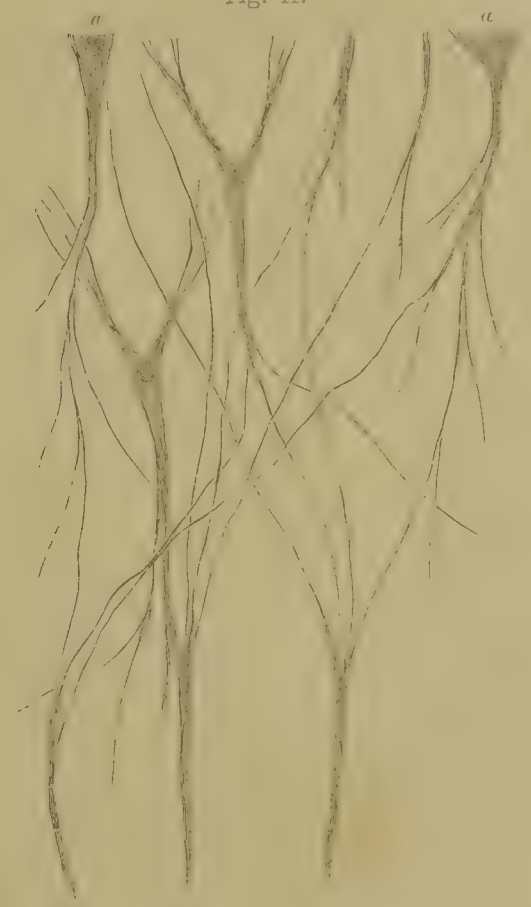
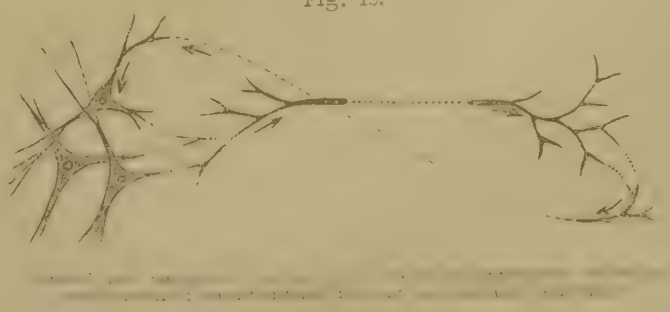


Diagram to show the course of the fibres which leave the caudate nerve cells. *a a* are parts of two nerve cells, and two entire cells are also represented. Fibres from several different cells unite to form single nerve fibres, *b b b*. In passing towards the periphery these compound fibres divide and subdivide, the resulting subdivisions passing to different destinations. The fine fibres resulting from the subdivision of one of the caudate processes of a nerve cell may help to form a vast number of dark-bordered nerves, but it is, I think, certain that NO SINGLE PROCESS EVER FORMS ONE ENTIRE AXIS-CYLINDER.

Fig. 42.



Committee have also given great attention to the best mode of ventilating, but on this point their report is not yet complete. When the appendices are complete they will be laid before the House.

"I made up my mind that I would act upon the data and opinions of the eminent men composing the Committee; and we find, therefore, that a great addition of space is required. Now, how is this to be obtained? We have in the metropolitan workhouses about 26,240 persons. That excludes the inmates of the Richmond and Croydon workhouses, which were improperly comprised within the metropolitan district. There are: temporarily disabled, 7046; old and infirm, 13,685; able-bodied, 2899; children above 2 years of age, 2150; infants, 1015. Of these 26,795 inmates, 1977 figure as 'imbeciles and idiots,' being included in some one or other of the above classes. In order to show how long persons may live in these workhouses, I may mention that there have been 4783 inmates for one year and upwards over 70 years of age; 3812 between 75 and 80; 903 between 80 and 90; 1352 have been inmates from five to ten years, and 857 above ten years. I saw in the City of London Union Workhouse a case which would have been one of great interest to the late Sir G. Lewis, who doubted whether there was any real instance of a man reaching that age—it was an authentic case of a man over 100 years of age, and he had every appearance of living longer. Well, the question is, how am I to get room? In the first place, I propose that the lunatics and imbeciles be removed into separate establishments; then, that the children above two years of age shall go to separate schools; and having done that, I believe I shall find myself still with a considerable deficiency of space under the new circumstances. We have to provide for about 34,000 persons, including children, and the deficiency must be made up by additional buildings. My object is to classify the different inmates of workhouses, and I hope to do that, in the first instance, by building asylums for 2000 lunatics. The next class to be removed is that of persons suffering from fever and smallpox. At present the great majority of those cases are sent to the Hospitals specially devoted to the cure of these diseases, but in several instances these Hospitals are overcrowded, and I am bound to say many of them are not so good as those under Poor-law management. I would therefore propose to take or hire such buildings as will accommodate from 700 to 800 of those patients. I hope and believe that the time will come when by proper attention to the use of those remedies which science has discovered—vaccination on the one hand, and good sanitary arrangements on the other—we may be able to dispense with those Hospitals almost entirely. But at present we cannot do so, and it is most material for the patients themselves and the people of the metropolis that they should be put under separate management. Now, am I to give up the existing workhouses? I think not, I believe, from the reports made, that there are twenty-five of the present workhouses which may be easily and satisfactorily adapted for all classes of poor, except those which I have before described. There is one thing, however, which we must insist on—namely, the necessity of the treatment of the sick in the infirmaries being conducted on an entirely separate system, because the evils complained of have mainly arisen from the workhouse management, which must be of a deterrent character, being applied to the sick, who are not proper objects for such a system. That is one thing which I should insist upon as an absolute condition."

Mr. Hardy therefore proposed that the workhouses should be managed by boards, one-third of whom were to be appointed by the Poor-law Board from residents in the union or parish rated at not less than £100 a year. After giving his reasons for not building six or seven large Hospitals, he proceeded to the subject of nursing.

"I would gladly insure, wherever there are a certain number of sick, resident Medical officers and separate matrons and nurses. I know, however, that I shall be told that I cannot secure good nurses, and Miss Nightingale states that trained nurses are not in existence at this moment. This being the case, we must do the best we can, not leaving ourselves at the mercy of unpaid pauper nurses, but employing responsible persons, under the supervision of matrons of a different class, and thus educating efficient nurses for ourselves. I believe that suitable persons could in many cases be found in the workhouses who would gladly seize the opportunity of earning a good livelihood, and that young persons might be found in the schools who would undergo a training for such positions. This, of course, would be a work of time; and, after all, the large Hospitals experience the same difficulty. In Liverpool a benevolent gentleman, Mr. Rathbone, gave £1000 a year for three years for the purpose of supplying nurses for the Liverpool workhouses, twelve persons trained by Miss Nightingale being put at the head of about eighty others. Everything was placed on what was thought a better system, but it is a singular fact that after ten months' trial—I admit, not sufficiently long—there were found to have been fewer discharges and more deaths than under the old system. I have another proposal to make with the view of securing more frequent visitation. It has been represented to me that there are no Medical schools in which the treatment of chronic diseases can be studied, and I therefore propose that the Poor-law Board should have power to establish such schools in connexion with these Hospitals, because the attendance of Medical Practitioners and their pupils would amount to an inspection of the most efficacious kind. I now come to the question whether anything can be done to diminish the number of sick inmates in workhouses. My attention was early directed to this point, for I believe that half the pauperism of the country begins with sickness, and I requested Mr. Lambert, an officer of the Poor-law Board, who undertook the collection of the statistics on which the measure of last year was based, to inspect the dispensary system in Ireland. He devoted part of his vacation to this object, and has made a report which I have laid on the table, and on which I propose to establish in the metropolis a system calculated to diminish the amount of sickness. The practice which now prevails of Medical officers prescribing upon a mere statement of the symptoms without visiting the patient is most unsatisfactory. I have been obliged, indeed, in some cases to remove Medical men for sending medicine day after day without seeing the patient. The general absence of any disastrous consequences from medicines thus sent upon mere guess seems to show that they must be of a very harmless character. (A laugh.) Indeed, in a union in the North, one of the paupers is entrusted with the administration of what is called "house medicine," of which anybody who likes may partake, and, although the establishment is not a large one, a gallon of this medicine is consumed weekly. The Medical officer says it does no harm, and the master says it is very effective. (Laughter.) Now, to remedy this loose system, I propose that dispensaries be established in different parts of the metropolis, and that in all cases the Medical man should write a prescription. This is the rule adopted in Paris and throughout Ireland, where it answers exceedingly well, and prevents a great deal of sickness which otherwise would have to be treated in the Hospitals. Dr. Rogers, the officer of the Strand Union, recommends that Medical officers should find the drugs themselves, but my proposition is, that they should simply give prescriptions, and that they should not find the drugs. This will remove a great temptation to the use of adulterated articles, and the best drugs will be obtained by the Boards, as, I believe, is done in Ireland."

The Bill also provided that the Local Acts in the metropolis (ten in number) should be repealed, and that the whole metropolis should be placed under the Poor-law Board. Mr. Hardy next discussed the equalisation of poor-rates, pointing out various objections to the principle, and intimated that, though he could not consent to equalise the metropolitan rates, the Bill would throw on the common fund the charges for lunatics, fever, and small-pox patients; Medical officers, dispensaries, and medicines; registration, vaccination, and the maintenance of children at school. To illustrate the effect of the distribution of these charges, £60,000 in amount, he mentioned that it would add 3¾d. in the pound to the rates of the City of London Union, it would relieve St. George's, Southwark, of 1s. in the pound, and would not amount to more than a penny rate over the whole metropolis. The last feature of the scheme—which altogether was very favourably received by the House—was a power to the Poor-law Board to appoint proper officers where the guardians refused or neglected to do it.

Mr. Ayrton, Lord Enfield, Dr. Brady, Mr. Locke, and Alderman Lusk made some general remarks in approval of the principle of the Bill, and leave was then given to bring it in.

Leave was obtained by Mr. R. Gurney to bring in a Bill to

remove some defects in the administration of the criminal law; by Mr. Lawson for a Bill to open the Professorships of Anatomy, Surgery, Chemistry, and Botany in the University of Dublin to all persons, irrespective of their religion.

On Tuesday, February 12, in answer to a question by Mr. Hanbury Tracy, Sir S. Northcote said that the attention of the Board of Trade had been directed to the fact that on the 9th instant eleven seamen had been received on board the *Dreadnought*, suffering from scurvy, and that it was the intention of the Government to introduce some measures for the control of the disease.

A Bill for providing better dwellings for artisans was introduced by Mr. M'Cullagh Torrens.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The Hunterian Oration, now biennially given in the theatre of the above institution, was delivered on Thursday last, the 14th inst. (the anniversary of the birth of Hunter), by Professor Hilton, F.R.S., the Senior Vice-President of the College, before the Members and a great number of distinguished visitors, most of whom attended to do homage to the memory of Hunter, and to show their respect to one of the most popular teachers and Surgeons of the day.

The orator commenced by stating that one of the signs by which the intellectual progress of nations might be measured was to be found in their just appreciation of those of their countrymen, past and present, who had given evidence of unusual mental endowment. It had, however, commonly happened that a new line of thought, or the opening up of a new track of mental or philosophical inquiry, had escaped the attention, or even excited the opposition, of contemporary thinkers, seemingly because their minds were pre-occupied in the elaboration of ideas antecedently suggested. Were the present a fitting opportunity for the quotation of historic proof of the orator's position, it might be abundantly adduced from the records of the classic ages; but the present seemed to him rather an apt opportunity for inquiry into the reason why the appreciation of philosophic knowledge should have been so prominent a feature of one age, and so utterly lost sight of in another. Necessarily the ages of strife could not nurture philosophy. "*Inter bella cedant artes*" furnished the one prominent cause for the indifference to mental culture in many epochs of the world's history, but careful consideration would elicit causes other than those of the sword and the battle-field for the different capacity necessary to the intellectual appreciation of contemporary labour at different periods of time. How rarely had the great intellectual luminaries of any age had kindred spirits to sympathise with their efforts! As a rule, their special value had been gauged by succeeding generations rather than by their own, because the light which they emitted furnished the medium of recognition through which their merits became visible. That outburst of intellectual splendour, apparently without any direct stages of development leading up to it, that signalised the reign of Elizabeth, had scarcely a parallel in the history of this or of any other nation of modern times, and yet what evidence did we find of its just appreciation by contemporaries? The orator then eloquently eulogised those master minds, Shakspeare, Bacon, Cecil, Raleigh, Drake, Hooker, &c., and quoted, in confirmation of his previous statement, the expression of Bacon, that "learned men, forgotten in states, and not living in the eyes of men, are like the images of Cassius and Brutus in the funeral of Junia, of which, not being represented as many others were, Tacitus saith, '*Eo ipso præfulgebant quod non visebantur.*'"

Our Hunter afforded another marked instance of this defective estimation by contemporaries. Two succeeding generations had done much to atone for the indifference of his own. It would be difficult to find another instance in which so large a meed of posthumous fame had been, as it were, literally dug up from the dry bones which he had bequeathed. The minds of the Professional men of his day seemed, as far as we knew, to have failed in measuring the extent and depth of the great truths which he had enunciated, or in appreciating the value of those which he was engaged in elaborating. The progressive knowledge of several succeeding years appeared to have been necessary to evoke the earliest public attempt to establish the true relation which his marvellous labours bore to the development of science. Hunter continued to labour patiently, perseveringly, and alone, with a sagacious and primitive simplicity; he read Nature's facts, as exhibited in the organised world, with a zeal unexampled, an industry scarcely ever surpassed, questioning her in her own language, and slowly understanding her tardy, and oftentimes to him obscure, responses. Professor Hilton then entered into the early history of Hunter and his struggles, and showed how much he did for himself from the very scanty materials at his command, and said it was curious to scan how aptly, and by what intuitive logic, Hunter worked out whatever subject he had in hand. A comparative illustration of this might be obtained by studying how Hunter and Darwin, the two foremost pursuers of biological inquiry in their day, dealt with the same subject, viz., that of sympathy. The orator then entered largely on this important subject, directing attention to an interesting diagram illustrating Hunter's explanation of this great physiological problem.

Professor Hilton then, in elegant and classical terms, drew a contrast between man's brief span of life and the endless pursuit of science, as well marked in Hunter's history.

Whilst Lagrange and Laplace were extending the powerful and mathematical analysis bequeathed by Newton; and Herschell, by patient observation, was extending Newton's great law of attraction to the furthest limits of our system, and completing the exact astronomical science of our day; whilst Black, Cavendish, Priestley, Scheele, Lavoisier, and their fellow-labourers in chemistry were reducing all ponderable bodies to their simplest undecomposable elements; whilst Dalton was investigating the law by which these elements were combined in numerical proportion of weight, and Hauy the geometry of their combinations—Hunter alone, unaided by sympathetic fellow-labourers, was scrutinising the tangled maze presented by the myriads of living forms, reducing them to order and investigating the hidden laws governing their formation and growth. Let the 10,000 preparations in the College Museum, the work of his own hands, bear witness how fascinated he was in his pursuit of Nature—these were the noblest monuments of his well-directed and well-sustained labour. He who would carefully decipher that record would best understand that reputation which had caused three succeeding generations to recognise and honour Hunter as the philosophic expositor of natural history, the profoundest anatomist and physiologist of his day, and, by common consent, the great conservative Surgeon and pathologist of all time—above all, the most patient exemplar of the true student of Nature.

We should fail to appreciate the full measure of Hunter's mental stature if we did not recognise the difficulties under which he toiled. The loneliness of his pursuits, the want of a single mind to sympathise with his large and exalted views of the grandeur of animate nature, must have had a chilling influence on his enthusiastic temperament. Worse than all this, he met opposition at every turn; he became at last conscious that he could never live to see the issue of all his toil, and in the bitterness of soul exclaimed, "My life is at the mercy of any scoundrel who chooses to put me in a passion!" How singularly prophetic he was in this matter is painfully too well known. Yet still he struggled onward, unmoved from his purpose, with that high resolve which can only belong to great minds.

Our Profession, said Mr. Hilton, has lately been reproached in these terms, brought most prominently before the public eye—that there is "probably no profession which in its aggregate or corporate capacity excites so little the interest of the public as that which professes to cure or alleviate the ills resulting from the physical constitution of man." This is but too true a picture of the indifference of well-informed men (on other subjects) to our art. But it was no real reproach, it arose not from our want of attainment, but from their total inability to gauge its worth. They knew nothing of the vast array of facts of which we must carefully acquire a knowledge, and skilfully and systematically store in our memories. These people knew nothing of the intricate problems of life and disease, which we had to investigate for ourselves with toilsome labour; the very formulæ of these problems were unknown—unintelligible to all but those specially instructed;

they could never realise that inner sense of true responsibility felt by the honest Surgeon when he knew that life and death so frequently depended not only on well-practised dexterity of hand, but upon the devotion of all his faculties of mind to the solution of the most intricate phenomena ever scanned by the human intellect.

Popular appreciation was a matter of small account, but lack of interest in our labours by professional contemporaries was hard to bear. If the honest worker was condemned with faint praise, without taking pains to obtain an accurate knowledge of the value of his discoveries, this was still harder. Hunter had to endure all this, and right manfully he bore it all. The inner conviction that, let the world say what it would, no dogmatism, no vague denial, no sneer could make any impression on his proven facts—above all, his conscious love of truth for truth's own sake, called out in Hunter only the high-minded indifference of the philosopher to the petty assaults of ignorance. Thus, we were not to strive for the brittle fame of the meteor, dazzling only for a short time, to be extinguished for ever. Rather should we seek, by the emanation of truth, the enduring steady light of the fixed star whose brilliancy time would not pale—a fame which earned, after the lapse of more than sixty years, the tardy national recognition of Hunter's great merits, and earned for his remains a hallowed resting-place amongst the wisest, noblest, best of Britain's worthiest sons. There they rest "in honour with the honoured"—

> "There so sepulchred in such pomp do lie,
> That kings for such a tomb would wish to die."

At the conclusion of the oration, Professor Hilton received the well-deserved applause of his large and distinguished audience; and in the evening the President (Professor Partridge) and Council entertained a still more distinguished party at a banquet at the Albion Tavern, among whom were observed the Earl Granville, the Bishops of Lichfield and Oxford, the Lord Chief Justice Bovill, the Lord Justice Cairns, the Director-General of the Medical Department of the Navy; Sir Thomas Watson, President of the Royal College of Physicians; Mr. Beresford Hope, M.P.; Mr. Cæsar Hawkins, Sergeant-Surgeon to the Queen and representative of the College of Surgeons at the Medical Council; Mr. Cooper, the Master of the Apothecaries and the representative of that Society at the Council of Education; Drs. Daldy, Barnes, Farre, Fagge, Percy, Pettigrew, &c.; and nearly all the Members of the Council.

CRITIQUE ON THE DOCTRINE OF VITAL FORCE,

AS ENUNCIATED BY DR. LIONEL S. BEALE, F.R.S., IN HIS EDITION OF TODD AND BOWMAN'S PHYSIOLOGY.(a)

Very few scientific works could be promised a more hearty welcome from the Profession than the re-issue of Todd and Bowman's admirable "Physiology" from the hand of their worthy successor, Dr. Lionel Beale, whose originality, ingenuity, and unwearied zeal as an observer, have gained for him so high a reputation. And while there is no department of physiological science in which the expression of his views would not be looked forward to with interest, none would probably excite more than this first part of the work, which contains, among other subjects, a discussion of the fundamental principles on which physiology is based, together with a summary of Dr. Beale's views of the processes and structures by which nutrition is effected.

That the volume is strikingly novel, and introduces any one (if any one there be) previously unacquainted with the learned editor's views into a completely new region of physiological conceptions, is little to say. The skill and clearness with which the subjects are worked out command admiration. In these respects Dr. Beale has fully caught the spirit of his predecessors, and the new edition cannot fail to retain the position which the first at once assumed as a model of exposition. This part contains a concise statement of the methods used by Dr. Beale for carrying out those microscopical investigations by means of high powers, in which, as yet, he stands almost alone, and numerous coloured plates illustrate the results at which he has arrived. On these points we can only refer to the volume itself. No one can criticise Dr. Beale on this ground unless he have carefully repeated his procedures and put his statements to the test, which, we doubt not, would confirm their truth. But it is not on every point that Dr. Beale outsoars his readers as he does in this special region Doctrines of vitality, the relations of physical phenomena to life, of chemical force to germinal powers, are in the main independent of the microscope; nor, if we could see with a hundred eyes, each of them lenses of the $\frac{1}{100}$th of an inch, should we be much nearer the solution of the mystery. It appeals not to the physical, but to the intellectual eye.

Doubtless the impulse given by advancing knowledge, like other impulses, is apt to carry its subject beyond the true point of equilibrium. The human intellect oscillates towards truth rather than advances directly thitherwards; and, as light dazzles the waking eye, so a fresh insight into nature may for a time seem to make blind the very mind that it illumines. Thus there needs amid the flood of new ideas a perpetual insistance upon old truths; and the voice of the true prophet in science, as in religion, amid all the width and freedom of the new, has ever in it a certain leaven of restraint and re-affirmation of the old. In reading what Dr. Beale writes we cannot help recognising in him this character. No man affirms more that is fresh; no man asserts more emphatically the authority of doctrines apt to be thought antiquated. No stronger claim upon our confidence could be. If a question might arise in our minds in the presence of such a teacher, perhaps it would be whether in Dr. Beale's representation the old and the new do not assume an attitude of hostility which does not rightly belong to them. We refer especially to his doctrine in respect to vital force—a subject second to none in importance both for theory and practice. Perhaps nothing could repay us better than to endeavour, under his guidance, to probe this question to the bottom.

Dr. Beale recognises in all the structures of the body one primary division, into "germinal matter," which alone is living, and "formed material," which is dead—which arises, in fact, from the death of the former. The formed material is permeated continually by currents of liquid "pabulum," on which the germinal matter lives, but which itself is also dead, until the germinal matter, in incorporating it with its own substance, again makes it living. The germinal matter is the same always and everywhere, and consists of small masses of a structureless, colourless, and transparent viscid substance. This alone is the seat of *vital* actions, and these vital actions differ essentially from any which the ordinary "physical" forces—heat or light, or chemical affinity, *e.g.*—are under any circumstances or modifications able to effect. Life, therefore, a distinct power, not interchangeable with any other form of force, resides in, or operates through, the germinal matter. The special characters of this "living" matter are that it attracts matter of different composition from itself and changes it into its own substance, thus increasing its own bulk; it subdivides and multiplies, and finally, though itself always the same, it gives rise, in "dying," to materials of the most diverse kinds, the various tissues of the body. All this it does with no instrumentality, mechanism, or apparatus, being entirely structureless. In addition, it performs spontaneous motions, without parallel elsewhere.

These are the grounds on which, as we understand him, Dr. Beale claims for the germinal matter that it exhibits the action and demonstrates the existence of a power ("life") which cannot be traced to any mode of operation of physical or chemical force. Thus, Dr. Beale, in affirming an uncorrelated life, takes his stand on the simplest and fundamental phenomena of organic bodies, on that which takes place without structure and apart from form; on the vital action itself, and not upon the mode or direction it assumes. But the results of vital action—the forms which it developes and the ends which it attains—form an additional argument on the same side. Not only does living matter assimilate and multiply, and effect its own change of place, but it results in

(a) The Physiological Anatomy and Physiology of Man. By Robert B. Todd, William Bowman, and Lionel S. Beale, etc., etc. A new edition by the last-named author. London: Longmans. 1866.

Reference is also made to the following:—

On Vitality. By the Rev. H. H. Higgins, M.A. Read before the Liverpool Literary and Philosophical Society, January 11, 1864.

An Essay on the Life in Nature. By Louis Mackall, M.D. Washington.

Extract from an unpublished Essay on Physical Force. By Louis Mackall, M.D. Washington. 1865.

hands, and feet, and eyes, and brains. What merely physical or chemic force can be imagined doing this? The power at work in living matter, besides being peculiar in itself, has a special direction given to its results.

On this aspect of the case Dr. Carpenter has especially fixed his attention, and Mr. Higgins, in his very able essay on Vitality, advocates essentially the same view. Life, according to these authors, is especially exhibited as a directive agency. The physical forces may be—Dr. Carpenter argues that they are—the source of all the active changes which take place in living things. Life in this sense—in its "constructive force"—is a correlate of other forces, especially of heat, but there is something which directs these forces—makes them build up a complex organism—when, if they operated only according to their own nature and capacities, they would produce at most an unshaped colloid mass or a formless aggregate of cells.

The relation between these two views is of interest. Evidently the latter is a derivative from the former. The *directive* is a curtailed representative of the *active* life, and it seems clear that in so far as any objection lies against the conception of life as an uncorrelated agent, operant by virtue of a spontaneity of its own, it applies equally to each form of the idea. Indeed, if either be open to the greater objection, it would appear to be that which affirms direction only and denies action. For an inherent force resident in matter or in certain forms of it, and leading, under given circumstances, to definite activities, is a conception which at least seems to have analogies in nature, and may be in some sense justified by a reference to notions which are as yet scarcely altogether exploded—gravitation, for example, or chemical affinities. In truth, if an ultimate vital force be affirmed only in the same sense as these other supposed ultimate powers of matter are affirmed, leaving open the question (as Dr. Beale probably would leave it) as to the true nature of all alike, there seems to be, on general grounds, no objection to the statement. Whether or not it does full justice to the present state of our knowledge is another question. But the view of life as a special agency standing by to control and direct changes which the ordinary physical forces effect, stands in quite a different category. To it not only nature, but even our imperfect thought of nature, offers no analogy. The different properties of various inorganic bodies are truly parallel not at all to such a directive agency, but to the peculiar property of organic matter by which heat or other force is made to produce the living substance. The physical forces (supposing them to be the constructive force in living matter) do produce—and are therefore no doubt directed to produce, since they do not direct themselves—certain results. If it be inquired—What directs them? we pray our teachers to give us real answers, or none. It is a question to be solved, if possible, by observation, or by processes of reasoning which deal with realities. When we read of "directive agencies," we are tempted to ask, who imposed it as a task upon these worthy gentlemen to tell us what determines the special vital processes, *if they do not know?* Surely here virtue is too hard upon itself.

We do not, however, think that the question—truly a most legitimate one—is quite hopeless; indeed, we shall venture by-and-by to offer a suggestion towards an answer. At least we trust to make it appear that there is another way of regarding the whole subject. But some of Dr. Beale's arguments first claim our attention. The conception of the vital force which he offers for our acceptance is stated briefly in the following extract (the italics are ours):—

"The view of the vital processes advocated in these pages differs from others in the very essential point that the assumed vital power is supposed to influence only particles of matter with which it is associated, and its association with matter is but temporary. The power bears neither a qualitative nor, as far as can be at present proved, a quantitative relation to the matter. It cannot act upon matter at a distance, nor upon the same particles for any length of time. The particles are influenced by it, but soon pass from its control. If their place is not soon succeeded by new particles, *vital action must cease;* but as long as new particles come into contact with those which live already, the action is transmitted, and so on for ever (not simply transferred from particle to particle so that one gains what another has lost). The direction and control exerted are exerted upon particle after particle. The various particles are not placed in this or that place by a controlling power ordering and influencing all, but each particle for the time being seems to direct and control itself, and its power is transmitted to new particles without loss or diminution in intensity, *and sometimes with actual increase.* . . . Physical forces invariably cause death, but they cannot give rise to life. Ordinary force and life seem to be opposed."—P. 35.

We cannot but feel that we are called upon here to believe some very difficult things—for instance an absolute coming into being and annihilation of power, surely not the less incredible because the power is vital. If this is a consequence of believing in a vital power, the inference rather would be, that there must be another explanation of the phenomena, even though it should be impossible to discover it. If we argued according to all that observation and study have taught us, so far as they have given us real knowledge, our conclusion must be that that which changes can only be a form, and that the variation in the amount of life proves its correlation. Further, we note that this power is represented as not merely becoming more or less with no compensating increment or diminution of other forms of force, but as increasing and diminishing itself. Or when, from lack of new particles to succeed the old, the "vital action" ceases, does the "power" remain disembodied, as it were, waiting till some new matter presents itself? If it do, why does it not sometimes seize on quite fresh materials and originate germinal matter *de novo?* Or why must it, after a brief dominion, relax its grasp of every particle, though there be no other to which it passes? Why cannot it retain its hold?

And though it is so peculiar, quite in another category from the physical forces, how is it that these can oppose and even destroy it? Can things totally different oppose one another—chemical affinity, for instance, and a syllogism? Like things can—gravitation and centrifugal force may oppose one another; magnetism may oppose gravitation; heat can oppose cohesion or the crystallising force, either of which will generate it; electricity may oppose chemical affinity. Are not all the instances we know, like opposing like? Nay, things that are identical in nature may oppose each other. A body moving north may oppose a body moving south; the gravitation of one weight will oppose that of another if they be but balanced. In truth, to be opposed implies not independence and diversity, but correlation. Though it may sound strange, there is nothing really simpler than for the same force to oppose itself. Take so common an object as an eddy in a stream: the downward flow, meeting with a resistance, is turned upon itself and becomes an upward flow, which the continued downward flow opposes; the downward and the upward being the same motion in two forms. Or take an oscillating pendulum. Is not its upward the opposite of its downward motion, and if these were brought together would not the former "destroy" the latter? Yet it is the same thing in another form.

In truth, it would scarcely be too much to say that, in physical nature at least, opposites are one; and to say of life that it is opposed to whatsoever force, is to go far towards saying that it is that force under another form.

Here, indeed, it seems to us, is the very key to the mystery so well insisted on by Dr. Beale. May it not be that the source of the wonderful power of vitality is to be found in the chemical force of matter, which in the living body opposes its own effects; takes a twofold direction—down and up—like a swinging weight? In this respect the peculiar molecular action in organic matter differs from that which is around it—that whereas in the inorganic world the process of chemical union, once commenced, is completed, and gives mere chemical compounds as its results, heat or light or electricity being given off as the dynamical equivalents of the satisfied "affinities," in the organic world a certain number of these chemical processes result, not in chemical unions, but in a new arrangement of molecules in which the chemical affinities are not satisfied but are kept at bay; the forces that would otherwise be given off being represented, in the resulting substance, by this very restraint of the affinities, under which form the name "vital" is given to them.

Living matter has force in it—not any special force, but the universal force operating in the special way of holding the molecules of matter in relations which are anti-chemical. For here a valuable remark of Dr. Beale's has an important bearing. He says (p. 102) that in living matter the elements are probably not "combined" at all; that it does not and cannot consist of chemical compounds in any sense; "their ordinary attractions or affinities seem to be suspended for the time;" and no others, it may be added, take their place. The elements are definitely arranged in suspension of their affinities; the force that suspends them, whencesoever derived or under whatsoever form before existing, being the vital force, and being expressed by, and so far consumed in, that suspension

Living matter is therefore, in this respect, in a state perfectly answering to that which in mechanics is called tension; and some, at least, of its most peculiar characters seem to flow naturally from this fact—among others, some of those on which Dr. Beale chiefly lays stress. For example, this state of tension may account for that striking character of the vital state, its transmission to a continual succession of new particles, while "the particles influenced by it soon pass from its control." Apart from its increase or destruction, life passes on like a wave—new particles assuming the tense or force-embodying state as others lose it. On the same ground, also, may be understood the constant tendency of life towards death, and how it is that contact with inorganic substance so often destroys it.

Attractive also in its simplicity as is Dr. Beale's generalisation in respect to germinal matter as the only living, there are many difficulties in the idea that the entire mass of the tissues is dead—in fact, that the living body is a dead thing in the main, with nothing living in it but some thickly scattered fragments; that it is rather a result than a seat of life. The very peculiar functions of much of the "formed material," such as the contractility of muscle, quite unaccounted for as yet, we believe, on mechanical or chemical principles, might be urged; as also might the various circumstances that seem to indicate that development, or the formation of structure, involves a higher exertion of vital action than mere growth. But on these we have not time to dwell, though Dr. Beale's own discovery of the greatly increased production of germinal matter in conditions of disease, might almost have suggested the idea that its multiplication was hardly to be regarded as the highest exhibition of vital energy. Probably it will be long before the human mind returns to the thought that disease means increased life.

And if, by dwelling on the peculiarities of vital phenomena, Dr. Beale had not come entirely to discard any dynamical connexion between them and other processes in nature, he would surely not have urged the increased heat which accompanies a morbidly increased formation of germinal matter (in abscess, for example), as indicative of an increased vitality. Phenomena of this kind really weigh in the opposite direction. Even let Dr. Beale's doctrine be assumed, that production of "germinal matter" is the peculiar action of the vital force, still its increase in inflammation, with concomitant increase of heat, is perfectly accordant with the view that vital force is one among other physical energies. In an inflamed part action altogether is increased; there is more of chemical change, and with this why should there not be more at once of vital action and of heat? That both should be increased together would surely argue them to be not of different, but of analogous relations. But a thorough examination of the phenomena of inflammation carries a conclusion even stronger in support of the unity of the vital and the other physical forces. Nothing can be more simple, and more entirely in accord with the generally received views in science, than the increase of heat in inflammation, on the supposition that there exists a diminished amount of properly vital action, manifested in a certain kind of growth, increased, indeed, in amount, but still more lowered in scale or intensity; while an increase of the decomposing changes liberates a larger amount of force, some of which in the healthy tissues was vital, but which assumes the form of heat precisely because it is not absorbed into the (diminished) vitalising processes. Dr. Beale does not delay to argue the question of the vital relations of inflammation, and therefore it is, we presume, that he makes no reference to the arguments by which Mr. Paget, in his Lectures on Surgical Pathology, maintained the view of a lowered vitality in inflamed parts—a lowered vitality, as proved by wasting, degeneration, and approximation to the unliving state in every form, yet expressing itself, as shown by Dr. Beale, in increased formation of germinal matter.

But, further, the phenomena of inflammation afford a striking illustration of the view that the source of vital action lies in opposite changes of a chemical character. For that such changes are present in great activity in inflammation is certain. It is no less certain that the starting point of the inflammatory action is in causes which lead to an excess of these decomposing changes. Consequent upon and coincident with them there arise increased vital changes; these changes being of an opposite and therefore naturally dependent kind, and at the same time of a lower order than those which previously took place in the textures, the vigorous life-grasp of the materials being broken.

If the mysterious network of vital actions is ever to be unravelled, it must surely be by tracing out the mutual connexions of the various processes which take place in the living body, pursuing with the eye of reason its intertwined dynamics, ever shifting, rising and falling with every breath, yet ever exactly balanced. And if one conviction might in this arduous and delicate, yet most enticing, task be pre-eminently taken as a guide, might it not be that as in the organic being no material, so also no force, is ever wasted? Wheresoever any change occurs (such as oxidation), of which a liberation of force is the result, there we should watch narrowly to discover, if we can, in what action—vital or other—that force has embodied itself; wheresoever any action (such as growth) that demands force, takes place, there we should set ourselves—and set ourselves patiently—to observe what changes that supply force have occurred, or are occurring. When we have demonstrated in any given case that there are none such, then, and not till then, we may be justified in inferring a force that assumes the vital form alone, and multiplies and diminishes itself as life ebbs and flows.

Such consideration of the dynamic aspect of the processes which occur in the living body we miss in Dr. Beale's volume. In speaking of oxidation, for example, admirably described in its chemical results, no reference is made to the inevitable influence which it must exert, as a process, upon the other processes with which it coincides; whereby surely its most important bearings are ignored, for life itself is a process, a state of active or potential change, and on its relations with other processes the eye of the physiologist should be most intently fixed. It is true that by oxidation effete matter is removed—doubtless a condition essential to the action of the vital force,—but when a fair field is thus prepared, whence comes the force itself? Is not an instance here of that economy whereon the bountifulness of Nature rests, the old as it lapses into inertia giving its strength up to the new? Can this be disbelieved until it is disproved? Nor is it a disproof to refer, as Dr. Beale does, to cases in which life exists in the absence of oxidation, or seems to flourish most when least oxygen is present. Oxidation is not the only force-giving change, occurring in the body or without, from which vital force may spring; nay, its very vigour may render it less suitable to support certain forms of vital action, those perhaps especially in which mere growth preponderates entirely over function, with the demand it makes, the scope it gives, for vigorous repair. The broad fact is this: Here are two processes continually going on—opposites in closest union—oxidation and vitalisation. Can we be said to have a physiology until we have explored their relation to the full?

We pass by the many facts, so well urged by Dr. Carpenter, which prove how close a correspondence obtains, especially in the vegetable world, between heat and vital action; nor can we dwell upon the significant fact that, without the presence of external force, vital action never manifests itself. These are arguments that have been often urged, and if in vain as yet, so far as Dr. Beale is concerned, it is perhaps because the differences between the vital and the other forces have so strongly filled his eye. Repeatedly he insists, and very pertinently, upon the question whether anything answering to the fundamental phenomena exhibited by the germinal matter can be shown elsewhere; the increase of substance from substance unlike itself, the movements without structure, the subdivision. Now while we recognise to the full the peculiarity of these phenomena, and that they are not identical with any other—that organic life is as distinct from all other forces as light is, or electricity—we think, nevertheless, that like phenomena can be seen elsewhere in nature; phenomena essentially like in respect to the operation of force, and differing only in mode. We appeal to so simple a thing as the formation of the clouds, or vapour issuing from a boiler. Here, it appears to us, are exhibited, in respect to physical forces, many phenomena truly parallel to the most peculiar of those which are exhibited in germinal matter in respect to chemical forces. The cloud forms itself (we will speak in Dr. Beale's language) from a substance which, though chemically like, is mechanically unlike itself. It assimilates more and more of this "pabulum;" it increases and extends itself; it subdivides and multiplies; it gives origin to other masses like itself; it "dies" into the "formed material" of the rain—not wholly like that unvaporous substance whence it arose, yet in rapid transition towards it. Nay, the cloud has force in it; in it is "suspended" the operation of physical (as in germinal matter the operation of chemical) attraction;

out from its bosom comes forth the lightning, overmatching by how far life's puny energies.

Granted the comparison of germinal matter to the clouds seems absurd, yet it is absurd chiefly because we have learned in the one case, and have not yet learned in the other, to trace the dependence of all the phenomena displayed to forces operant without. The cloud does not "form itself;" it does not "assimilate" the water; does not spontaneously change its form; does not "subdivide and multiply." True; but it seems as if it did all these things—as much seems so, to an eye blind to the laws of evaporation, as the germinal matter seems to our eyes to do them. The question is one of vision, not of diversity of process. Nature is full of force, and that force, wheresoever the favourable conditions are, finds its expression in vitality. If it be true that living matter is the needful precedent of vital action, be it so. The living matter is a channel whereby force passes into this new mode.

If those who advocate this form of opinion were called upon (which assuredly they are not) to show how such change of mode could be brought about, even this were not impossible. Let it be supposed that either from the living molecules being themselves arranged in antagonism to chemical force, or from some other cause, a resistance is offered to certain processes of chemical change, so that the chemical action, being itself uncompleted, passes on into an action of an opposite character, as the downward sweep of a stream, resisted, curves into an upward flow. Let such resistance, however arising, be supposed, and a fund of chemical activity around, and the dynamics of the "germinal matter" offer no single point unparalleled in our most familiar knowledge. The seeming mystery of these fundamental processes of life arises from our putting life as an agent instead of a resultant. The vital force does not increase itself, but more and more of the force of Nature takes the vital form.

But we owe much to Dr. Beale for marking so clearly as he has done the distinction between vitality and form, or between increase of the vitalised matter and its organisation. To us it seems that the separation of these two constituents of the problem of life is of primary importance, and that it cannot otherwise be treated with any chance of a rational issue. How comes the vital substance into being—shapeless, structureless, but force-containing? is one question. With Dr. Beale's aid we have endeavoured to approach a general answer. How is this substance shaped and wrought up into the textures, and knit together into due-proportioned wholes? is another. We cannot but wonder that Dr. Beale should answer—by death. Surely some cunninger, diviner hand has stamped its impress here. Even a "directive agency" were in some sense better, at least in sound. But if neither dying nor a verbal formula can have shaped the countless varieties and exquisite perfectnesses of the living form, can they be traced to any source? We think they can; but it is by our consenting to learn a deeper lesson from our failure to unravel the mystery of life than it has taught us yet. Mere physical and chemic forces, it is said, cannot result in life, cannot by their dead mechanic impulse marshal the dull atoms into these ordered ranks, replete with forethought and instinct with soul. It is most true they cannot; but if science proves that in the forces we call physical there does lie the source of all that is in life, what follows? Surely this, that these forces are not the mere physical and chemic forces we have deemed them. It follows that we must correct our impressions, and learn to interpret that which is beyond by that which is within our ken. Since this little organic life comes out of, and is one with, the great whole of Nature, springing from its bosom but to rest a moment and return, then the great whole is living and organic too. The more cannot come out of the less; nor that Nature, which bursts forth on every hand into palpable vitality, be dead. Life, in the whole, is hidden, not absent, as we dream, blinded by the limitations of our own perception—hidden by its vastness. The organic world differs from the rest of nature, not in itself, but in its relation to our perception. Lying, as a whole, within the narrowness of our vision, we see it, in some respects, more truly, and therefore see it living. Not that it only lives, but that it reveals to us, by virtue of its littleness, the life. The birth is living because the parent lives. The source of the adapted structure of living things is the constitution of the universe, throughout which, unseen, that living adaptation rules; unseen by vision that falls short so far as ours, but visible to reason, and made sure by every proof that force is one.

Nature seems to us not living, as to a parasite inhabiting our own bodies (supposing it endowed with power to compare and reason) its own life would seem the only life, merely because it was proportionately small; and the body it inhabited would seem a great inorganic universe: mighty torrents of revolving stars, and slow oscillations of attracting and repelling masses, interrupted at long epochs by cataclysms of swift and wide-spread ruin. What would it see of the great human life it fed on? [Query: Is any animalcule proud but one?]

Some few steps have been taken in tracing to external mechanical conditions certain details of the organic structure. (See, for example, Herbert Spencer's "Biology," and a recent paper by Mr. H. G. Seeley in the *Annals of Natural History* on "The Nature of the Skull.") And, few and small though they may be, their value and significance appear to us to be very great; for they imply no less than the commencement of a demonstration that the vital organisation is the result—the expression—of the universal order, and that this universal order is to be learnt from, and studied in, that which we call life. For this end, perhaps, it is that the long strife of vitalist and physicist has raged.

We cannot but thank Dr. Beale very heartily for the zeal he has thrown into the discussion of the vital force and its relations. On nothing does the progress of physiology more directly depend than upon right views of this subject. Much more, indeed, depends upon them, as we may see from Dr. Mackall's pamphlets. There is much in the style of these productions to excite a prejudice against them; yet they are not without value. The author protests against the whole modern doctrine of force, and affirms that force inheres in the "laws of nature" alone. The argument is based no doubt on a misapprehension of the most advanced views on the subject, which recognise as fully as Dr. Mackall himself that in what we call matter no causative energy is to be found; but it is interesting as indicating one of the directions thought on this subject is likely to take.

James Hinton.(b)

REVIEWS.

The Sanitary Act, 1866, *with Notes, Statutes, etc.* By Robert Cecil Austin, Esq., Barrister-at-Law, etc. Together with copious notes and commentaries on Public Health and the Sanitary Laws of England, and Suggestions for a Code of Sanitary Law, by William Hardwicke, M.D., Deputy Coroner for Central Middlesex, etc. London: Nicholls, Frederick-street, W.C. 1867.

This is a work both legal and Medical. Mr. Austin's contribution is a summary of the Sanitary Act, 1866, together with an edition of that Act, with foot-notes calculated to render the legal and Medical reader better able to understand its provisions, and to put them into execution. Dr. Hardwicke contributes a series of chapters on each of the topics which a Sanitary Act ought to embrace. For example, the general principles of sanitary legislation, with suggestions for consolidating and amending the present sanitary laws; water supply, drainage, cemeteries, ventilation, overcrowding, quarantine, etc., etc. His comments on each point are short and sensible. We may refer to one, which illustrates the great bane of all sanitary discussion, viz., the attempt to overdo things—to provide what may be right in the abstract, or what may suit the educated classes, without knowing or caring for what will suit the low moral and intellectual condition of the classes who really are the subjects of sanitary legislation. The instance we would give is one referred to by one of our contributors last week, viz., the impossibility of always providing separate accommodation for the sexes, and the fact that, taking the widest view of the world, no such separation as is demanded by the fastidious and refined habits of modern civilised society can be provided for the masses. Dr. Hardwicke quotes with approbation the efforts of Prof. Kerr to devise wholesome and decent dwellings for the labouring classes, on the *one room* system, at the same time that he in no way overlooks the evil influence of inadequate accommodation or throws discredit upon the desire to provide for the poor whatever refinements are within their reach. The first desiderata are simplicity, cheapness, and wholesomeness, and to give the labouring man accommodation that he can pay for, and with little to spoil. Dr. Hardwicke also commends the scheme, advocated by a writer in the *Poor-law Chronicle*, of public cheap dormitories,

(b) This paper was written as a review, but has been signed at our request.—Ed.

apart from workhouses, and provided with efficient means of cleanliness and discipline. Nothing can be much worse than the present casual wards.

Lectures on Public Health delivered at the Royal College of Surgeons in Ireland. By E. D. Mapother, M.D., Professor of Hygiene, etc. Second edition. Pp. 663, with numerous illustrations. Dublin: Fannin. London: Longmans.

The new edition of this useful work is thrice as extensive as the preceding one; for, "believing that it is only by the spread of a knowledge of the healthy functions of the human body that quackery will wane, and sanitary reforms rest on a safe because reasonable foundation," the author has made his book a manual of physiology for general use. His well-known manual of this subject for Medical students indicates how well he was qualified to perform the task. The present work contains twenty-four lectures, the principal contents of which we will enumerate. The introductory lecture treats briefly of the epidemics of the middle ages and those of recent times, and in those succeeding the subjects are discussed of air, ventilation, water, soil and climate, food, alcohol, adulteration, baths, clothing, mental and physical exercise, Hospitals, dwellings, sewerage, town improvement, burial, occupations injurious to health. In the seventeenth lecture the prevention of special zymotic and constitutional diseases is considered most ably. In the eighteenth, fifty-one pages are devoted to the discussion of the circumstances which conduced to the development and spread of cholera in 1866, especially in Dublin. Very conclusive evidence of the communicability of cholera is brought forward, and Dr. Mapother has discovered the closest correspondence between the localities where the disease prevailed, and the long-forgotten and obstructed streams and pools, which, however, he was enabled to delineate with the aid of a map of the city engraved in 1610. Pettenkofer's theory of this epidemic gains much support from the facts and arguments in this lecture, and the views advanced with regard to the condition of the nervous system in collapse seem to us sound and most suggestive.

The nineteenth lecture gives an account of cattle-plague which seems very meagre, as nothing but the pathology of that interesting epizootic is touched on; and disinfection, vital statistics, Irish poor-law sanitary organisation, and proposals for amendment and codification of the sanitary laws are the topics which the concluding lectures treat of. In addition to much original matter, this volume contains well-chosen quotations from the reports of Mr. Simon, Dr. Farr, Professor W. T. Gairdner, Dr. Druitt, and other leading health officers, and its usefulness is much increased by an appendix containing the principal Sanitary Acts.

FOREIGN CORRESPONDENCE.

FRANCE.

Paris, February 12.

The elections of the Paris Faculty of Medicine terminated a few weeks ago in the nomination of three other new Professors —Drs. Hardy, Axenfeld, and Broca. This last gentleman, who is appointed to the chair of Operative Surgery, has ranked for many years as one of the most eminent members of the Profession in France. His labours on aneurism, on cancer, and on tumours in general, are well known to the Medical public. Of late years, Dr. Broca has devoted a considerable share of his attention to anthropology, and he was probably led by his investigations on this interesting subject to a most profitable excursion into the territory of Medicine. I allude to his well-known paper on *Aphemia*, a disorder now more generally known under the name of *Aphasia*. Of course Dr. Broca cannot pretend to the discovery of this singular mental disease, which had been fully described several years ago by Professor Lordat, of Montpellier, but he certainly revived the question, which had lain dormant for so many years, by attempting to connect aphasia, as a symptom, with morbid alterations of the third circumvolution of the left frontal lobe. Whatever may be, ultimately, the fate of these hypothetical views, the scientific acuteness and high intellectual capacity of their author cannot be questioned, and his talents will, no doubt, give additional lustre to the celebrated body of which he is now a member.

The two chairs of Internal Pathology are filled by Drs. Hardy and Axenfeld. The first is chiefly known amongst us for his valuable contributions to the history of skin diseases; the second, who for several years was one of the librarians of the Faculty, unites the most extensive erudition to a remarkable fluency of language, which will, no doubt, make him one of our most useful and popular professors.

But the nominations of the Faculty, before being submitted to ministerial approbation, are subject to the control of the *Conseil Académique*—a sort of educational senate, which is called upon to give its opinion in all matters of importance connected with public instruction. Several Catholic bishops form part of this body, in which other religious creeds are represented by two Protestant clergymen and the head of the Jewish synagogue in Paris. I am sorry to say that the accusation of *atheism* was again raised against one of the successful candidates by some of the right reverend members of the assembly. It was, however, overruled by a strong majority, and the choice of the Faculty was definitively sanctioned yesterday by an Imperial decree.

Whatever may be thought of the men selected in preference to others by the Faculty, the tendency of its measures is evident. To fill the chairs of the Paris school with active teachers, and to connect Medical education in all its branches with modern physiology—such is, at present, the order of the day; and from this new spirit the most beneficial results may confidently be anticipated.

While the Faculty was thus engaged in filling up the vacancies which time and death had made in its ranks, the proceedings of the Academy of Medicine were occupying in their turn a large share of the public attention. Two important elections have just taken place, and two more are shortly expected. In Surgery, Dr. Legouest, a distinguished military Surgeon, was elected to fill the seat of the late lamented Dr. Michon. In Medicine, Dr. Guéneau de Mussy, a near relation of a well-known London celebrity, was nominated by a very large majority. His principal competitor was Dr. Hardy, the newly-appointed Professor.

While we cordially congratulate the two new Academicians on their well-deserved success, we cannot help regretting that the eminent services of one of the veterans of French Surgery should have been almost entirely forgotten on this occasion. M. Chassaignac, the inventor of Surgical drainage, and of the *écraseur linéaire*, is probably more extensively known abroad than even his more successful competitor. Let us hope that at some future opportunity full justice will be rendered to his claims.

One of the signs of the times—one of the symptoms of our universal tendency to connect Medicine with Physiology—is the recent creation of a Society of Experimental Therapeutics. The leading members are Professor Trousseau, Dr. Pidoux, Dr. Guéneau de Mussy, Dr. Gubler, Dr. Hérard, etc. The chief purpose of the Society is to ascertain, through experiments made on living animals, the real properties of active drugs, which clinical observations on the human subject cannot always determine with a sufficient degree of scientific accuracy. Some interesting communications, by Dr. Moreau, the physiologist, on the action of belladonna, were discussed at the first meeting. The affiliation of some eminent members of the Veterinary College of Alfort will enable the Society to prosecute its researches on the larger species. And it may here be observed that the intervention of the Society for the Protection of Animals has not exercised the slightest influence on the practice of vivisection, so largely adopted at the present day in France. It must be confessed that, in a time of almost universal warfare, when thousands of human beings are wantonly sacrificed for questionable ends, there seems to be a slight tincture of exaggeration in that philanthropy which deprecates all suffering inflicted on the brute creation for the advancement of science. Might it not be suggested that hunting is fully as cruel and far less justifiable a persecution of brutes? We are not informed, however, that the above-mentioned Society intends to proceed against the innumerable lovers of sport in England. However this may be, it is certain that experimental physiology still continues to flourish in our veterinary schools, and, in particular, that experiments made on the horse have settled questions which for a long time had divided physiologists into opposing parties. Such, for instance, was the result of Chauveau and Marey's researches on the motions and sounds of the heart. It will gratify the majority of your readers to learn that Dr. Marey, the inventor of the sphygmograph and the *collaborateur* of Chauveau in the experiments we have just

mentioned, has been recently promoted to a chair at the College of France.

We cannot bid adieu to horseflesh without a word on the subject of *hippophagy*, a practice which appears to spread extensively in Paris. There exist at present numerous stalls in which *viande de cheval* is openly sold. It is in general rather uninviting in appearance, on account of its deep brown-red colour. From personal experience I can assert that when boiled or roasted it is savoury, though rather tough; but then the broth it makes is highly superior to any decoction of beef.

GENERAL CORRESPONDENCE.

NOTES ON A CASE OF ATTEMPTED SUICIDE WITH SULPHURIC ACID.

LETTER FROM DR. GEORGE CRAWFORD.

[To the Editor of the Medical Times and Gazette.]

SIR,—The following case appears to me to be of sufficient importance and rare occurrence to induce me to give you its history.

Mrs. D., aged 35, the mother of a large family, and who only ten days since had a miscarriage, from which she had made a good recovery, is in the habit of taking a great quantity of whisky, and is just as frequently beaten by her husband, who also indulges rather freely in the same liquor. She drank, on the 31st ult., about a wineglassful of sulphuric acid, with the intention of destroying her life, but no sooner had she taken it than she repented of what she had done. When she felt a very burning heat in her throat and stomach, she immediately took a quantity of common syrup and water in order to cause her to vomit, but she could not. I saw her about ten minutes after she took it, and administered a large quantity of bicarbonate of soda in water, and before she finished the draught she vomited a frothy matter copiously, which was still in a state of effervescence. I continued to give soda till the vomited matter was no longer acid, as was shown by the addition of soda to the vomitings. She then got a quantity of sweet milk, which was soon ejected, mixed very much with a kind of mucus which adhered tenaciously to the vessel in which it was put. About half an hour after taking the acid the vomited matter contained much coagulated blood, which had the real appearance of coffee grounds. At this time her pulse at the wrist was imperceptible, and the whole surface of her body was perfectly cold, and remained so for upwards of an hour, but after the most sedulous application of bottles of hot water and hot irons she began to get warmer, and the pulse to be felt at the wrist. Cold water and milk were given to her at short intervals during the night, but the stomach always immediately ejected them, mixed with more or less coagulated blood in small particles. On the following day a dose of castor oil was given, but only a part of it was retained. More was given two or three hours afterwards, which was retained, and the bowels were soon freely moved, and a quantity of urine passed. Beef-tea and milk were given, and retained for a considerable time. Vomiting took place at longer intervals, and the pulse at this time was 96, and very weak. The patient complained of great heat and pain in the stomach; the throat remained comparatively free, and deglutition was easily performed.

Nov. 2.—She is much better, and has taken arrowroot with milk and beef-tea. The pulse 96, and stronger, and vomits very seldom.

3rd.—Still keeping better, and taking more food. Her pulse 90, and bowels moved with oil, and urine passed freely. Heat and pain less in the stomach.

4th.—Able to be up a little, and feels almost better. Vomiting ceased. From this her recovery was gradual and uninterrupted, and at this date (November 10) is quite better.

Remarks.—When I saw the patient first, she said she had taken a wineglassful of vitriol, with the intention of destroying her life, but after she began to get better she said it was by mistake, apparently being ashamed of herself, and that she did not take more than half that quantity, and that it had been in the house for a considerable time. But as the label was clean, and marked "vitriol (poison)," and bore the druggist's name, I took the bottle, which still contained about half a drachm of strong sulphuric acid, and showed it to him, and was informed that she had been supplied with two ounces two days before in a bottle the same as the one shown to him; so there could be no doubt but it was taken with a suicidal intention, and that she had swallowed the greater part of it. The back half of her tongue was the only visible part which was affected with the acid. The bottle from which she took it had a very long neck, and appeared to be so far introduced that the acid did not come in contact with the outer half of the cavity of the mouth. The only thing which the stomach contained at the time she took it was one or two glasses of ale, which had only been taken a short time previously.

I am, &c. GEORGE CRAWFORD, M.D.

Port Glasgow, November 30.

A CONSULTATION WITH A SPECIALIST.

LETTER FROM MR. WILLIAM HEWITT.

[To the Editor of the Medical Times and Gazette.]

SIR,—I write to you in some indignation, and hoping that your insertion of this letter may be attended with some alteration in the "Medical etiquette" of some of our so-called specialists. Some few weeks ago, a lady consulted me on account of bleeding piles. I advised ligature, and that a speedy cure would almost of necessity result. She consented to the operation, but suggested that some specialist should be consulted, merely to endorse my opinion, to which I at once consented, and accordingly she proceeded to the house of a Surgeon, holding an appointment to a special Hospital for such disease, who, after going into some grievances of his own as connected with his peculiar Hospital, took a sketch of posterior region, and told her that if any one but himself operated he would not be answerable for the consequences; that she would have retention of urine, constipated bowels, all sorts of agony, and finally would have to come back to him in a month or so to have an effectual operation and mode of treatment carried out. All this I was gravely told by the patient herself and her nurse who accompanied her. On the morning of my next visit, I at once proceeded to a gentleman connected with the same Hospital, and explained what had occurred. Need I say he did all in his power to rectify the evil his colleague had committed, and with perfect success?

Now, Sir, I ask you, is this the conduct the Medical Practitioner has to expect from men holding what should be a high position? If so, I shall endeavour to get the general Practitioners to form themselves into a society or union to protect themselves from such grossly dishonourable treatment. The time has come, I feel sure, when we may surely say—"Corruption wins not more than honesty;" and I, as a general Practitioner, feel that, if such a state of things continue to exist, I shall use every exertion on my part to throw contempt and ridicule on "speciality" and specialists on all occasions that may present themselves, and to warn all patients against their allurements and artful designs. I am, &c.

WILLIAM HEWITT.

A CLINICAL THERMOMETER.

LETTER FROM DR. T. CLIFFORD ALLBUTT.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have been urged by several of my friends, whose opinions I value, to describe to the Profession a convenient clinical thermometer which I am in the habit of using. I have delayed doing so in fear of taking up your space unnecessarily, and in fear also of seeming to claim some share in the introduction of the thermometer as a clinical instrument. This I must disclaim, as I have been in this matter altogether a follower of others. From Dr. Davy I first learnt how useful the thermometer would be in observation of physiological states, and I owe, I believe, all I now know and so much value to his researches and to those of Dr. Aitken and Dr. Ringer.

The instrument fell in with the rule which we make at the Leeds Infirmary—namely, that qualitative knowledge shall be quantitatively ascertained whenever possible. I use the thermometer, therefore, constantly, as I do any other instrument which answers the purpose of giving accuracy to our statements. In private practice, however, the instruments sold as clinical thermometers were found to be very cumbrous, so cumbrous that they were often left at home, unless especially needed. I wanted a thermometer which should live habitually in my pocket, and be as constantly with me, or more constantly, than a stethoscope. Such a one Messrs.

Harvey and Reynolds, of 3, Briggate, Leeds, have had made for me. It is scarcely six inches in length, and, being slipped into a strong case, not much thicker than a stout pencil, is carried in the pocket easily and safely. It is made as I proposed—namely, by slightly widening the thread above the bulb, so as to allow the mercury to expand for 20 degrees of heat without rising much in the thread. The graduation begins a little above this widened portion at 80°, and runs up to 115°. Even this limit of variation is wider than we need, but to make the thermometer any shorter would be to make it too short for easy reading off when set well into the axilla. I have many times had to congratulate myself on being always ready with this little pocket instrument.

I am now trying to have the temperatures measured in my Infirmary patients, as electricity, by the needle and dial. This will make the variations more evident, and therefore more trustworthy for the pupils, as not more than one or two can at once see an ordinary thermometer in place, and our time in the wards is precious. I am, &c.

T. Clifford Allbutt.

38, Park-square, Leeds, January 14.

P.S.—I have referred in this letter to Fahrenheit's scale which, however, I much disapprove. My own instruments are scaled in Centigrade. I have omitted to say that Messrs. Harvey and Reynolds supply my thermometers at 7s. 6d. each in a leather case; at 8s. 6d. in a boxwood or ebony case, which makes their carriage quite safe. They are to be had either with a Fahrenheit register, or, as I prefer, with a Centigrade register, accompanied by a Fahrenheit scale for comparison. Messrs. H. and R. say, as I expected, that busy Practitioners will buy this portable thermometer who would not look at the larger instruments.

EXAMINATION OF A SCIRRHOUS TUMOUR AFTER INJECTION WITH ACETIC ACID.

Letter from Mr. Alexander Bruce.

[To the Editor of the Medical Times and Gazette.]

Sir,—In a recent report on the clinique at University College Hospital you mentioned that a case of cancer of the breast, under Mr. Henry Thompson, had been treated by acetic acid injections, but that it was subsequently found necessary to resort to an operation. As the value of Dr. Broadbent's method of treating cancer by injections of acetic acid is still *sub judice*, and as opportunities of examining tumours after injection present themselves but rarely, it may perhaps prove of interest if I give an account of my examination of this tumour, removed fourteen days after injection with the acid, in consequence of the formation of an abscess in the breast.

The tumour presented all the characters of scirrhus; the skin at one spot had been invaded by the growth, and ulceration had taken place. The spot chosen for the insertion of the pipe of the syringe was distant about three-quarters of an inch from the seat of ulceration, and at about the same distance from the nipple. The fluid employed consisted of dilute acetic acid, in the proportion of one part of acid to six of water; about mxx. of this solution were injected into two different parts of the tumour, but through the same puncture in the skin. Considerable pain was experienced after the operation, and a large abscess having formed, which required to be opened, it was considered advisable to remove the breast on the fourteenth day.

After removal a section was made through the breast at the spot where the pipe had been inserted. The skin was found to be undermined to the extent of a quarter to half an inch around the margin of the ulceration, and an abscess had formed in the subcutaneous cellular tissue, its wall presenting a highly vascular and softened appearance. Beneath this, but quite distinct from it, was a cavity in the substance of the tumour of the size of a large horse-bean, partially filled with a soft glairy substance like thickened mucus, and in parts having a greyish-green puriform character. There was no very distinct wall bounding this space, the surrounding substance of the tumour being softened, and passing almost insensibly into the pulpy condition of its contents. For a space of about one-eighth of an inch the mass around the cavity was softened, did not creak on section, and yielded no milky juice when gently scraped. Beyond this distance the substance appeared to be unaffected.

On microscopical examination the soft pulpy contents of the abscess were found to consist mainly of disintegrated cell structures, free nuclei, and granules; some few cancer cells were found apparently unaffected. In the softened zone around the cavity cancer cells were found in abundance, the nuclei and nucleoli being distinct, and very little change having taken place; here and there cells appeared unduly granular. Beyond this region the juice presented the ordinary characters of scirrhous cancer.

On making a section with a Valentine's knife through the wall of the cavity outwards into the hard mass, the following appearance was distinctly seen under a low power. The tissues forming the wall were homogenous, and dimly granular, becoming gradually less so as they receded from the surface, but still throughout the whole thickness of the softened zone, presenting characters very different from those of the normal scirrhous mass beyond; here the surface was marked by opaque bands ramifying in different directions, evidently consisting of obstructed gland ducts, and between these were seen faint fibrous bands intersecting one another, the intervals being occupied by a closely-packed mass of cells. The general absence of colour from this part contrasted with the yellowish hue of the two former. The lines of demarcation were nowhere very defined.

From this it would appear that the solvent action of the acid did not extend very far, and that the disintegration produced was due more to the inflammatory process established, than to the chemical action of the reagent on the cell structures. I am, &c.

Alexander Bruce, M.S.

Museum, University College, January 15.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, February 6.

Dr. Hall Davis, President, in the Chair.

Dr. Routh showed two specimens of Liebig's Food for Infants, as prepared by the new Company, the one being intended for younger, the other, and thicker, for older children.

Dr. Matthews exhibited a very ingenious New Craniotomy Forceps, intended to give the grasping portion of the blades as much of a parallel and as little of a centric motion as possible, thus avoiding to a certain extent the danger of splintering the bones.

Dr. Hall Davis showed a specimen of Cystic Polypus removed from the anterior wall of the vagina of a woman who had been supposed to be the subject of a flexion of the uterus, and who had suffered from pains in the back, with profuse vaginal discharge. An opening in the cyst was made, and the fluid allowed to escape, but the growth did not disappear, so that it was ultimately removed by the wire écraseur, Dr. Davis having first satisfied himself that there was no communication with the parietes of the bladder, and taking the additional precaution of not removing the whole of the pedicle.

Dr. Ross sent from the Cape of Good Hope a drawing and account of a very curious monster which had lived some time after birth. There was very great deficiency of the parts constituting the head.

Dr. Cleveland exhibited the body of an infant of what appeared to be doubtful sex, the first offspring of a delicate woman aged 35. The clitoris was very much enlarged, and below it was a very small opening, constituting what appeared to be the vagina. No urethra could be found. The rectum appeared to be without a sphincter, and the coccyx to be turned the wrong way. As no dissection of the parts had been made, Dr. Cleveland and Dr. Braxton Hicks were appointed to examine the case and report.

Dr. Hall Davis, then occupying the President's chair for the first time, returned thanks for the honour done him, alluded to the responsibilities of his situation, and trusted he would be able to keep up the reputation and usefulness of the Society.

A paper was then read by Dr. Rose on a very curious case of

DISEASE OF BOTH OVARIES,

a preparation of them being also shown. The patient, aged 42, first came under treatment in March, 1866, complaining of pain in the left side, and having a large tumour, evidently

ovarian, on that side of her abdomen. She was sent to Middlesex Hospital, but did not improve there, and the tumour was rather larger when she left than when she entered. On June 29 last she passed four stools like matter of a very offensive character, and the tumour for a time disappeared. About the middle of October she was troubled with occasional looseness of the bowels, the tumour now filling, now emptying, when a new swelling appeared in the right groin. This was punctured towards the end of September, when a quantity of flatus escaped, followed by some pus. The wound continued to discharge, and the woman ultimately died of exhaustion. On a post-mortem examination, the tumour in the right ovary was found to open into the cæcum, and also externally, whilst the cavity in the left was found to be continuous with the rectum.

Dr. Greenhalgh had seen two cases of an ovarian tumour communicating with the bowel by a single opening, in one case evidently coming after taking a large dose of house medicine. The opening was into the cæcum, and the fluid could easily be made to splash, as in succussion of the chest. It passed readily from the ovary into the intestine, but not *vice versâ*.

Dr. Parson narrated a case of

EPITHELIOMA OF THE CERVIX UTERI REMOVED BY THE ÉCRASEUR.

The growth was very vascular, and there was great hæmorrhage from it, weakening the patient greatly. Chloroform did not suit her, producing extreme prostration long before the induction of anæsthesia; the use of the écraseur alone was found to be equally unsuitable, as the same depression of the heart resulted; so that in both cases stimulants had to be employed. It was therefore resolved to try local anæsthesia by ether spray. The vagina was opened as widely as possible, the écraseur adjusted, and the cold applied with complete success. The only sensation after the removal of the os was that of slight burning, and there was but little bleeding. The patient recovered well.

Dr. Sansom suggested that the tendency to prostration so marked in this case may really have been the cause of death in some instances where chloroform was supposed to be the fatal agent. He also asked if the ether might not be used to control the bleeding in such a case, without any further operation.

Dr. Gustavus Murray said he had not been so successful in a case of extensive ulceration of the os, with allongement of the cervix uteri, which he had tried to remove with the aid of the ether spray, but as this did not arrest the pain entirely, he had to give chloroform. He strongly recommended the single wire écraseur, which he had employed in this instance. The patient was doing well.

Dr. Parson said the great difficulty in the application of local anæsthesia was getting sufficiently rapid evaporation; in his case the vagina had been very wide. He recommended the use of wooden instead of metallic instruments for this dilatation, as they would have less attraction for the cold.

A Gentleman suggested the introduction of an increased current of air with the jet of ether.

Dr. Wynn Williams read a highly suggestive paper on

DIPHTHERIA,

upholding its local nature, and maintaining that the great constitutional disturbance depended on the absorption of the decomposing remains of the membrane formed, and that the feebleness of the pulse was proportionate to the extent of this membrane. He therefore, in treatment, set himself to remove this pellicle, and so to get rid of the chance of poisoning the system. For this purpose he never used escharotics, but simple astringents; the best he had found to be tannic acid (ʒij to ʒj. of water), laid on with a brush, or, when low down, by injection. The membrane shrivels and loosens, and is soon expelled. He also uses the chlorate of potash with hydrochloric acid, bark, and iron; in the later stages strychnine. No aperients are given, except when absolutely necessary. He approves of the permanganate of potash as a gargle.

Dr. Sansom thought the theory was paradoxical, and stated that he employed the sulphite of soda and carbolic acid. The latter he had also found highly useful when applied to enlarged tonsils.

Dr. Playfair thought the treatment good, but the theory wrong, as pyrexia often appeared first.

Dr. Williams replied to the objections brought against him.

Dr. Woodman related a case of Complete Inversion of the Uterus of five years' standing, which gave the patient little inconvenience, and three cases of Double Nipple on the Left Side of the Body.

OBITUARY.

JOHN HEWSON, F.R.C.S.

Mr. Hewson was born at Horncastle June 26, 1799, and was the only son of a baker in that town. He was educated at the grammar school in the town, and his father dying young, his relatives sent the boy to Lincoln to be apprenticed to Mr. Joseph Swan, who at that time had a most extensive practice in and around Lincoln.

Whilst with Mr. Swan he spent much of his time in dissecting for that gentleman's excellent work upon the nerves of the body. He went from Mr. Swan's to Guy's and Thomas's Hospital (then conjoined), and soon became an object of interest to Sir A. Cooper, Mr. Key, and the other teachers, from his evident superiority in acquiring knowledge, and his extraordinary memory which enabled him to retain it.

When he had obtained his diploma, Sir A. Cooper offered to take him as his assistant to make preparations, etc., for £100 a year, and was considerably astonished when the penniless but independent youth said he should like to think over it, and was still more astonished when Hewson (having consulted his friend, Mr. Key) declined his offer, and decided to return to Lincoln, and begin practice alone, with hardly a sovereign in his pocket. By dint of constant work and good friends he soon acquired a fair practice, and this he kept steadily increasing until he became master of an immense practice, and his services were called for all over the county. He rose at five summer and winter, frequently at four in the summer, and, having had a cold bath, commenced his day's work. He was able to bear an immense amount of fatigue up to quite lately.

In 1827 he was made Surgeon to the Lincoln County Hospital, and held the appointment till 1864, when failing health compelled him to resign it. During this long and useful career as a Hospital Surgeon he was particularly successful in the operations of lithotomy and ligature of the larger vessels, having tied the common carotid once and the external iliac several times successfully, when that was the only method of treatment pursued for aneurism. In 1864, whilst in the midst of practice, he became affected with softening of the brain, but continued to get about until January 3, 1867, when he became worse, and on February 2 he died, aged 67 years.

For many years he spent his spare time in the study of mathematics, with the late Professor Boole, and of chemistry, entering deeply into both of them. He collected a large and very valuable library, especially rich in works on natural history by Gould, Audubon, and in microscopic and philosophical instruments of great value. He was a general Practitioner in the fullest sense of the term, and his incessant occupations left him little time for his favourite pursuits.

NEW BOOKS, WITH SHORT CRITIQUES.

The Volunteers at Brussels. October, 1866. London: G. J. Stevenson. Pamphlet.

*** A highly interesting account of the visit of our Volunteers to the Belgian "Tir National," capitally written by a member of our own Profession, who seems to have enjoyed himself most heartily, which we have no doubt those who read this *brochure* will also do.

On Joint Diseases. By Holmes Coote, F.R.C.S., Surgeon to St. Bartholomew's Hospital, &c. London: Hardwicke. Pp. 299.

*** The title of Mr. Coote's book is somewhat obscure, as it might mean either combined diseases, or diseases of the joints. We need scarcely tell our readers that the latter is the meaning intended, nor that when Mr. Coote writes he has got something to say worth hearing. He particularly urges the cultivation of this branch of Surgery by ordinary Practitioners, instead of leaving it in the hands of specialists, and strongly recommends that mechanical appliances should be taken advantage of to their fullest extent before operative procedure is employed. Diseases of the appendages of joints, as well as of their exact constituents, are here discussed.

Transactions of the Obstetrical Society of London. Vol. VIII.

*** The eighth volume published by this Society is now before us, and the papers contained in it are quite what might be expected from the members. Where all are good, it is almost invidious to select any for special commendation, but we think that Dr. Eastlake on Uterine Therapeutics, Benson Baker on Lead Poisoning, Snow Beck on Enlargements of the Uterus which follow Abortions, &c., Greenhalgh on Mechanical Dysmenorrhœa, Redford on Lacerations of the Uterus, Ellis on Anæsthesia by Mixed Vapours, Braxton Hicks on Puerperal Eclampsia, and the now historical paper by Dr. Tanner on Excision of the Clitoris, are really of unusual merit. The Society, if young, is vigorous, and we trust it has a long and prosperous career before it. Might we suggest that in the next volume fewer cases of monstrosity might be given, so that the room may be available for more practical matter?

The Baths and Mineral Waters of Bath. By R. W. Falconer, M.D., etc. 4th edition, enlarged. London: Hardwicke. Pp. 54.

*** Another edition of a very convenient, and certainly highly instructive, little manual of the Bath waters. This edition is illustrated by plans of the several baths, in some of which considerable changes have recently been made.

Eleventh Annual Report of the Trustees of the State Lunatic Hospital at Northampton. October, 1866. Boston: Wright and Potter. Pp. 62.

*** Gives a very complete account of the routine in a high-class American Asylum, but, on the whole, extremely like that of our own county Asylums when under skilful management. It affords a good specimen of the changes which have taken place in the treatment of lunatics since the days of Pinel.

Lithotrity and its After-Treatment. By G. H. Porter, M.D., F.R.C.S.I., Senior Surgeon to Meath County Hospital, etc. Pamphlet—reprint.

*** Two new cases added to Mr. Porter's list of successes. He uses Mr. H. Thompson's flat-headed lithotrite and Clover's syringe in the operation. Although formerly opposed to washing out the bladder, Mr. Porter, since using the latter apparatus, which combines suction with injection powers, has had reason to change his opinion. He uses an apparatus very slightly altered from Clover's, and finds it of the greatest benefit in removing the *débris* of calculi and clots of blood from bladders whose expulsive powers have been much weakened.

The Second Annual Report of the Hankow Medical Mission Hospital. By F. Porter Smith, M.B. Lond., etc.

*** This Medical Mission, planted so far off by the Wesleyan Missionary Society, seems to flourish, no less than 8041 people having been relieved during the past year. Dr. Smith contributes some valuable Medical information as to the Chinese and their Medical notions. He says that the vaccine virus, though only introduced twenty years ago, is losing its force.

A Treatise on the Varieties, Pathology, and Treatment of Dysentery. By W. E. O'Brien, L.R.C.S.I., Surgeon R.N. Imp. quarto. Pp. 62.

*** Mr. O'Brien thinks it of great importance to recognise distinctions as to the kinds of dysentery. He speaks of acute dysentery, acute inflammation of the rectum, fever, and dysentery; dysentery with liver, lung, or heart complications, dysentery with scurvy, and chronic dysentery. He thinks that the great remedies are gentle saline purgatives, as Rochelle salts, combined with warm hip baths, and the use of a combination of antimony, mercury, and opium. By the use of these he has been very successful. By the bye, Mr. O'Brien uses the word "scybella"—quære, a misprint for scybala?

The Story of the Truck, or the Why and Wherefore of Cattle Disease. By William Reid. Edinburgh: Elliot. Pp. 140.

*** Mr. Reid has invented a trough for supplying cattle with water during a railway journey, and he has now written a book mostly on the same topic. No one can deny that the subject is one of very great importance; we only regret that Mr. Reid has thought fit to embody so many versions of the same tale in a book. Had he told his simple story, it would have been better listened to.

Medical Students of the Period. By R. Temple Wright, M.D., late Scholar of King's College, London. Edinburgh: Blackwood. Pp. 170.

*** A most interesting little volume, giving an account of the London Medical student's routine life, mixed up with little stories in a very pleasant manner. The sketches will be read with pleasure, even although somewhat technical and a good deal *couleur de rose*. In his next work, we would advise Dr. Wright not to be quite so familiar in his address, and, above all, not to try to be funny; he is clearly capable of better things. We heartily recommend the book to our readers; it will recall the happy days of student life in the most vivid manner, and will enable them to spend with pleasure some moments of their scanty leisure time.

JOURNALS.

*** *The Glasgow Medical Journal*, among other interesting matter, contains a capital paper, by Dr. Ebden Watson, on the Pathology and Treatment of the Advanced Stage of Croup. He remarks that the false membrane never extends as far up as the vocal chords, but that these last are invariably tense and inflamed; that the mere effusion is not enough to account for the dyspnœa, which is more probably produced by the irritated and contracted vocal chords. This being the case, tracheotomy immediately suggests itself as a remedy, but the inflamed condition of the trachea is a great obstacle to success. In certain cases the arytenoepiglottidean folds are very œdematous, thus hindering the entrance of air and the expulsion of the false membrane. What, therefore, he recommends are inhalation of chloroform, or water spray to the chords with vinum belladonnæ, to obtain relaxation, and for the œdema the application of nitrate of silver, or, in certain cases, puncturing with a lancet. Dr. Cassells, in the same journal, records certain observations which lead him to believe that the normal temperature of children is very much lower than is usually supposed—not much above 97°, in fact.

The *British Journal of Dental Science* contains two cases of suppuration in the antrum, and some of almost uncontrollable hæmorrhage from the gums, from the pen of Dr. Smith, of Edinburgh—all good in their way. The others are reprints.

The *Co-operator* contains a short paper on Medical Co-operation by Dr. David Brodie. We conceive his meaning to be that a Medical gentleman should be on proper terms associated with a co-operative society, so that the members might at all times have the benefit of Medical superintendence, not when sick only, but also in the bringing up of their children, their education, in instructing women in nursing, and so on. Very good things, but we fear, Dr. Brodie, we are scarcely ripe for them yet. No harm in proposing them, however.

*** We have before us the *Seventh Annual Report* of the Cranley Village Hospital, now so well known. We are happy to see that their funds are in a satisfactory condition, and that so much good can be done at such a small expense. Twenty-seven new cases have been admitted during the year, and a short synopsis of each case is given in the report, so that every subscriber can see what he gets for his money. Altogether, since the opening of the little institution in 1859, upwards of 100 patients have been benefited by it and the services of Mr. Napper.

The *Canterbury Dispensary* is on a rather more ambitious scale, and is specially intended to afford Medical relief to the sick poor at their own dwellings. During the past year 1564 have been treated, measles, smallpox, and diarrhœa being the predominant diseases. Mr. Rigden, the Surgeon, will thus have had his hands full. The institution is in a favourable financial condition.

MEDICAL NEWS.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Anderson, J. G., L.R.C.P. Edin., L.S.A., L.M., has been appointed Resident Obstetric Officer to St. Mary's Hospital, *vice* Thurgar, term of office expired.

Carter, Albert E., L.R.C.S.I., has been appointed Assistant-House-Surgeon to Northern Dispensary, Liverpool.

Hayden, J. Augustus, M.R.C.S.E., L.M., L.S.A., has been appointed Assistant-House-Surgeon to the St. Pancras Workhouse, *vice* Edward Mahoney, M.B., M.R.C.S.E., L.S.A., resigned.

Muriel, R., M.R.C.S.E., has been appointed a Surgeon in Ordinary to the Ely Dispensary.

Randall, John G., M.R.C.S. Eng., has been appointed House-Surgeon at the Male Lock Hospital, Dean-street, Soho.

Sinclair, Dr. G. M., has been appointed a Surgeon in Ordinary to the Ely Dispensary.

Smith, Heywood, M.A., M.B. Oxon., M.R.C.P., has been appointed Physician-Accoucheur to the St. George's and St. James's Dispensary (Mount-street branch).

Smith, Robert Ayre, L.R.C.P. (Exam.), L.R.C.S.Ed., has been appointed House-Surgeon to the Sunderland Infirmary and Dispensary, *vice* Dr. Dixon, resigned.

Sterling, H. H. J., M.R.C.S.E., has been appointed Resident Medical Officer to the Metropolitan Free Hospital, Devonshire-square.

BIRTHS.

Bowen.—On January 23, at Quebec, the wife of R. Bowen, Esq., Surgeon, Rifle Brigade, of a daughter.

Evans.—On February 11, at Cheshunt, Herts, the wife of Nicholl Evans, M.D., of a son.

Ewing.—On February 6, at Buttevant, the wife of Surgeon-Major Ewing, 62nd Regiment, of a son.

Davis.—On February 4, at Abbey-gardens, St. John's Wood, the wife of W. F. Davis, M.D., Assistant-Surgeon H.M.'s Madras Army, of a son.

Foster.—On February 9, at Fortune's Well, Portland, the wife of E. B. Foster, M.R.C.S., R.N., H.M.'s brig *Ferret*, of a son.

Griffith.—On February 9, the wife of Dr. S. C. Griffith, of 57, Wimpole-street, Cavendish-square, of a son.

Olive.—On January 31, at Northampton, the wife of E. H. Olive, M.R.C.S.E., of a son.

Protheroe.—On February 6, at Gosport, the wife of E. Shaw Protheroe, Esq., Surgeon-Major R.A., of a son.

MARRIAGES.

Chennell—Rolph.—On February 9, at St. Martin's-in-the-Fields, S. P. Chennell, M.D., to Jane Edwards Rolph, eldest daughter of the late R. Rolph, Esq., J. P., of Sandwich, Kent. No cards.

Grant—Duguid.—On January 31, at Westerton, Huntly, N.B., R. A. P. Grant, Assistant-Surgeon 43rd Light Infantry, to Jeanie Frances, only daughter of the Rev. W. Duguid, D.D., Glass, Huntly. No cards.

Hughes—Edwards.—On February 7, at St. Hilary Church, Denbigh, J. R. Hughes, M.D., of Denbigh, to Margaret Eliza, eldest daughter of the Rev. R. Wynne Edwards, canon of St. Asaph and vicar of Rhuddlan.

Stevenson — Maberly.—On February 7, Thomas Stevenson, M.D., M.R.C.P., Angell-park, S., to Agnes, third daughter of George Maberly, Esq., London. No cards.

DEATHS.

Bruce, W., M.D., late of Madras, at 15, Kensington-crescent, on February 7, aged 75.

Davies, R., Surgeon, of 53, Gray's-inn-road, late of 126, Holborn-hill, on February 11, in his 74th year.

French, H. J., L.R.C.P. Edin., of the Wandsworth-road, on January 23.

Jones, W. A., M.R.C.S.E., L.S.A., at Foxley, near Bewdley, on January 1, in his 41st year.

VACANCIES.

Eastern Dispensary, Bath.—Resident Medical Officer.

Kensington Dispensary.—Resident Medical Officer.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Haslingden Union.—Mr. Jonas Wimpenny has resigned the Rossendale District; area 7511; population 12,641; salary £20 per annum.

Hastings Union.—Dr. Forbes has resigned the Third District; area 8144; population 1552; salary £40 per annum.

Tenbury Union.—Mr. J. L. Sweet has resigned the Bockleton District; area 16,882; population 3046; salary £55 per annum.

APPOINTMENTS.

Blackburn Union.—Henry Patchett, L.R.C.S. Edin., L.R.C.P. Edin., to the Billington District.

Kirkby Moorside Union.—John Lightbody, M.D. Edin., M.R.C.S.E., L.S.A., for the Union

Leeds Township.—Frederick Hall, M.R.C.S.E., L.S.A., to the First District.

Newark Union.—Robert T. Matterson, M.R.C.S.E., L.R.C.P. Edin., to the Newark District.

Ticehurst Union.—Thomas Baker, L.R.C.P. Edin., M.R.C.S.E., L.S.A., to the Robertsbridge District. William M. Harmer, L.R.C.P. Edin., L.F.P. & S. Glas., L.S.A., to the Hurst-green District.

THE *Gazette* of Tuesday contains the following announcement:—"St. James's Palace, February 7.—The Queen has been pleased to appoint William Carter Hoffmeister, Esq., M.D., and William Hoffmeister, Esq., M.D., jointly, to be apothecaries to Her Majesty's Household at Osborne.

MR. J. Z. LAURENCE on Saturday last ligatured the common carotid for a pulsating tumour of the orbit, presenting all the characteristics of intraorbital aneurism. The symptoms were of sudden origin, and due to falls on the head. Compression of the carotid with a tourniquet was applied for about a week before the operation, without, however, any permanent effect on the tumour. Up to the time of our going to press, the patient had not had a bad symptom.

ROBERTS, the would-be assassin of M. C. de Visconte Godfray, the Surgeon, of Jersey, committed suicide by hanging himself in gaol on Tuesday, January 29.

THE RIGHT MAN IN THE RIGHT PLACE.—Mr. Frank Buckland has been appointed Inspector of Salmon Fisheries, in the room of Mr. Eden, who has retired from that appointment.

LONDON SURGICAL HOME.—We learn that Mr. Isaac Brown, Junior, has tendered his resignation as Assistant-Surgeon to the London Surgical Home. Dr. Barratt has also retired from his post as Physician.

RETIREMENT OF DR. BUDD.—We regret to learn that Dr. George Budd, of Dover-street, has been compelled by impairment of health to resign practice.

"PALL-MALL GAZETTE" TESTIMONIAL.—HUNTER *v.* SHARPE.—The subscription list will be closed on Wednesday, February 20. Subscriptions will be received by T. H. Hills, Esq., 45, Queen Anne-street; G. Pollock, Esq., 27, Grosvenor-street; by the Union Bank, Argyll-place; and by Messrs. Dimsdale, 50, Cornhill.

A SPECIAL Board of Governors will be held at St. Mary's Hospital on Tuesday, the 19th inst., for the purpose of electing an Assistant-Surgeon. The following gentlemen have been duly admitted as candidates for the office:—Walter J. Coulson, Esq., F.R.C.S.; Arthur T. Norton, Esq., M.R.C.S.

FRENCH ACADEMY OF MEDICINE.—M. Noel Gueneau de Mussy was elected into the section of Therapeutics and Materia Medica by the votes of fifty-three of the seventy-five members who were present.

ST. PANCRAS WORKHOUSE.—Dr. Markham has been visiting the small-pox wards in this workhouse, and describes the state of them as something awful—people's clothes never disinfected, but kept below their beds till they were well again; patients turned into beds just vacated, and without any change of clothes; little or no water-closet accommodation; and only a single day nurse, with a woman 71 years of age to look after the patients at night. Of course the guardians *are to see to* the matter.

HAMP *v.* ROBINSON.—This case, which has occupied Chief Justice Bovill and a special jury during the greater part of the past week, is one of disputed paternity. It will turn upon the proof of the possibility of access on the part of the husband to the wife, and on the resemblance of the child to the supposed father. It was not concluded at the time of our going to press. The inheritance of 3000*l.* per annum is at stake.

A MEETING of the Council of the Metropolitan Poor-law Medical Officers' Association was held on Tuesday, the 12th inst., when the Bill introduced by Mr. G. Hardy was submitted to careful consideration. The clauses relating to the supply of medicines, the employment of dispensers, the establishment of dispensaries, and throwing the salaries, etc., upon a metropolitan fund, met with the most hearty approval. It was resolved to call a general meeting of the Association at the Freemasons' Tavern on Wednesday, the 27th inst., at 3 p.m., and to invite the attendance and earnest co-operation of all Metropolitan Poor-law Medical Officers.

DR. GILBERT CHILD has been investigating the water supply of Oxford, and finds it on the whole better than might have been expected. The sources are four in number, but the most important is from a lake known as the Railway Lake, virtually supplied by the Isis, the water contained in this being remarkably good. Dr. Child recommends that this water should be supplied to the greater part of Oxford, and that proper precautions be taken to prevent contamination from the sewage of a village now rising near its banks.

UNIVERSITY OF CAMBRIDGE.—SCHOLARSHIPS FOR NATURAL SCIENCE AT SIDNEY SUSSEX COLLEGE.—The annual examination in Natural Science (Electricity, Chemistry, Geology, Anatomy) for two scholarships of the value of £40 per annum each, will take place in this College on October 8. It will be open to all who have entered at the College before October 1. Further information may be obtained from the Rev. J. C. W. Ellis, tutor of the College. Mr. Walker, who obtained one of these scholarships three years ago, and was bracketed first in the Natural Sciences Tripos last December, has just been elected a Bachelor Scholar of the College, superintendent of the College Laboratory, and Natural Science Examiner. There is, we understand, at this College, a considerable fund available for the promotion of natural science, so that students deserving encouragement will not fail to meet with it.

SANITARY REFORM LEAGUE.—An association has been started in Lancashire under this title for the purpose of facilitating the operation of the Sanitary Act, 1866, and of promoting the cause of sanitary reform in Great Britain. The first meeting of the League was held in Manchester on the 8th inst., and was attended by delegates from Liverpool, etc. Mr. Harris, the Registrar of the Court of Bankruptcy in Manchester, was nominated chairman; Mr. James Samuelson, of Liverpool, editor of the *Quarterly Journal of Science*, vice-chairman; and Mr. Rees, Poor-law auditor, honorary secretary. The meeting was most enthusiastic, and, besides a number of influential gentlemen who were present, many others sent their names as supporters. It is the intention of the gentlemen named to constitute their Association as the nucleus of a national league, and a conference will shortly be invited to meet in London, at which several influential members of Parliament have promised their support.

LONDON GAS.—The proposal of the Board of Works to give each municipal district charge of its own gas-making has caused quite an excitement among the gas companies, who are naturally indignant that they should be at all interfered with. It must be understood that these companies are not entitled to declare a greater dividend than 10 per cent., which, to some who have received 13 per cent. or more, is no doubt vexatious, but not half so much so as it would be for the municipal authorities to take the business of supplying their own gas into their own hands, and allow the present shareholders in the gas companies a rate of interest equally certain, but only double that allowed for consols. The *Journal of Gas Lighting, Water Supply, &c.*, contains an article taking the present proprietors' side, but we confess we have no patience with a practical monopoly which makes the comfort and convenience of its customers a secondary consideration to profit.

PRESENTATION OF ONE HUNDRED SOVEREIGNS TO JAMES MUNRO, ESQ., M.D., F.R.C.S.—On the afternoon of Friday last week a deputation of gentlemen belonging to the Moffat district of Upper Annandale, waited on Dr. James Munro, in his house, Bank-square, High-street, Moffat, to express their sense of his valuable services as a Medical man, their sympathy for him in his recent illness, their delight at his restoration to usefulness and heatth, their appreciation of his worth of character, and their good wishes for his welfare in all that concerned him. But as words themselves were little worth as compliments, they begged that he would permit them to give earnest of the reality of their feelings of goodwill and friendship, by accepting from them, just as a small recognition of the same, a purse of a hundred sovereigns. They had not thought it desirable to acquaint him beforehand with the purpose of their coming, and hoped to be excused for taking him unawares. The Doctor said that, with thorough surprise, he had heard the friendly remarks they had made, for he never had cause to doubt of their sympathy and esteem. They had so unexpectedly come upon him that he could not possibly collect his thoughts so as to thank them as he ought. It is true that unexpected goodness

has a double charm, and, handsome as this gift was, the good feeling accompanying the presentation of it very much enhanced its value in his eyes. "The sympathy you all, and indeed the whole neighbourhood, manifested for me during the severe and painful illness to which you have all alluded, greatly mitigated the sore suffering of that time. I assure you I feel exceedingly your present kindness, and more, all your other kindnesses to me during the eighteen years that I have dwelt in the district, and gone in and out amongst you. I thank you most cordially, and if God sees fit to spare me, I hope, though not able to be worthy of all that you have said in my favour as a Medical Practitioner and as a member of society, yet to be able to act in such a way as to retain your respect and good wishes, which I reciprocate unreservedly. Let me again thank you and wish you every prosperity and happiness." The deputation then withdrew.

"BREACH of warranty" will soon supersede "breach of promise," if a Wiltshire coroner's advice should happen to be generally acted upon. A man's wife died soon after marriage; an inquest was held, and the husband was examined as follows:—"Had she a cough when you married her?" "Eas, zur." "What did you marry her for, then?" "I suppose 'twas because I liked un, zur." "Well, but you must have seen she was not in a healthy state." "I thought she'd be good enough for I, zur." "This is a foolish and most reprehensible way of acting. It would be well if no man would take so serious a step as to marry without being assured, under Medical advice, that his intended wife was a healthy woman. If this were done, sad scenes like the present would be much rarer." But of course, if this scheme were carried out, equal guarantees would have to be required from husband as well as wife.—*Pall-mall Gazette.*

URBAN MORTALITY AND BIRTH RATES.—About one-fifth of the aggregate population of the United Kingdom is located in thirteen large cities and towns, and these, arranged in the order of their mortality rate during the quarter ending December 31, stand thus:—Bristol, 21 per 1000; Birmingham, 22; Hull, 23; London, 24; Sheffield, 24; Salford, 26; Leeds, 28; Glasgow, 29; Manchester, 30; Edinburgh, 30; Liverpool, 33; Dublin, 34; Newcastle-on-Tyne, 37; and the average town rate was 26·53. The birth-rate varies very much in these towns. In Bristol, 34·62 children were born to every 1000 inhabitants; in Edinburgh, 35·07; in Manchester, 35·10; in London, 35·71; in Newcastle-on-Tyne, 36·24; in Birmingham, 37·39; in Salford, 38·54; in Liverpool, 38·73; in Hull, 39·63; in Glasgow, 40·24; in Sheffield, 41·98; and in Leeds, 43·18. The registered birth-rate in Dublin was 24·69, which, like the death-rate, is disturbed by defective registration.

ORIGIN OF THE DOMESTIC HOG.—At the meeting of the Academy of Sciences, at Paris, on November 12, a note from M. Sanson was read, in which he controverted the opinion generally adopted since the time of Cuvier—that the wild boar (*Sus scrofa*), in passing from the savage to the domestic state, gave rise to our different breeds of pigs. M. Sanson states that his researches led him to quite a contrary opinion. The common hog has been shown to have been domesticated before historic times, its remains having been discovered in great abundance when excavating the ancient lake-habitations in Switzerland. There are also important anatomical distinctions between the wild boar and the domestic hog. The former is dolichocephalous, and has only five lumbar vertebræ, while the latter is brachycephalous, and has six lumbar vertebræ. These and other differences prove that the two animals belong to different types; the hog has always been a hog, and the wild boar a wild boar. M. Sanson, in conclusion, remarked on the fact that the Oriental races of horses were distinguished from those of the West by the number of their lumbar vertebræ; the former race possessing five and the latter six of these vertebræ, as may be seen in skeletons in the Museums of Paris and London. After Mr. Sanson's paper had been read, M. Blanchard remarked that M. J. G. St. Hilaire had demonstrated that the common hog was derived from an Asiatic species.—*Comptes Rendus*, tome lxiii., p. 843.

ENDOSMOSIS AND DIALYSIS.—At a recent meeting of the French Academy of Sciences a note was read repecting these interesting phenomena, from Mr. Graham, the Master of the Mint. A few weeks ago a note from M. Dubrunfaut was read, in which he asserted that endosmosis and dialysis were nearly identical, and claimed the discovery of the principle of the latter. To this Mr. Graham replies by stating that the two processes are not identical; that in performing the experiment of endosmosis it is sufficient if only one soluble body be placed in the osmometer (such as a solution of common salt, sugar, gum, albumen, etc.). When two substances are employed, one is placed in the osmometer and the other in the water which surrounds it, as in the experiments of Dutrochet. In dialysis, on the contrary, two substances must be put into solution, but not any two substances; one must be a crystalloid, and the other a colloid. In regard to the object of the two processes, he adds that in endosmosis it is the addition of the water to the one salt which is operated upon; but in dialysis the two salts are separated. M. Dubrunfaut speaks of his process as described in 1854, but Mr. Graham's principal memoir on the diffusion of liquids was published in 1849. See *Comptes Rendus*, lxiii., pp. 838 and 937.

THE DITREMA ARGENTEUM, a fish found near California and Vancouver's Isle, presents some remarkable peculiarities. In the first place it is viviparous. From the moment of their birth the little ones, fully developed, are able to swim and seek their own food. The anatomy of the embryo is not yet well known; but it seems as if the sea-water had access to the placental pouch, in order that the branchiæ may acquire their peculiar mode of action. The fœtal development of the young is especially remarkable. In fact, a female only eleven inches long is able to contain thirteen or fourteen little ones each not less than three inches long. These fishes, when in danger, spring out of the water, and frequently into the boats of persons endeavouring to capture them.—*L'Institut*, No. 1720.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. C. F. Maunder.—The thing is incorrigible, and is probably not chargeable on the author of the work.

W. K.—1. The communication was received. 2. It depends upon whether he practises as a Physician or a General Practitioner. In the latter case, it would not be to his interest.

T. B. P.—The *Gazet'e Hebdomadaire de Medecine et de Chirurgie* is published every Friday, by Victor Masson et Fils, Place de l'Ecole de Médecine, Paris. Apply to Dulau, foreign bookseller, Soho-square, London, W.

Dr. Martin.—The first oration in memory of John Hunter was delivered in 1814 by Sir Everard Home, Bart., his brother-in law. The last oration was given by Mr. Partridge in 1865.

Mr. Bell.—The first Collegial Triennial Prize was awarded to Mr. Joseph Swan for his essay on a Minute Dissection of the Nerves of the Medulla Spinalis from their Origin to their Terminations, and to their Conjunctions with the Cerebral and Visceral Nerves. The preparations are now in the Museum of the College. Mr. Swan is a life member of the Council.

Timor omnis abesto.—We do know instances where Surgeons in general practice are Surgeons to Hospitals, but rarely (although possessing diplomas) Physicians. Every institution must be governed by its special rules.

Paterfamilias.—If a man really believes his wife's health too delicate, he can rarely have much difficulty in sending her out of town, and taking other measures for her complete restoration to health and family duties.

A QUESTION IN OBSTETRICS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—A young unmarried female, 20 years of age, of delicate person, and not so tall or stout as many girls of seventeen, has been delivered of twins, which appear, in relation to the mother's form and size, in every respect children of the regular period. She states that they are seven months children, and that they are the product of violation and rape committed upon her whilst in the country from home by a man who seized her and afterwards made his escape. She persists in her story, which her previous character would corroborate. The question I would ask is, Can these children be of seven months, and could twins be in this way got, a frightened and unwilling party being the victim?

I am, &c. QUÆSTOR.

NEWSPAPER SCIENCE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I enclose a paragraph which appeared in the *London Review* of Saturday last, and which, I doubt not, will astonish you. It alleges that, up to the time when Gall delivered his lectures on the brain, nothing was known of cerebral anatomy. Now, Sir, if I remember rightly, Gall and Spurzheim's inquiries were first laid before the public some time between 1800 and 1806. Thus, if the *London Review* be correct, the labours of all the ancient anatomists go for naught. Old Vieussens, Dubois (who gave his name to the fissure of Silvius), Varolino, and our great fellow countryman, Thomas Willis (of the circle of Willis), appear to hold no friendly place in his mind; and yet I do not think one is far from the truth in saying that Gall and Spurzheim, though most distinguished anatomists,

did little more than follow up the serious labours of Varolino and Vieussens. Is it, then, ignorance or prejudice which induces a writer in a respectable journal to publish so glaring a misstatement as that to which I refer? I fear it is ignorance, for I find the writer is a terribly serious supporter of phrenology, and that he accuses Dr. Allen Thompson, of Glasgow, of having done nothing to distinguish himself beyond his own locality. On the question of phrenology I say nothing—most scientific men have already made up their minds about it—but I may mention (what is known to most of your readers) that Dr. Allen Thompson is the author of the finest memoir which has appeared on the structure and development of the ovum generally, and that his name is familiar to all who study comparative physiology.

I am, &c.

AN ANATOMIST.

EXEMPTION OF MEDICAL MEN FROM SERVICE ON JURIES.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—May I beg the favour of your letting me know in your next issue if I am liable to serve as a grand juryman or common juryman, as I have been summoned fifty miles as such, and can only just receive your answer in time to be of use? On "passing" the Royal College of Surgeons many years ago, I thought I was informed that I was free from such troubles. I am not in practice, but would rather assume the harness than be so troubled. What would constitute being in practice as an efficient answer to the authorities?

I am, &c.

February 9. X. Y. Z.

*** By Section 2 of 6 Geo. IV., cap. 50, it is enacted that "all Surgeons being members of one of the Royal Colleges of Surgeons in London, Edinburgh, or Dublin, and actually practising, shall be absolutely freed and exempted from being returned and from serving upon any juries or inquests whatsoever, and shall not be inserted in the jury lists." We are not aware of any exact definition of "actual practice." In the case of a barrister, he is held to be in actual practice if he be merely ready to plead or advise, no matter how briefless he may be. If you have taken the pains to have your name inserted in the *Medical Register*, that would probably be sufficient proof of your readiness to practise, as showing your wish to be provided with proof of your legal qualifications.

COMMUNICATIONS have been received from—

W. K.; Dr. GEORGE HENDERSON; X. Y. Z.; PATERFAMILIAS; Dr. TUCKWELL; Mr. J. T. RUDALL; Mr. C. F. MAUNDER; Dr. BEAMISH; Dr. W. HEWITT; Dr. CRAWFORD; TIMOR OMNIS ABESTO; Mr. EVANS; Mr. THOMAS; QUÆSTOR; Dr. M'CORMAC; Rev. Dr. S. HAUGHTON; Dr. LIONEL BEALE; Mr. J. CHATTO; Dr. HUGHLINGS JACKSON.

NEWSPAPERS RECEIVED—

Medical Press and Circular—Jersey Times—L'Union Médicale—Pall Mall Gazette—The Co-operator—Gazette Hebdomadaire—Moffat Times—Journal de la Santé Publique—Portsmouth Times—Sunday Gazette—Gazette Médicale de Paris.

BOOKS RECEIVED—

Overend, Gurney, and Co.: a Plain Statement, by a Barrister—The Story of the Truck—Dictionnaire Annuel des Progrès des Sciences et Institutions Médicales—Obstetrical Transactions, vol. 8—Child's Water Supply of Oxford—Dental Journal—Seventh Annual Report of the Cranley Village Hospital—Eleventh Annual Report of the State Lunatic Asylum at Northampton, U.S.—American Journal of the Medical Sciences, No. 105—O'Brien on Dysentery—Report of Canterbury Dispensary—Letheby's Report of the Sanitary Condition of the City of London—Moore on Madeira—Beamish on Asiatic Cholera—Atkinson on Change of Air—Pirrie and Keith on Acupressure.

VITAL STATISTICS OF LONDON.

Week ending Saturday, February 9, 1867.

BIRTHS.

Births of Boys, 1173; Girls, 1126; Total, 2299.
Average of 10 corresponding weeks, 1857-66, 2047·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	850	717	1567
Average of the ten years 1857-66	690·6	697·4	1388·0
Average corrected to increased population..	..	..	1527
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,388	..	1	3	1	15	3	5	..
North ..	618,210	13	2	5	5	13	17	2	..
Central	378,058	3	1	2	1	8	4	2	..
East ..	571,158	13	4	5	..	17	8	3	..
South ..	773,175	18	2	7	4	15	10	6	..
Total ..	2,803,989	47	10	22	11	68	42	18	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·452 in.
Mean temperature	43·4
Highest point of thermometer	54·8
Lowest point of thermometer	32·9
Mean dew-point temperature	38·2
General direction of wind	S.W.
Whole amount of rain in the week	0·48

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, February 9, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending Feb. 9.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending Feb. 9.	Temperature of Air (Fahr.). Highest during the Week.	Temperature of Air (Fahr.). Lowest during the Week.	Temperature of Air (Fahr.). Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	2299	1421	1567	54·8	32·9	43·4	0·48	48
Bristol (City) . .	165572	35·3	132	74	‡80	52·1	32·5	43·7	1·46	147
Birmingham (Boro')	343948	43·9	270	167	155	53·6	34·8	42·9	0·78	79
Liverpool (Borough)	492439	96·4	404	285	306	51·6	35·8	43·2	0·90	90
Manchester (City) .	362823	80·9	255	205	‡209	..	..	..	..	..
Salford (Borough) .	115913	22·2	88	58	59	51·5	33·1	42·4	1·50	151
Sheffield (Borough).	225199	9·9	181	119	111	42·0	33·1	41·8	2·22	224
Leeds (Borough) .	232428	10·8	162	118	123	53·5	33·5	42·3	1·22	123
Hull (Borough) .	106740	30·0	91	49	59	..	..	..	..	..
Nwcstl-on-Tyne, do.	124960	23·4	98	66	105	48·0	35·0	41·3	0·43	43
Edinburgh (City) .	176081	39·8	117	85	100	47·7	32·0	39·7	0·90	91
Glasgow (City) .	440979	87·1	389	257	269	47·8	31·7	38·3	1·83	185
Dublin (City and some suburbs) .	319210	32·8	152	†157	229	51·8	33·0	43·5	1·08	109
Total of 13 large Towns . . .	6187761	34·3	4629	3061	3375	54·8	31·7	42·1	1·16	117
					Week ending Feb. 2.	Week ending Feb. 2.				
Vienna (City) . .	(1863) 560000	..	..	..	332	..	..	§42·1	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·452 in. The barometrical reading decreased from 30·36 in. on Sunday to 28·65 in. on Wednesday.

The general direction of the wind was S.W.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 46·0°.

APPOINTMENTS FOR THE WEEK.

February 16. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

METROPOLITAN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH, 7½ p.m. Meeting.

ROYAL INSTITUTION, 3 p.m. G. A. Macfarren, Esq., "On Harmony."

18. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

ROYAL COLLEGE OF SURGEONS, 4 p.m. A Lecture, by Professor Huxley.

MEDICAL SOCIETY OF LONDON, 8 p.m. Dr. A. E. Sansom, "On the Comparative Action of Volatile Narcotics: an Inquiry as to the Best Agent to Employ in Practice."

19. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ANTHROPOLOGICAL SOCIETY OF LONDON, 8 p.m. Meeting.

PATHOLOGICAL SOCIETY, 8 p.m. Meeting.

ROYAL INSTITUTION, 3 p.m. Professor Tyndall, F.R.S., "On Vibratory Motion with Special Reference to Sound."

20. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

ROYAL COLLEGE OF SURGEONS, 4 p.m. A Lecture, by Professor Huxley.

21. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

HARVEIAN SOCIETY OF LONDON, 8 p.m. Mr. Victor de Meric, "On Some Complications of Gonorrhœa." Mr. Teevan will show Cases to Demonstrate the Use of the Microscope.

ROYAL INSTITUTION, 3 p.m. Professor Tyndall, F.R.S., "On Vibratory Motion with Special Reference to Sound."

22. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.

ROYAL COLLEGE OF SURGEONS, 4 p.m. A Lecture, by Professor Huxley.

ROYAL INSTITUTION, 8 p.m. M. D. Conway, Esq., "On New England."

ORIGINAL LECTURES.

LECTURES ON CATARACT,

AND THE

MODERN OPERATIONS FOR ITS TREATMENT.

DELIVERED AT

King's College, London,

During the Summer Session, 1866,

By J. SOELBERG WELLS,

Professor of Ophthalmology in King's College, and Ophthalmic Surgeon to King's College Hospital.

Lecture VI.

(Continued from page 136.)

Von Graefe's New Modified Linear Extraction.

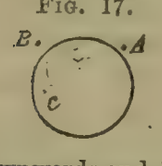
Von Graefe has lately devised a modification of the linear extraction, which promises to combine the advantages of the flap and the scoop extraction; for whilst the section involves but a very small portion of the cornea, it yet, on account of its shape and mode of formation, gapes sufficiently to permit, in the great majority of cases, the exit of even a hard senile cataract without the aid of a traction instrument. The operation is divided into four periods:—1. *The incision;* 2. *The iridectomy;* 3. *The laceration of the capsule;* 4. *The removal of the lens with or without a traction instrument.* The operation is to be performed in the following manner:—

1. *The Incision.*—The patient having been placed under the influence of chloroform, the eyelids are to be kept apart with the stop speculum, and the eye fixed with a pair of forceps. The point of a long narrow knife (Fig. 16), with its cutting

Fig. 16.

edge turned upwards, is to be entered in the sclerotic (at the point *A*, Fig. 17) near the upper and outer portion of the cornea, about one-third of a line from its edge, so that it may enter quite at the periphery of the anterior chamber. The point of the knife should be at first directed downwards and inwards towards *c*, so as to enlarge the inner incision, and then, when the blade has advanced about three and a half lines into the anterior chamber, the handle is to be depressed and the point carried along to *B*, where the counter-puncture is to be made. Great care must be taken that the counter-puncture does not fall too far in the sclerotic, which might easily occur if the presentation of the point of the knife is not carefully watched, or the blade is passed too far downwards and inwards, before it is turned upwards to make the counter-puncture. Such an accident will give rise to a wide gaping wound, and, in all probability, to great loss of the vitreous, even perhaps before the iris has been excised, and certainly during the pressure which has to be made upon the globe to facilitate the exit of the lens.

Fig. 17.



As soon as the counter-puncture has been made, the edge of the blade is to be turned steeply forwards, and the knife pushed straight on until its length is nearly exhausted, when the section is to be finished by drawing it backwards from heel to point. If a little bridge should remain, it is to be divided by a slight sawing movement of the knife, which will then lie under the conjunctiva, which is next to be divided in such a manner as to leave a conjunctival flap of about one line to a line and a half in height. In order that it may not exceed this extent, the edge of the blade must be turned horizontally forwards, or even downwards. If the cataract is hard and firm, it may be advisable to use a somewhat broader knife, and to make the points of puncture and counter-puncture one-third of a line lower.

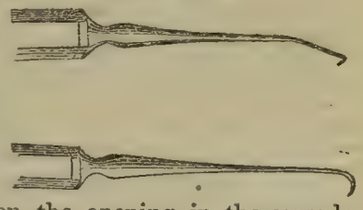
By this incision the track of the wound lies almost perpendicular to the surface of the cornea, and is far steeper (less sloping) than that made by the lance-shaped knife. Thus the exit of the lens is greatly facilitated, for its equator passes far more readily into the track of the wound, and the cortical substance exudes also more easily. There is, however, the disadvantage that on account of the steepness of the section the suspensory ligament loses its support, and hence there is a greater tendency to loss of vitreous than if the incision is made with the lance-shaped knife.

2. *The Iridectomy.*—If the section does not come well into view, an assistant is to draw the eye down with a pair of forceps, and the conjunctival flap is to be turned back over the cornea with a small pair of iris forceps, thus laying bare the prolapsed portion of the iris, which is next to be excised to the whole extent of the incision.

3. *Laceration of the Capsule.*—The capsule is to be freely divided with the cystotome by two successive lacerations. The one is to commence at the lower edge of the pupil, and to extend upwards along its inner side, the other along its outer side; both incisions should reach quite up to the periphery of the lens exposed by the iridectomy. The edge of the cystotome should be turned somewhat slanting, so as to avoid the risk of displacing the lens.

4. *Removal of the Lens.*—The back of a rather broad curette is then to be lightly pressed upon the sclerotic near the centre of the incision, in order to make it gape a little, the eye being at the same time drawn boldly downwards with a pair of forceps, which facilitates the presentation of the lens. If we aid the pressure of the curette above by a gentle counter-pressure of the forceps below the cornea, portions of cortical substance will readily exude, and the vertex of the nucleus present itself. To assist in its exit the curette should be made to glide laterally along the sclerotic to the angles of the incision (the "Schlitten manœuvre" of Von Graefe), the pressure being somewhat increased along the scleral border of the incision. These lateral movements may, if necessary, be repeated several times. Finally, the pressure is to extend in an upward direction, being also at the same time somewhat increased. It is to be diminished in proportion as the diameter of the nucleus presents itself, and when its edge has arrived within the section, its exit may be aided by lifting it out with the edge of the curette. If it is found that the nucleus, even after a repetition of these gliding movements of the scoop, does not present itself in the section, it is better to employ some form of traction instrument than to endeavour to force the lens out by increased pressure upon the globe, which would be sure to cause loss of vitreous. Von Graefe employs a blunt hook for this purpose (Fig. 18), the stem of which is slightly bent, so as to pass more readily under the nucleus. Its use requires a good deal of dexterity and care; otherwise the nucleus may not be equably balanced upon it, but become somewhat tilted.

Fig. 18.



It should be at first laid flat on the opening in the capsule, and then drawn back to the exposed edge of the nucleus. The handle is then to be elevated so as to bring the hook into the direction of the posterior cortical substance, along which it is to be pushed on the flat until it has skirted the posterior pole of the nucleus. The handle is then to be somewhat depressed, but the hook still pushed on until it has arrived almost at the opposite edge of the nucleus. It is then to be lightly rotated between the fingers around its axis, so that the plane of the curvature of the hook is brought from a horizontal into a vertical position, or, if increased resistance be felt, into an oblique one, and the nucleus or the whole lens is then to be gently drawn towards the incision. Instead of the hook, either Mr. Critchett's or Mr. Bowman's scoop may be used. Von Graefe states in his last paper upon this subject (a) that the traction instrument was only employed by him in about one case in eight, and then chiefly in hard senile cataract. With respect to the frequency of the loss of vitreous, he found that it diminished considerably since he substituted more and more the pressure with the curette (sliding-manœuvre) for the use of the traction instrument. Thus, in the first hundred cases, (b) he lost vitreous in thirteen, whereas, in the third hundred, he only lost it in six cases.

The after-treatment of this operation is very simple, far more so, indeed, than that of flap extraction. The general rules which I laid down with regard to the after-treatment of the flap and scoop operation, apply also to it.

This operation has proved so remarkably successful in Von Graefe's hands, that he has not only completely abandoned

(a) *Archiv f. Ophthalmologie*, xii. 1, p. 175.
(b) *Ibid.*, p. 202.

the scoop extraction in its favour, but even questions whether it may not in all cases be substituted with advantage for the flap operation. Within a year he has operated by this method upon 300 cases of various kinds of cataract, including, without any exception, those of advanced or middle life, and those forms of juvenile cataract in which there were not marked reasons for preferring the operation of division. In 90 per cent. he obtained a perfect result (acuteness of vision from $\frac{1}{6}$ to $\frac{5}{6}$). In 82 per cent. the progress of the case was quite normal; in 8 per cent. complications of a temporary nature occurred (*e.g.*, irritation of the section, iris, and capsular cells, slight prolapse of the iris at the angles of the incision, and temporary opacities of the vitreous); in 10 per cent. the result was imperfect, so that some cases required a secondary operation. But, on the whole, the cases showed 94 per cent. of perfect results; and these statistics are certainly more favourable than those of flap or scoop extraction.(c)

It must be, moreover, stated that these were not cases specially selected as being favourable for this mode of operation, but that they were taken as they came. For instance, some were cases of immature cataract, in others the opacities were of a lamellar nature, or were situated at the posterior pole of the lens, leaving the body of the lens transparent. Some again were complicated with affections of the conjunctiva or lachrymal apparatus, others with chronic iritis, posterior staphyloma complicated with an affection of the vitreous, etc. Eight cases of diabetic cataract (occurring in six patients) were operated upon, with seven good results; in the eighth there will probably be a medium result. Collapse of the cornea, which, when at all considerable, we regard as so very unfavourable a symptom in flap extraction, does not appear to exert any deleterious influence. In ten cases there was extreme collapse, and yet the result was perfect; in sixteen others, in which it occurred to a slight extent, there was only one defective recovery.

These results are unquestionably most favourable; and if they are equalled in the hands of other operators, this operation is likely to supersede not only the scoop, but also the common flap extraction. My friend, Mr. Critchett, has tried it extensively during the last year, and has also found it very successful. My own experience of it is at present too limited to enable me to form a decided opinion of its merits, but I think the results which Von Graefe has obtained demand that all Ophthalmic Surgeons should give it an extensive trial.

I should mention that Dr. C. Taylor, of Nottingham, has operated by a method somewhat similar to that of Von Graefe (but quite independently of him) since the summer of 1865; indeed, both appear to have begun these operations about the same time. In No. 9 of the *Ophthalmic Review* (April, 1866)(d) Dr. Taylor says:—"I have also, in certain cases where the results of sclero-choroiditis posterior, extensive atheroma of vessels, staphyloma, or other disease of the eyeball, render it unsafe to reduce tension so suddenly or completely as is done by the ordinary flap operation, endeavoured to obviate the dangers of escape of vitreous, hæmorrhage, and subsequent suppuration of the eyeball by a modification of Schuft's operation—premising an iridectomy as above, and making the incision with a small ground-down cataract-knife, entered in the cornea and sclerotic junction, and emerging at a counter-puncture, so as to incise a little more than the upper third of the cornea, the opening being well back, and larger than the large one sometimes required in Schuft's operation. The eye may be safely fixed throughout the operation. The flap cannot be turned down; and yet, if the posterior lip of the wound be gently pressed back, the lens may be coaxed out without passing any instrument into the eye."

Metropolitan Poor-law Medical Officers' Association.—The Council held a meeting on Monday, the 18th, for the purpose of considering the quarterly report to be presented to the Association at the general meeting to be held at the Freemasons' Tavern on Wednesday, the 27th, at 3 p.m., and to settle the order of proceedings. An earnest hope was expressed that as the Metropolitan Poor Bill would be the principal topic of discussion, all Poor-law Surgeons and others interested in the question of the better treatment of the sick poor would attend.

(c) *Vide* Von Graefe's "Statistics of Flap and Scoop Extraction," *Archiv f. Ophthalmologie*, xi. 3, p. 7.

(d) See, also, the *Medical Times and Gazette*, p. 675, December 22, 1866.

ORIGINAL COMMUNICATIONS.

FUNDAMENTAL STRUCTURE AND ARRANGEMENT OF A NERVOUS APPARATUS.

By Dr. LIONEL S. BEALE, F.R.S.,

Fellow of the Royal College of Physicians, Physician to King's College Hospital, and Professor of Physiology and of General and Morbid Anatomy in King's College, London.

Conclusion.

Of Spherical and Oval Nerve-cells.

The fibres from these cells are often very numerous, and they appear to grow from the cell and to increase in length as the cell advances in age. The so-called *connective-tissue capsule* of these cells consists principally of bundles of pale nucleated nerve-fibres, which are partially coiled round the cell. If these be torn away, portions of the body of the cell are detached, and the surface is left rough. The fibres grow from the cell, and some of the nuclei existing in the fibres near the cell were once embedded in the material which then constituted the body of the cell itself.

Many of the remarkable spherical, oval, and pyriform nerve-cells found in connexion with many nerves of the frog have two distinct fibres, one of which comes from the central, the other from the circumferential, part of the cell, the latter being coiled spirally round the former. The absence of this spiral arrangement in the youngest cells, its appearance as the cell advances towards maturity, and its increase as it becomes older, indicate the occurrence of important structural changes while the functional activity of the cell lasts. From the presence of numerous oil-globules in the substance of the mature cell I infer that chemical decomposition of successive portions of the material of which it is composed has occurred. The manifestation of electricity must have accompanied the chemical change; and the structure, arrangement, and course of the nerve-fibres, as well as their connexion with the cell, are such as to suggest the view that in these cells and fibres we have an electrical apparatus.

Of the Angular or Caudate Nerve-cells.

The largest cells of this class are found in the grey matter constituting the anterior cornu of the spinal cord of man and the higher vertebrata.

In 1864 I presented to the Royal Society a paper on the "Indications of the Paths taken by the Nerve-currents as they traverse the Caudate Nerve-cells of the Spinal Cord and Encephalon," which was published in the *Proceedings* with the figures reproduced in Plate III. In this paper I described the peculiar lines traversing the "caudate nerve-cell," and demonstrated that the "fibres" possessed the same structure and composition as the outer portion of the cell, and were in structural continuity with it. I could not resist the conclusion that the lines seen in these cells, and passing from each fibre across the cell towards every other fibre emerging from it, were the very lines taken by the nerve-currents when the cells were active. All that I had demonstrated concerning the networks and plexuses in peripheral nerve-organs, and in the arrangement of nerve-fibres in the trunks of nerves and their subdivision, seemed to support the inference that these cells were parts of an extensive circuit, and I felt convinced that instead of regarding these cells as bodies from which nerve-fibres emanated, we should rather look upon them as junctions where numerous circuits decussated.

The idea of *nerve-circuits*, as opposed to the idea of nerve-fibres with a beginning and an end, received from this anatomical observation the strongest support.

The highly interesting researches of Deiters, published after his death by Max Schultze, are not opposed to my conclusions. Although I do not think that the one long fibre connected with the cell and described by him has a different composition from the so-called "protoplasm" processes—if this were the case, its existence would be in favour of the idea of circuits. This long fibre corresponds, I think, to the longest fibre represented in my drawing (Fig. 38). Although in Deiters' figures it is represented as if it were altogether different in structure from the other fibres of the cell, I do not find the same difference indicated in the drawings of Boddaert,(a) and in the

(a) "Recherches sur l'Histologie de la Moelle épinière," par M. le Dr. Gustave Boddaert de Gand.

beautiful photograph of one of the large cells from the anterior cornu of the spinal cord of the ox, the refractive power of the long unbranched fibre seems to be the same as that of the so-called protoplasm fibres.(b)

From the axis cylinder, which comes to the cell in the long fibre, many fibres proceed across the cell and pursue their further course in the smaller processes which diverge from it in different directions. In short, Deiters' drawings and Boddaert's photograph are as strongly in favour of circuits as any figures that I have published.

If I were compelled to speculate concerning the office of the two very distinct classes of cells already referred to, I would suggest that, as the spherical, oval, and pyriform cells are highly developed at an early period of embryonic life, and grow and multiply freely even in the adult, and are always active—as they are specially connected with cardiac and vascular nerves, and are the only central nerve-cells of the simplest forms of nervous system, it is probable they are the *sources* and *generators* of nerve-force, and are alone required for reflex nervous actions. While, as the angular, stellate, or caudate nerve-cells attain their maximum development in man and the higher mammalia and birds, and are very small in the lower vertebrate animals—as they are the last to attain perfect development, and are in an immature state for some time after birth, it seems likely that they are concerned in those wonderfully combined and harmonised acts which are so characteristic of man and the highest vertebrate classes.

It is an interesting circumstance, and strongly corroborative of the truth of the views here advanced, that, at the very time I was making out the peculiar anatomical points recorded in my paper on the paths taken by the nerve-currents in the caudate nerve-cells, Professor Alexander Bain, looking upon the subject from a totally different side, arrived at inferences concerning the arrangement of the nervous mechanism agreeing in all important particulars with my own, which have been deduced from facts arrived at by anatomical observation only.

Let it not be supposed that, even if conclusive proof had been afforded that the nerve-current was electricity, we should have ascertained the whole truth, or even approached towards a true explanation of nerve-phenomena. The action is due not to the mere force which travels, but to the course it is compelled to take, and this is determined by the arrangement of the fibres and centres—in short, by the form or structure of the nerve apparatus. It is not until we attempt to ascertain how the very simplest nerve mechanism has been *formed* that we discover how very little we really know, and yet, without an accurate knowledge of the construction of the instrument, how can we hope to learn much about the nature of its work? For is not the kind of work performed by a machine determined by its construction, and has not every particle of the work done a particular form or character stamped upon it which may be traced through the machine to its designer?

To say that the work done by any machine is a result of force is but a half truth, for force alone cannot do the work or produce the machine which performed the work. Both the work and the machine exhibit *form* as well as *force*, and surely this *form* was not derived from force, but from mind. There is no mechanism, animate or inanimate, simple or complex, which has resulted only from the influence of any ordinary force, and I doubt if any physicist who had seen the nerve structures described in these papers would attribute their *formation* to force. Although it has been asserted that force *forms* and *builds* tissues, not the slightest evidence has yet been advanced in support of such a doctrine. Force cannot form or build, any more than it can design or originate. Nor will all the energy, authority, and influence of the physico-chemical school succeed in forcing the real student of nature to entertain such a dogma. It is very remarkable that in the present day any thoughtful person should maintain that ordinary force can *form*, or has ever *formed*, any mechanism or other thing in this world capable of working.

(b) I think Max Schultze, of Bonn, and many others, use the word "protoplasm" somewhat loosely. Matter exhibiting very different properties has been included under this term, and I think it would enable anatomists and physiologists to understand the protoplasm doctrine more clearly if some one would give a series of drawings of different textures, with Schultze's "protoplasm" clearly marked in each. In my drawings I have endeavoured to distinguish the "germinal or living matter" from the "formed or lifeless matter of the cell." It is not to be expected that my fellow-workers in Germany will soon admit the distinction I have ventured to draw between *living* and formed matter; but I regret to find an indisposition to discuss the question. There is something in the word "living" which seems so irritating to some minds that I would gladly substitute some other word for it, if one as short and equally applicable could be found.

ON PUERPERAL URÆMIC ECLAMPSIA.

By ARTHUR SCOTT DONKIN, M.D. Edin., M.D. Dur.,
Lecturer on Medical Jurisprudence to the University of Durham College of Medicine, Newcastle, and Physician to the Sunderland Infirmary and Dispensary.

Amongst the achievements of modern pathological investigation, there are none more important than the discovery that the genuine typical form of puerperal convulsions is the result of uræmic blood-poisoning, produced by a morbid condition of the kidneys during the advanced period of pregnancy.

Considering the very grave and important bearing of the subject in a practical point of view, it is much to be regretted that the recognition of the correct pathology of this most formidable disease is by no means so general amongst ourselves as amongst our French and German neighbours, especially the latter, by whom pathological chemistry has been cultivated with so much assiduity and success.

But this is only evidence of the fact that the earliest original researches commenced in this country by Sir J. Simpson,(a) Dr. Lever,(b) and Dr. Cormack,(c)—researches which, within the last twenty years, have led to the elucidation of the pathology of the disease—have been much more fully and correctly appreciated by the Profession abroad than in Britain. Beyond the contributions just referred to, our own literature cannot boast of any such elaborate treatises on the subject as those of Professor Braun, of Berlin (translated by Dr. Mathews Duncan), and Professor Cazeau, in the recent edition of his great Parisian work on Obstetrics.

When it is recollected that cases of this disease but seldom occur in the experience of individual Practitioners, and that yet, nevertheless, our attention is every now and then directed to fatal instances of its energy, we the more clearly perceive how important it is, in a practical point of view, that each illustration of it should be accurately and fully recorded. This reason has induced me to place on record the three following cases, which are instructive, both pathologically and practically considered.

The report of the following case was supplied to me by Mr. May, of Newcastle, who, from time to time during its progress, supplied me with specimens of urine withdrawn by the catheter:—

Mrs. G., first pregnancy. Up to the time of her labour attended to her usual domestic duties. A twin pregnancy was suspected, owing to the great size of the abdomen, which, however, was due to excess of liquor amnii. Towards the close of gestation her legs were œdematous and urine scanty, but no facial œdema. She took aperients occasionally.

On March 30, at midnight, she was seized with "fainting fits," her countenance being pallid; she seemed exhausted, and answered questions with an effort; had voided scarcely any urine during the previous day; feet and legs pitting under pressure. No headache nor giddiness at this time, nor indications of incipient labour. A stimulant administered. Shortly afterwards she began to have a rapid succession of fits, with all the features of puerperal convulsions, and at 10 o'clock on the following forenoon was observed lying on her back quite comatose, as she had been for a few hours, with stertorous laborious breathing, a flushed face, puffiness below the eyelids, and a full and very rapid pulse. The late Dr. Dawson now saw her in consultation. Ten grains of calomel were prescribed, followed in the course of an hour and a half by two drops of croton oil. At 11.30 a.m. the os uteri was dilated to the size of a crown piece, and the liquor amnii was discharged spontaneously. The fits increasing in frequency and violence, and the cathartics not having acted, two enemata were administered in succession, but with no effect. At 3 p.m., the fits recurring with greater frequency and violence, and the aspect of the case being very formidable, six ounces of blood were withdrawn from the arm, with the effect of checking the convulsions for a time, there being no more fits for some while afterwards. Coma not relieved. An hour afterwards the forceps were applied and a dead fœtus abstracted, followed immediately by the placenta. Coma as profound as ever; pulse 130. Cathartics now acted profusely and frequently. At 8 p.m. no improvement.

Next day (April 1) not much improved; still unconscious, but respiration easier; perspiring freely; swallows beef-tea in spoonfuls, and the medicine (calomel and antim. tart.)

(a) *Edinburgh Monthly Journal*, 1847.
(b) *Guy's Hospital Reports*, 1843.
(c) *Medical Times and Gazette*, p. 26, 1850.

every four hours. Bowels acting freely, and a considerable quantity of urine voided.

April 2, 11 a.m.—Much improved; skin moist; would sit up in bed to micturate; conscious to a considerable degree, replies to questions, and knows her friends; still purged; some abdominal pain; lochia scanty; mustard poultice applied to the abdomen; calomel, antimony, and opium continued; partakes freely of the beef-tea. This improvement occurred thirty-six hours after the invasion of the disease.

3rd.—Passed a calm night; answers questions correctly; countenance more cheerful; sleeps occasionally; respiration calm and quiet; pulse 120, calm and compressible; voided a large quantity of pale urine. No abdominal pain nor tenderness; lochia returning; beef-tea continued.

On the 5th seized with hemiplegia, and died with symptoms of exhaustion on the 7th, eight days after the seizure, her intellect remaining clear to the last.

I carefully examined an ounce of the urine withdrawn by the catheter (all the bladder contained) prior to using the forceps; its density was 1020, pale and highly albuminous; it contained epithelium, but no tube-casts or blood-corpuscles; the quantity voided on the day after delivery and following days prior to death was copious and pale-coloured. On the second day the albumen had greatly diminished, and on the fourth almost entirely disappeared, owing, no doubt, to the subsidence of the renal affection.

I saw the second case in consultation with Mr. May. Mrs. D., aged 26, a short, thick-set, robust young woman; first pregnancy, and near the full period; seized with a violent attack of convulsions on the morning of May 14, 1863, terminating in complete coma, which continued uninterrupted until her death. The pulse was full, strong, and rapid, 130, throbbing in the carotids. The pupils were strongly contracted; the respiration stertorous and laborious. An ounce of urine (all the bladder contained) was withdrawn by the catheter before delivery. Its density was 1020, pale-coloured, and became nearly solid when examined for albumen, the quantity being so large. It contained epithelium, but neither casts nor blood-corpuscles. She was bled to the extent of about sixteen ounces at 4 o'clock in the afternoon, and afterwards delivered by the forceps of twins. Both were head presentations, and living. Cold was applied to the head, and a full dose of croton oil administered, which acted fully. She died at 10 o'clock the following forenoon.

The following case occurred under my own observation:—

Mrs. H., aged 30, a thin, spare woman; first pregnancy, and at the full term; was seized, on March 27, 1864, with headache, which increased until the next day, when she squinted, and became blind of one eye, and then delirious, with greatly increased pain in the head; afterwards blindness of both eyes. Early next morning (29th) she was observed sitting up in bed talking incoherently, and soon after was seized with a violent attack of convulsions, ending in deep coma. A second fit followed in twenty minutes. I first saw her when this latter was subsiding. The coma still continued; the respiration was stertorous; the pupils firmly contracted; the pulse full and rapid—125. She was placed in a sitting posture, and blood withdrawn from the arm by a large aperture. After the abstraction of 40 oz. the pulse became soft, and the vein was closed. A few minutes afterwards she opened her eyes, though still unconscious. A third fit followed the second in twenty minutes, but very much milder, shorter, and attended with very slight coma. Labour had not commenced; cold was applied to the head, and ol. croton. gtt. j., and pil. colocynth. et hyoscy. gr. x., prescribed.

On visiting a second time at 8 a.m., was told that an hour before she awoke and answered questions, though indifferent to everything around; and in half an hour, without warning, gave birth to a healthy boy; the placenta followed, with very slight hæmorrhage. Subsequently she had no recollection of her delivery. At this time still indifferent, but when questioned replied that the pain in the head was severe. Pulse 110, soft. At 4 p.m. quite conscious; pain in head slight; pupils not contracted, but vision imperfect.

Next day, still improving, but vision imperfect and hazy.

Next day (31st), improving; vision nearly recovered.

April 1.—Quite convalescent; the patient soon regaining her strength and nursing her infant as if she had never been bled. In December, 1865, she was delivered of her second child without the slightest tendency to convulsions.

The blood coagulum was cupped and buffed, and the serum of the strong violet hue considered by Frerichs and others as characteristic of uræmia.

The urine on the day of delivery was highly albuminous, and contained epithelium, but no tube casts nor blood corpuscles. At the period of convalescence the albumen had nearly disappeared.

I shall now briefly review the more important clinical features of these cases.

1. They are illustrations of the almost universal relation between the disease and first pregnancy. In the first, the liquor amnii was greatly in excess, the second was a twin pregnancy, and the third occurred in a thin spare subject of small abdominal capacity—all circumstances greatly aggravating the pressure exerted by the gravid uterus on the renal veins in close proximity behind, thus producing renal congestion and uræmia.

2. They illustrate that fulness and rapidity of the pulse are an important feature of the disease, to which sufficient attention has not been directed.

3. The pupils were strongly contracted in two of the cases (no observation having been made in one of them on this point). This phenomenon has been witnessed by Dr. R. Haldane in cases of uræmic eclampsia occurring in the progress of Bright's disease (*Edin. Med. Jour.*, April, 1865); it indicates fulness of the cerebral vessels, and is of great practical import.

These observations introduce us to the following questions:—

1. What is the general pathological condition of the kidneys in this affection?

2. Should it be treated by bloodletting; and if so, to what extent and at what period?

It would be incompatible with the history of this disease and utterly untenable to suppose that the renal affection partakes of the nature of chronic degeneration in any of its different forms constituting Bright's disease. It, indeed, appears that the only question to be decided is whether it is of the nature of chronic inflammation or passive mechanical congestion, induced by the direct pressure of the gravid uterus on the renal veins.

The following data are sufficient to show that it is not inflammation:—1st. The absence of its general and local symptoms. 2nd. The state of the urine, pale and devoid of fibrinous casts, and blood corpuscles and epithelium both embedded in them and free. This is very different from what we observe in the scanty, smoky, bloody urine of the inflammatory dropsy following scarlatina.

But that there is simple mechanical congestion of the renal venous system of the kidneys is proved—1st, by the intimate relation of the disease with first pregnancy, especially twin cases, excess of liquor amnii, tight lacing, a short or spare figure with small abdominal cavity—all conditions dangerously approximating the posterior surface of the gravid uterus and the renal veins behind it, producing compression of the latter and obstruction of the renal circulation current. 2nd. The rapidity with which the kidneys resume their healthy function after delivery—in other words, the rapid evanescence of the disease after the emptying of the uterus—as observed in two of these cases.

The individual result of these cases shows not only the value of bloodletting, but also the extent to which it ought to be practised and at what period of the attack. In the first 6 ozs. were withdrawn, in the second 16 ozs., but in neither until irreparable injury had been inflicted on the brain, and both died. But in the third case, although the attack was preceded by most formidable symptoms of cerebral disturbance, bleeding to 40 ozs. at the onset produced the happiest result, supplemented by a drastic purgative and cold applied to the head. The indications in such cases are to subdue the force, rapidity, and increase of the cerebral circulation, and to eliminate the poison with all possible speed. It is only by such remedies that these ends can be accomplished, and fatal injury to the brain prevented until the kidneys resume their function.

As an additional indication for bloodletting, I must also note the contracted pupils present in two of these cases, and probably also in the third. This condition seems to be produced, as I have said, by a full condition of the vessels of the brain. On this subject, Dr. Rutherford Haldane, in a valuable contribution on the Uræmic Eclampsia of Bright's Disease (*Edin. Med. Jour.*, p. 892, April, 1865), remarks: "It appears to be undoubted that in general the size of the pupil is an index to the state of the vessels, not only of the iris, but of the brain. When the vessels of the head are full, the iris is broad and the pupil is small; on the contrary, when the cerebral vessels are emptied the iris is narrow and the pupil large.

Thus, when an animal is hung with its head downwards, so that the vessels become turgid, the iris becomes broad and the pupil small; on the contrary, when the vessels of the head are emptied by bleeding, or by tying or compressing the carotids, the iris becomes narrow and the pupil large. In the patient suffering from acute meningitis the pupils are greatly contracted, while in the hysterical or chlorotic female they are widely dilated."

At the full period of gestation there is a special tolerance for bloodletting not found in any other condition, and this because parturition, though a strictly healthy physiological process, is in every instance attended by hæmorrhage by no means slight in degree—sometimes so severe as to produce syncope—but when not fatal, this excessive hæmorrhage but seldom indeed leaves behind any abiding anæmia, the patient generally regaining her wonted strength and vigour with surprising rapidity. Very different from the result of profuse hæmorrhage in abortion and in the non-pregnant in health or disease. It is evident, then, that Nature, according to her general law, has made special provision for loss of blood towards the end of gestation, to meet a special emergency, rendering it innocuous. Consequently, at this period copious venesection may be had recourse to without the risk of protracted injury. This consideration seems to have been entirely lost sight of in the controversies which have arisen on this subject. I, therefore, hold that the arguments urged with propriety against bloodletting in the non-pregnant suffering from severe disease are in general quite inapplicable in the present instance. For example, the result obtained by bleeding in the uræmic eclampsia of advanced Bright's disease would be very different from that of bleeding a robust young female seized with puerperal uræmic eclampsia.

The invasion of the disease should, if possible, be prevented by prophylactic treatment. Albuminuria in advanced pregnancy is exceedingly dangerous, and should be treated accordingly by cathartics and other measures to establish a vicarious excretion to compensate, as far as possible, for the deficient action of the kidneys, and every article of dress compressing the abdominal parietes removed. But, in any case, should those characteristic premonitory symptoms so frequently ushering in uræmic eclampsia—such as disordered and imperfect vision, tinnitus aurium, pain in the head, vertigo, and an accelerated pulse, etc.—begin to present themselves, the only remedy on which reliance can be placed to prevent the seizure is bloodletting.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

LARGE CYST OF THE THYROID GLAND SUCCESSFULLY TREATED BY INJECTIONS OF IODINE.

(Under the care of Mr. SAVORY.)

Cysts in the substance of the thyroid gland occasionally grow to a very great size. In this case they were so large as to increase the girth of the neck from about fourteen to eighteen and a half inches. Such cysts are not only, through their bulk, very unsightly and inconvenient, but they are very formidable when the question of their active treatment has, in consequence of their continued increase, or of their interference with respiration, or more rarely with deglutition, to be considered; for they are situated in the substance of a highly vascular gland, and are surrounded by all the vital structures found at the side and in the front of the neck. What is put down in books regarding their treatment shows how perilous this is, and that, though the Surgeon may be compelled to interfere with them, he ought always to act with the greatest caution, since, by any operation, however carefully done, he is likely to place his patient's life in some—generally a considerable—temporary risk. The common methods for the radical cure of such cysts are (1) the injection of iodine into their cavity, (2) the introduction of a seton, and (3) the laying them freely open, so that they may be obliterated by contraction and granulation. The idea of dissecting them out cannot be entertained. The injection of iodine into their interior is probably the most certain and least dangerous plan. It answers very well in cases in which the cysts are of comparatively small size. But there is preserved in the museum of St. Bartholomew's Hospital (s. xxii. 16) a large cyst of the thyroid gland, which, during treatment by iodine injections, became intensely inflamed, and burst into the pharynx immediately above the orifice of the larynx. Death was caused by the escape of its contents into the trachea. Mr. Coote, in Holmes's "System of Surgery," vol. iv. p. 707, says:—"I have succeeded in producing the complete obliteration of a thyroid cyst by means of the injection of iodine in the usual proportions of one drachm of the tincture to five of water. But whoever undertakes such an operation should bear in mind the numerous complications that await him, as well as the fact that in some instances the hæmorrhage has been so severe as to demand the application of a ligature to the common carotid." Mr. Paget lately mentioned the following case:—A lady, who had an enormous cystic goître, thinking the door of a room into which she had occasion to go was open, walked on in the dark, and struck the projecting front of her neck violently against the flat panel of the door, which proved to be shut. She was much alarmed at the accident, but was well enough to go out to dinner on the same evening. She went to bed conscious only of having bruised herself severely. On waking the next morning she was very much surprised to find that the swelling in her neck had almost wholly disappeared, so that the skin was left loose and hanging in folds over her sternum. It was evident that the sudden blow had ruptured the cyst, and that the serous contents had been extravasated into the cellular tissue of the neck. Some time afterwards no return of the swelling had taken place, and she considered herself thus accidentally cured. Another patient that Mr. Paget knew of, and who had a large cyst in his thyroid, was cured for some time, if not permanently (of this Mr. Paget could not speak certainly), by the hug of a garotter. It is to be regretted that one [so exceptionally favoured has not had the gratitude to come forward and acknowledge his obligations to one of a class who are universally reviled.

H. L., aged 20, from Northamptonshire, was admitted into Lucas Ward, under the care of Mr. Savory, on October 20, with great enlargement of the thyroid gland. She said that this had begun eleven years ago, and that it was at first confined to the right side of the neck. From that time it had gradually and painlessly increased. It had been variously treated with the external application of iodine and some medicines internally. On examination, it was seen that the neck was very much enlarged by two cysts, one in either lobe of the thyroid gland, and separated by a deep sulcus corresponding with the isthmus. It was impossible at this time to say whether there was any solid enlargement of the gland. A few days after her admission the cyst on the left side (the smaller) was tapped, and, after it had been entirely emptied by the removal of a quantity of serum of the colour of dark brown sherry, was injected with a mixture of one part of tincture of iodine and two parts of water. The injection was allowed to remain. This proceeding was followed by some, but an inconsiderable, heat of skin and acceleration of the pulse, and by tenderness over the cyst; but there was no shivering or other formidable symptom. The cyst partially refilled, and then gradually subsided till scarcely a trace of it could be felt. A few days later the cyst in the right lobe was tapped, and injected with three drachms of a mixture of equal parts of tincture of iodine and water. On emptying it, however, previously to the injection, it was discovered that there was a considerable solid enlargement of the gland beneath. No constitutional disturbance followed the injection; but in a few days the cyst had refilled. It was therefore again tapped, and injected with a similar solution. Its cavity now suppurated, and was opened after the fashion of an ordinary abscess, into which, indeed, it had been converted. The abscess cavity by degrees contracted, and the patient was at length discharged, with her cysts, to all appearance, obliterated. The solid enlargement of the right lobe of the gland, which, however, constituted but a very small proportion of the original swelling, still remained; and for this she was to be an out-patient.

THE MIDDLESEX HOSPITAL.

TREATMENT OF CANCER BY THE INJECTION OF ACETIC ACID.

(Under the care of Mr. C. H. MOORE.)

Injections of acetic acid continue to be employed in several cases in the cancer wards of the Middlesex Hospital. The

condition of the patients at the commencement of this treatment is, we are told, usually such as to preclude the hope of complete relief by other means, as the acid is never used in any case of cancer which is adapted for the usual operation. The results of the injection treatment thus far confirm the statement that the acid produces a chemical solution of cancerous substance, and renders it capable of being absorbed. It is not always easy to decide what part of any changes occurring in cancerous tumours may be due to treatment, and what to the unhindered progress of the disease, but it appears that both sloughing and suppuration may result from employing too great a quantity of acid. The following report is the sequel to a case which we have already published in part (*Medical Times and Gazette*, October 21, 1866), and is given thus early because the treatment by means of the acid has been interrupted.

October 25.—The discomfort attending the two operations had subsided, and the flow of saliva was further diminished. Injections of diluted acetic acid were made into the floor of the mouth and into the diseased under-surface of the tongue, as well as into the outer gum. There was scarcely any pain when the diseased parts were injected, but the stinging appeared to be severe when the acid passed into the adjoining healthy tissues. To some extent, probably, the pain arising from the punctures and the injection within the jaw was obviated by the previous division of the gustatory nerve.

November 1.—He has improved in appearance and general condition. He sleeps sometimes three hours at a time. He still finds difficulty in swallowing, which is due, not to pain, but to the mechanical restriction of the muscles of deglutition. The lymphatic glands beneath the jaw have increased in size, and the disease has extended back a little on the outer gum on the right side. The patient is under the impression that towards the left the disease of the outer gum has diminished. In the floor of the mouth there is a little lessening of the bulk of the cancerous growth on the right side, but elsewhere it is as large as when he first came under observation. Mr. Moore injected two drachms of a solution of acetic acid with five parts of water into the glands beneath the jaw by punctures in the skin, through the mouth, in the right gum, and in the floor of the mouth. Nearly a quarter of it may have returned from the latter punctures as soon as it was thrown in. Though weaker than the solutions previously used, this injection gave a good deal of pain for a time, and broke his sleep a little in the night. The next day there was much more swelling beneath the jaw than was accounted for by the fluid which had been injected. Without being sloughy, the ulcerated edges and surfaces of the gum were finely shreddy, as if material had been dissolved out between the shreds.

12th.—The patient left the Hospital a week ago, and returned to show himself to-day. He expresses himself as decidedly more comfortable, the mouth being clean, swallowing less difficult, and pain diminished. Nevertheless, an abscess has formed and opened at the last puncture beneath the jaw, and a new tumour has grown at the right side of the tongue in such a position as to lie between the back of the upper and lower gums when the mouth is open. The sensation of the right side of the tongue is still absolutely annihilated, and this doubtless spares him from much suffering. There is very little secretion of saliva. The sputa are chiefly the mucous and purulent discharges from the mouth. The mass in the outer gum is much softer, and perhaps less bulky. Considering the various materials making up the entire swellings at this date—œdema, pus, remnant of injected fluid, and cancerous substance—it appears that this last is not more abundant than when he first presented himself; but whilst the anterior part, which has been reached by the acid, is less, the deeper and distant portions of it have grown. Injections were made into the outer gum and the part of the tumour beneath the left side of the tongue.

18th.—The abscess beneath the jaw has discharged freely, and is smaller. Nevertheless, the tongue is more raised by the growth beneath it (or by abscess or œdema above the mylohyoid), and he has had a good deal of pain on the left side of the tongue. The growth of the outer gum is larger. No injection was made to-day.

December 6.—He has been kept at home by an attack of gout, which has not yet quite left him. A slough has come away from beneath the tongue, deepening the ulcer, and allowing the tongue to resume nearly its natural position and to move a little more freely. The swelling beneath the jaw is less, and separate cancerous glands can again be felt. The total growth outside the gums has considerably increased. It is clear that the injections have not been adequate to repress this disease, but that on the whole its progress has been retarded, and the suffering attending it diminished. This last result is partly due to the division of the nerve, the effects of which still continue in anæsthesia of the right side of the tongue and in lessened secretion of saliva.

17th.—The mass of disease both within and without the jaw has increased. The tumour on the right side of the back of the tongue is also larger. It is still covered by healthy mucous membrane, and it is probably continuous through the substance of the tongue with the mass in the floor of the mouth. Beneath the jaw the parts are much smaller, and there is still a little discharge from the abscess in that situation. Though the tongue itself is not superficially diseased, its movements are much restricted by the growth in its substance, and particularly by pain about its base; deglutition is much impaired, and the patient is thin and pale. The reduction of the mass of disease beneath the jaw is greater than can be accounted for by the evacuation of the matter, and is probably due to the action of the acid; but further injections can be of service only by delaying the fatal increase of the disease, as they have already failed to overtake the growth within the mouth, and in the amount and extent to which they would now need to be carried with a view to a cure, they would probably occasion fatal swelling and suppuration about the base of the tongue. Such palliative injections are accordingly being made.

February 16, 1867.—A copious hæmorrhage has greatly reduced this patient, and he appears likely to survive only a few days.

ST. MARYLEBONE WORKHOUSE.

LARGE CANCEROUS TUMOUR OF NECK AND FACE TREATED BY INJECTION OF ACETIC ACID.

(Under the care of Dr. BROADBENT and Dr. RANDALL.)

The early history of this case will be found in our Hospital Report for October 27. The tumour was of large size, and extended so far in the neck as to interfere with deglutition and displace the larynx. The first injection on October 3 was followed by extensive destruction of the diseased mass, and it was then found to have arisen primarily from the bones of the face. The muscles and vessels in the neck were laid bare, but healthy granulations sprang up, and the wound in the skin was contracting.

On Oct. 23 the note was:—Healing rapidly, progressing below; still great enlargement about the face. Great cavity at seat of last injection (over lower jaw). Patient more comfortable.

26th.—The old woman looking and feeling decidedly better. No great change in the face. The cavity had been filled, and the wound dressed with cotton saturated with dilute acid.

A solid mass about the centre of the disease, over the superior maxilla, was injected, the needle being passed to near the limits of the disease. The acid was retained better than before; it gave greater pain. An injection also upwards, in the direction of the malar bone, not well retained.

The needle could not be passed equally in all directions, bony projections being met with too firm for penetration.

30th.—Again injected. The needle was forced through a series of thin bony laminæ in an upward direction.

Nov. 6th.—Considerable pain and inflammation followed the last injection for two or three days, and there was a copious discharge. No marked change in the tumour could be detected, the bony prominences preventing the skin from subsiding. No injection was made.

Later, after careful examination, it was decided to watch the progress of the disease for a time before pushing the treatment further. It was evidently not possible to eradicate the tumour, springing as it did from bone. The osseous projections interfered with the passage of the needle, and the intervening structure was so soft as to allow of the ready escape of the fluid. There was no longer any danger to life, or any considerable suffering, and thus no object existed of sufficient moment to warrant the infliction of the pain which must have attended any attempt to remove the disease completely.

Dec. 20.—No occasion for interference has arisen. The tumour has increased somewhat in size, but not so as to add materially to the existing deformity. Mastication is rendered difficult, but she swallows well, and is in a state of comparative comfort.

The only result which could be looked for in this case was destruction and sloughing, and it was one of those exceptional instances in which the employment of acetic acid to this end could be recommended. The tumour caused suffering, and, from its size, threatened the life of the patient. Removal by the knife was out of the question. Experience had given sufficient reason to believe that the acid injected would destroy the vitality of the morbid growth, and would discriminate between healthy and diseased structures. It was hoped also that there would be little pain or constitutional disturbance. The expectations formed were justified. The great size of the mass forbade the attempt to remove it at once, but more might have been done at first with advantage. The acid used was of uniform strength throughout, $\frac{1}{4}$—that is, one of acid to three of water.

THE LONDON HOSPITAL.

CASE OF TREPHINING THE SPINE—DEATH FROM PYÆMIA—CLINICAL REMARKS.

(Under the care of Mr. MAUNDER.)

The following case is one of very great Surgical interest. The question of the advisability of trephining the spine after injuries—an operation recently advocated by Dr. Brown-Séquard—was largely discussed at a recent meeting of the Medical and Chirurgical Society after a paper by Mr. Berkeley Hill. We refer our readers to our report of that meeting for an account of the opinions of several Surgeons, and to Mr. Maunder's remarks reported below. For the following report we are indebted to Mr. Tracey:—

J. J., aged 28, while somewhat tipsy, fell off a cart upon his right buttock, and was unable to stand or move his lower extremities from that moment. The case was first seen by Mr. Maunder on August 31, three days after the occurrence of the accident, when the patient exhibited more or less loss of sensation below the level of the nipples, and loss of muscular power in the trunk and lower extremities, with constipation and retention of urine. The right buttock was bruised and excoriated, as also was the integument over the angles of the right mid-dorsal region. On examining the spine, the spinous process of the seventh cervical vertebra appeared to be most unusually prominent, and the attempt to move this (though no mobility was appreciable) gave pain in the region, and also along the back of the patient's right arm. The patient stated that this prominence had existed a long time, and had been caused by carrying bags of sand upon his neck. Respiration was performed chiefly by the diaphragm. The patient was placed upon a water-bed, and beyond attention to his bladder and to the bruise on the buttock, which was gradually converted into a sore, little in the shape of treatment was requisite; but the symptoms gradually changed—incontinence of fæces and urine supervened, and the loss of sensation as high as the nipples became complete. He grew weak.

On September 18 he was the subject of a severe cough, accompanied by difficult and copious expiration. He breathed most easily when lying over somewhat on his left side. The urine was highly ammoniacal and loaded with muco-pus. Dr. Davies was consulted as to the condition of the chest, and advised mist. oleosa and brandy. Pulse intermittent.

19th.—After consultation with Dr. Ramskill and Mr. Little, Mr. Maunder determined to cut down upon the seat of and explore the injury. Insensibility and loss of volition existed as high as the nipple; the skin over the upper part of the right scapula and along the back of the right arm as far as the elbow was tender on pressure, and an attempt to move the spine of the seventh cervical vertebra caused pain also. Irritating the feet caused reflex action. Incontinence of fæces and of urine as before. The grasp of the right hand was weaker than that of the left, which was strong.

At the operation Mr. Maunder said he was induced to interfere surgically for certain reasons—the physical condition of the spine led him to think that the seventh cervical vertebra, in part or entirely, had been displaced backwards and a little upwards, thus compressing the cord between its body and the laminæ of the first dorsal. He thought that the cord had not been crushed beyond repair at the time of the accident, because there was not from the first a total loss of sensation, but this had gradually become complete by reason of the continued pressure causing loss of temporary function. The operation which he proposed to perform did not, he thought, in itself entail great risk to life, and was justified by the urgency of the symptoms.

Operation.—The patient being on his face and under the influence of chloroform (which he bore well), an incision about three inches in length in the mesian line exposed the spines of the first and second dorsal vertebræ, and the knife kept close to these readily allowed the muscles to be separated, so as to expose the laminæ also. The muscles were ecchymosed to some extent. Free bleeding occurred, but no ligature was requisite. The spines of these vertebræ were now cut off at their bases, and the corresponding laminæ were removed by the trephine and bone forceps. The bleeding having ceased, the sheath of the cord was seen at the bottom of the wound, but nothing abnormal could be either seen or felt in it. On comparing the interval between the sheath of the cord opposite the laminæ of the third dorsal vertebra, and between it and the laminæ of the last cervical, the space was decidedly greater in the former than in the latter region; but this difference was not sufficient to induce the operator to remove the laminæ of the seventh cervical. The wound was dressed with water-dressing, and the patient returned to bed. Half a grain of extract of belladonna was ordered thrice daily.

For some few hours after the operation the patient vomited, and, when he had recovered from this, said his legs felt warmer than before the operation. Pain in the arm persisted for two or three days. Cough diminished greatly. On the fourth day subsequent to the operation he was ordered one-twelfth of a grain of strychnine thrice daily, and in a day or two reflex action was more readily excited in the lower extremities. On the 29th the cough again became very distressing, and he expired suddenly on October 2.

At a post-mortem conducted by Dr. Sutton, the medulla spinalis was found more or less pulped opposite the lower border of the seventh cervical vertebra, and this, too, was displaced slightly forward, and its right transverse process was broken. There was not the least trace of inflammatory action in or about the cord and its membranes, but there was ample evidence of pyæmia in the great viscera. The bladder was quite healthy, a condition which Mr. Maunder believed to be due to the attention bestowed upon that viscus by Mr. Salt, one of the dressers. Mr. Maunder suggested that the first attack of cough (before the operation) was also due to the blood-poisoning originating in the bed-sore.

IODIDE OF POTASSIUM AND ANTIMONY IN THE ACUTE EXACERBATIONS OF CHRONIC BRONCHITIS.

(Under the care of Dr. ANDREW CLARK.)

It is but a few years ago, Dr. Clark remarks, that we bled blistered, and purged nearly every case of acute disease that came under our care. To-day we do exactly the reverse. Then it was all depleting and depressing; now it is all supporting and stimulating. There is no medium between the two plans of treatment, and often but little discrimination is exercised in the management of the one chosen. The great masters of our art are not to blame for this. Their practice, it is true, has been imitated, but the conditions and limitations by which it was saved from swelling into a senseless fashion have been either disregarded or forgotten. Doubtless we are, on the whole, gainers by the change. But we might be much more so; for if lives are saved by stimulation which would be lost by depletion, there are not a few which this would save and that destroy. At all events, it is desirable that we should occasionally test the accuracy of our convictions by an appeal to clinical experiment, and learn when we may withhold stimulants and when we must give them. Here is a case somewhat in point:—

W. W., aged 46, a coalwhipper, of necessarily(a) intemperate habits, was admitted into the London Hospital on December 4, 1866. He is a short, stoutly-built, and not unhealthy-looking man, with dark hair and grey eyes. For the last six years has had during each winter cough with expectoration and shortness of breath. On November 24 last he was seized suddenly with cold chills followed by tightness of chest, incessant short cough accompanied by scanty frothy expectoration, urgent dyspnœa, and great weakness. Treated by senega, ammonia, and alcoholic stimulants, he continued to get worse up to the time of his admission. When first seen patient was scarcely able to stand alone. His face was somewhat livid, his breathing hurried and laborious, his speech

(a) Necessarily by reason of the iniquitous custom of requiring a portion of the wages to be received in the form of drink.

broken, and his whole aspect betokened extreme distress. He complained of incessant almost dry cough, of shortness of breath, of tightness and oppression of chest, of a sense of sinking at the pit of the stomach, and of general and great weakness.

On inspecting the chest it was noticed that the supra-clavicular spaces were much depressed; that the second, third, and fourth ribs were arched and bulging; that the thorax and shoulders were lifted up during inspiration; that the act of expiration occupied about six times its usual length of time; and that the heart beat visibly in the epigastrium. The whole upper third of chest yielded a tympanitic resonance on percussion, and in this region the respiratory sounds were loud, harsh, almost blowing, and accompanied at irregular intervals by sibilant rhonchi. The murmur of inspiration was broken, and accompanied towards its close by a low-pitched dry crackle like that which might be produced by the crumpling of thin paper near the ear. Vocal resonance was extremely feeble. Over the upper and back part of both lungs the percussion sound was unusually resonant; the respiratory sounds were loud, harsh, and accompanied by numerous fine sibilant rhonchi; vocal resonance was increased, and no dry crackle was audible. Below both bases were toneless on percussion; the respiratory sounds were feeble, and here and there replaced by small bubbling rhonchi; in a few spots breath-sounds were quite absent. The heart was pushed downwards, and caused visible epigastric pulsation. There was no murmur; respirations 34 and pulse 130 in a minute; tongue rather dry, and coated with a yellowish fur; bowels open; urine normal; skin cold, dry, and bluish at parts; slight headache; considerable despondency and depression.

Dr. Clark remarked that this was a case of chronic bronchitis and emphysema of long standing, upon which there had supervened, in consequence of exposure to cold, acute inflammation of the smaller air-tubes, considerable pulmonary congestion, and probably some amount of pulmonary collapse. He thought the immediate distress of the patient, and all his more serious objective symptoms, were due to the pulmonary congestion, to the hyperæmic, swollen, and imperfectly secreting bronchial mucous membrane, and to the inactive condition of the skin.

How was the case to be managed? Were stimulants to be continued? Could the man be left to nature? Should he be treated after the manner of an empirical therapeutics? The stimulating plan had already been tried without benefit. Nature, judiciously ministered to, might carry the patient through his present attack in safety to life, if not without greater damage to health; and yet, as matters looked, even this seemed a doubtful issue. Dr. Clark considered the case to be one peculiarly amenable to art, provided we had the experience to perceive and the courage to follow its teachings. He was of opinion that if early and free secretion could be determined in the skin and pulmonary mucous membrane, immediate and complete relief of the patient's recent symptoms would follow. But the satisfactory achievement of this object required the use of means which might depress the powers of life, and the exclusion of stimulants which might be needful to their support. Then the patient was already weak, and seemed to be getting weaker. Was it safe to pursue such a plan of treatment in such circumstances? Dr. Clark thought the patient strong enough to endure the experiment, and held that his experience justified its trial. Believing that the patient's suffering and weakness resulted from bronchial and pulmonary congestions, he fully expected that, with the establishment of free secretion from the skin and mucous membranes, distress would abate and strength quickly return.

Acting upon these views, Dr. Clark placed the patient upon a milk and beef-tea diet, ordered a hot linseed poultice sprinkled with mustard to be placed round the chest, and directed the following draught to be given every three hours —℞ Liq. ammon. acet. ʒj., potassii iodidi gr. ij., antim. tart. gr. $\frac{1}{8}$, aquæ ʒj. Fiat haustus.

If the patient was threatened with a bad night, he was ordered to have a liberal dose of henbane; but unless in actual danger of sinking he was to have no alcoholic stimulant. He was allowed to have as much milk and beef-tea as he desired.

December 5.—Patient has passed a fair night without henbane, and has required no stimulant. He expresses himself generally better, and avers that every dose of the medicine makes him feel stronger. Cough easier, looser, and accompanied by free mucoid expectoration, which is less frothy and tenacious. Breathing easier, and 30 in a minute; basic dulness remains; moist râles are now heard throughout the upper parts of both lungs; pulse 110, of fair strength; skin acting very freely; mixture continued; poultice reapplied.

6th.—Patient continues to look and feel much better. Says that he is almost well, and feels hungry. Once or twice yesterday experienced a little nausea. Tongue clean; bowels open; urine turbid with lithates; cough loose, infrequent, easy; expectoration increased, and consisting of a yellowish gelatinous mucus. No difficulty of breathing, which, however, is still rather short and laboured (28). No oppression of chest. Pulse 104, good. Skin acting freely. Puffiness and lividity of face gone. Basic dulness less. Moist râles more general. Mixture to be given only every six hours; poultice as before.

8th.—Has continued to improve in every way since last report. Tongue clean and moist; appetite good; bowels regular; lithates in urine; cough easy; expectoration more abundant, muco-purulent, and easily ejected. No complaint of shortness of breath or oppression of chest. Still some basic dulness, with extremely feeble breath-sounds, ascribed by Dr. Clark to collapse. Sibilant rhonchi heard along the inner borders of both lungs, but no longer any dry crackle; elsewhere coarse and fine moist mucous râles. Respirations 28; pulse 96; skin moist. Mixture to be continued four times daily.

10th.—Patient continues better. Bronchial secretion rather free. Respiration 26, easy; pulse 96, not quite so good; skin relaxed and covered with sweat.

Dr. Clark observed that free sweating and bronchial secretion having been now established, and all oppression of chest, difficulty of breathing, and general discomfort having disappeared, the iodide of potassium and antimony had done all the good he expected they could do. The right time had therefore come to relinquish their use, especially as their continued employment might inconveniently increase the bronchial secretion and imperil the general strength. The object now was to brace the blood-vessels relieved by free exudation. The antimony was therefore suspended; the patient was put upon a more generous dietary, and ordered small doses of nitro-hydrochloric acid, quinine, and perchloride of iron three times a day.

13th.—Patient has now recovered his usual state of health, and is not likely ever to be better. His own statement is, that he is quite well. But he has a little cough with mucous expectoration, and some labour in breathing, which has fallen in frequency to twenty times in a minute. There is still some basic dulness, with feeble breath sounds. Elsewhere the resonance is good, but sibilant rhonchi are heard occasionally in various parts of both lungs. The dry crackle originally heard over the emphysematous borders of the lungs has never returned. Pulse 84, good.

On the 16th, patient was taken from the Hospital some hundred yards to the lecture theatre of the College, where he was stripped and kept some time uncovered for examination.

Next day he was seized with shiverings, tightness of chest, difficulty of breathing, and short teasing cough without expectoration. He was sent immediately to bed, covered with extra clothes, and ordered to drink cold water freely. The following draught was prescribed, and a large mustard poultice was applied to the chest:—℞ Antim. tart. gr. $\frac{1}{4}$, liq. ammon. acet. ʒij., spir. æth. nit. ʒss., aquæ ʒj. Ft. haust.

On the 18th, patient was sweating freely in bed, and all unpleasant symptoms had subsided.

On the 19th, he got up, and resumed his acid, quinine, and iron mixture.

On the 22nd, he had recovered, and has since retained his usual health.

This case is one of many similar cases which Dr. Clark has successfully treated upon the same plan. It illustrates the great value of iodide of potassium and antimony in acute bronchial attacks, given when the mucous membrane is irritable, congested, swollen, dry, and withdrawn when secretion has been freely established and there arises danger of loss of power. The case further shows that recovery may take place, even from great prostration, without the use of any form of alcoholic stimulant. When required, the best form is whisky toddy, and the best time for administration when free bronchial secretion has taken place and there is some difficulty in expectorating it. But stimulants are not often needed, except in the very young and aged.

Hamp *v.* Robinson.—This case of disputed paternity has ended unsatisfactorily for both parties. The jury were unable to agree, and separated without finding a verdict.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0

Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.

Post-office Orders and Drafts on Army or Navy Agents, should be made in favour of Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d. | A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d. | A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, FEBRUARY 23, 1867.

THE LEPROSY REPORT.

We were enabled to give in the *Medical Times and Gazette* for April 21, 1866, a summary of the principal conclusions that might be drawn from a perusal of the information in reference to leprosy which had been received by the College of Physicians from various parts of the world. We shall now proceed to sketch in general terms the final opinions of the Leprosy Committee, which have been put to print, and are to be presented with the report to the Colonial Office. The last "returns" came to hand through the Colonial Office from the Bengal Presidency in the spring of 1863; some 250 in all. The replies to the questions originally propounded by the College are arranged under the successive interrogatories, and the conclusions the Committee have formed on the subject-matter of each interrogatory from a review of the whole evidence before them are given in like order. Appended is a sketch by Dr. Gavin Milroy of the geographical distribution of leprosy at the present time; notes respecting the leprosy of Scripture, by the same gentleman; and observations on the true leprosy or elephantiasis, with cases, by Erasmus Wilson, F.R.S., who supports the theory that the disease has possibly a malarious origin.

The Committee very justly observe that "the extent to which leprosy prevails in many distant dependencies of the British Empire, and the inevitable destitution and mendicancy that attend its existence among a population, render its thorough investigation a matter of special duty on the part of the Government of this country," and they submit that "the attention of other Governments, and more particularly those of France, Spain, Portugal, and Holland, should be drawn to the importance, in the interests of science and humanity, of further investigations being made respecting it."

First as to its geographical distribution. "The chief seats of leprosy in recent times continue to be the same regions of Africa and Asia where it was originally seen, and where it is known to have been most common in remote ages." It is endemic in Egypt about the Nile, and on the shores of the Mediterranean and Red Sea. In Abyssinia it is common in various parts, amongst the slaves in the Soudan, in the interior, along the north coasts of Africa, in Algeria, and at Morocco and Senegambia. At the Cape it affects all tribes and native races. It is endemic at Madagascar, in Mauritius, and the Isle of Bourbon. The Asiatic continent, too, suffers. In the southern parts of Syria, about Beyrout, Jaffa, at Nablus; in Arabia, and parts of Persia, Bokhara, Cashmere; in India, along the sea-coasts, in all the Presidencies; in Ceylon (its southern parts); in Java, Sumatra, and other islands of the Indian Ocean; in China; Kamtschatka; Australia (Ballarat); the islands of the Ægean, both Turkish and Greek; Crete, and Cephalonia, and Malta; Greece; south-eastern provinces of European Russia, from the Crimea to the Sea of Azoff, and by the Caucasus away to Astrachan; and in the Baltic provinces, Esthonia, Finland, and Courland; in Sweden, Norway, Iceland, the coasts of North Italy and south-east of France; the shores of the Mediterranean; on the French coast, Provence, Languedoc, and Roussillon; the delta of the Rhone, especially about Martignes and Vitrolles, and near Toulon and Marseilles; in Spain more than any other European country, especially Granada and Catalonia; in Portugal about the provinces of Lower Beira and the Algarve. It is endemic at Madeira, and prevails in Mexico, Brazil, and West India Islands, New Granada, Venezuela, and Ecuador; in Brazil it is common, and La Plata States; in the West Indies, Cuba, Jamaica, Barbadoes, Guadaloupe, and St. Bartholomew chiefly; and in North America, at New Brunswick.

It appears that leprosy is unknown in Nova Scotia, Prince Edward's Island, Turk's Island, British Honduras, Falkland Islands, Gibraltar, Malta, Alexandretta, Trebizond, St. Helena, Natal, Labuan, Western Australia, Queensland, Tasmania, Wallachia, Servia, and some other places.

The migration, so to speak, of leprosy is a very interesting topic. There can be no question that an improvement in the diet of the people at large "is one of the principal factors in the gradual decline and eventual cessation in most parts of Europe." There are, however, not wanting those who believe that the enforced segregation of lepers has also played a considerable influence. The Committee lay most stress on the former, and the following quotation, which is given place in their report, expresses their views sufficiently well:—"This happy change (the disappearance of leprosy) perhaps may have originated, and been continued, from the much smaller quantity of salted meat and fish now eaten in these kingdoms; from the use of linen next the skin; from the plenty of better bread; and from the profusion of fruits, roots, legumes, and greens, so common in every family. Three or four centuries ago, before there were any enclosures, sown grasses, field turnips, field carrots, and hay, all the cattle that had grown fat in summer, and were not killed for winter use, were turned out soon at Michaelmas to shift as they could through the dead months, so that no fresh meat could be had in the winter or spring. Hence the marvellous account of the vast stores of salted flesh found in the larder of the eldest Spencer in the days of Edward II., even so late in the spring as May 3." In Lent, too, the poor used to consume large quantities of fresh and salt fish, and the bread was made of barley and beans. Mere poverty of diet does not seem alone sufficient to account for the disease; and, as evidenced in the case of Iceland, there is some peculiarity in the *kind* evidently, and the testimony to the use of rancid, oily, and fatty matters, especially fish, is very strong.

The following are the chief conclusions:—

1. The distinctive characters of leprosy are the same in all parts of the world where the disease has been observed. There are certain kinds of cutaneous eruption and discoloration, associated with a tendency to ulceration or the death of the affected parts, and with disorders of innervation, more particularly the impairment or loss of sensibility. Two forms of the disease are generally described in the replies — the "tubercular" or "tuberculous," and the "anæsthetic." The Committee prefers to call these respectively "tuberculated" and "non-tuberculated." Loss of sensibility is not confined to the "anæsthetic" form, though it occurs earlier and to a marked degree in it. The characters of the two forms are often intermingled or replace each other; Morphæa alba and M. nigra, in which the centres are anæsthetic, are styled "leucopathic." The term "leprous" is applied in different countries to many dissimilar diseases; hence various chronic maladies of the skin occurring in unhealthy persons who live in poverty and neglect cleanliness are often confounded with it, and the patients, being regarded as "lepers," are treated as outcasts and objects of abhorrence.

2. The disease may be apparently congenital, but it usually commences about puberty. It is not unusual to see arrests of development in the children of lepers; it is preceded by symptoms of general debility, and various disorders of the cutaneous sensibility, numbness or tingling along the course of a nerve, with oftentimes an erythema of the face, which looks as if overheated, and it is upon this redness that tubercles develope in the "tuberculated" variety. Dr. Jackson and Sir Ranald Martin note excessive perspiration of the hands as a common occurrence.

3. The two chief varieties, says Dr. Carter, "are inimical to life in different degrees. . . . Taking, however, the disease as a whole, its duration may, when not excessive, extend to upwards of twenty years. It is generally much less —five, ten, or fifteen years being perhaps the usual period; but there is not to my knowledge either a limited course or a uniform termination to the affection." And this is accounted for by the fact that lepers die of intercurrent diseases—diarrhœa, dysentery, or pneumonia. Kidney affections, with albuminuria, are common. "The too common destitution and neglect of the sufferers greatly aggravates both the liability to the above maladies and the danger of their occurrence. It has been remarked that the children of leprous persons are less amenable to Medical treatment for other maladies than other children of the same age and condition."

4. There is some little difficulty in ascertaining the influence of sex. The seclusive life of the females in countries where the disease abounds may explain in some degree the fact of its being more frequently *seen* in males. "In some of the leper asylums of the West Indies the number of the two sexes is about the same." The general opinion, however, is that males are much more usually leprous than females. Of 543 deaths in Bombay during twelve years 409 occurred in males, and yet of 906 leprous patients treated in St. George's Hospital at Bergen, Norway, from 1841-6, 461 were males, 445 females.

5. In hot climates the disease appears to be much more frequent amongst the dark than the white population. Europeans escape, and are only attacked after long residence in places where the disease is endemic.

6. Poverty, uncleanliness, residence about the sea-shore, and the consumption of rancid oils, stale fish, and salted meats, intemperance, and foul dwellings are named as the causes that produce or aggravate the disease. We have referred to these in our original article on the subject.

7. "There is an almost unanimous concurrence of opinion that leprosy is hereditary, but that it also frequently occurs in persons in whom no hereditary tendency can be traced appears to be equally certain. In what proportion of cases the disease is of hereditary origin it is often extremely difficult, if not impossible, to determine," and the form transmitted by parent to offspring varies. "The disease may not unfrequently pass over one generation and reappear in the next. In China it is said to become mild in the third generation, and to run itself out in the fourth. . . That instances frequently occur where one member only of a family is affected, the other members remaining free from any trace of the disease, is obvious from the experience of observers in all parts of the world." It will be remembered that Drs. Danielssen and Boeck traced an hereditary tendency in 185 of 213 leprous persons, which they believe is more frequent on the maternal than the paternal side, and in the collateral than in the direct line.

8. Leprosy is considered by most reporters to be a disease *sui generis*, to have no connexion with syphilis. Some think that it may be excited by syphilis, or that the two diseases are related; yet syphilis is unknown in the districts of New Brunswick, where leprosy occurs, and rare in the villages of Persia, where leprosy is common.

9. As to the question of contagiousness, the Committee in their report say that "the all but unanimous conviction of the most experienced observers in different parts of the world is quite opposed to the belief that leprosy is contagious or communicable by proximity or contact with the disease. The evidence derived from the experience of the attendants in leper asylums is especially conclusive on this point. The few instances that have been reported in a contrary sense either rest on imperfect observation, or they are regarded with so little attention to the necessary details as not to affect the above conclusion. That leprosy is rarely, if ever, transmissible by sexual intercourse when one of the parties has no tendency whatever to the disease, is the opinion of the great majority of the respondents who have had the largest opportunities of observation." The spirit of these conclusions, of course, is in direct opposition to the belief that has prevailed from time immemorial that leprosy is contagious, and that the isolation of lepers, which has always been enforced by the authority of traditional law and popular prejudices, founded more or less upon observed facts, has been efficient in preventing the spread of the disease by contagion, which some authorities say should be judged of in relation to the segregation in operation through the manners and customs of the people amongst whom leprosy is prevalent.

10. Great diversity of practice, however, is said to exist in regard to the enforcement of segregation. In some countries the slightest ascertained taint carried with it a compulsory seclusion tantamount to banishment from the rest of the community. In the West Indian colonies lepers may be apprehended and detained in an asylum when found loitering about as mendicants. In Syria, too, they are obliged to go to Damascus, or live apart outside the towns. "Throughout India no compulsory segregation of leprous persons is ever attempted, and no restriction or restraint whatever is imposed on their free intercourse with the rest of the population. In Calcutta they are to be seen at all the bazaars, where some of the principal lepers are beggars" (Dr. Jackson). This is a quotation from the report at p. lxix., and it is a strong statement, but we are bound to note that at p. xlvii. Dr. Jackson is made to say—"There is no legal impediment to the communication of lepers with the people. The social impediment is sufficiently strong. The malady is held in great dread by Europeans and natives, so general is the impression of its being contagious. Instances are on record of a Mussulman being disinherited in consequence of the disease, and amongst Eurasians a marriage may be broken off by the discovery of the taint in one of the parties." And so we find that the reports from Loodiana, Serohi, Seharunpore, Benares, Raneegunge, Madras and Bombay Presidencies, Ceylon, Tabreez, Canton, Jerusalem, Damascus, Rhodes, Barbadoes, Trinidad, and other places afford additional evidence that lepers, as the rule, are avoided, and especially disallowed all "personal contact." This is important to note in discussing the contagiousness of leprosy.

11. The public provision made for the leprous poor is almost always scant and insufficient. Most frequently no lazaret exists; where, however, such a thing is in existence, it is a dreary, filthy, dilapidated hovel, from whence lepers issue sometimes to beg by day and return to sleep at night. Nothing is done for their cleanliness or comfort, as a rule.

12. Leprosy appears to be on the increase in some of the West India islands, notably Jamaica, the assigned cause being free sexual intercourse amongst leprous persons and the degradation of the people as to dwellings, food, and mode of life. In a few islands the disease is believed to have declined of late—in Tobago, for example; and this is said to be due "to the circumstance of the lower orders being better housed, fed, and clad, and to their comparative immunity from depressing mental causes." (Dr. Elliott.) Reports and opinions generally differ very materially.

13. The report says that "there is an unanimous accord of opinion that the greatest benefit is derived from the adoption of hygienic measures, and that by improving the general condition, physical and moral, of the leprous poor, very much

may be done to retard or arrest the malady in its early stages, and also to mitigate its severity when more fully developed." No Medical substance, vegetable or mineral, exerts anything like a direct or specific effect on the malady. The immediate use of mercury gives rise to most disastrous effects. Leprosy is never curable; the progress of the disease, however, may experience a marked retardation or arrest when the patient is maintained in a favourable hygienic condition.

14. It comes out in the report that very few of the British colonies have the advantage of a general or uniform registration of births and deaths. As regards the West Indian colonies, it is much to be regretted, in the interests of the physical and moral amelioration of the population generally, that no record is kept of the birth and death rate of the people. The Committee have received a report only from Antigua, and it appears that the deaths are here in excess of the births. Bombay appears to be the only presidential city in India in which registration of deaths is carried out. In the Australian colonies of Victoria, and New South Wales, and Tasmania, during the last ten years, a scheme similar to that in operation in England has been adopted.

15. The last question originally proposed by the Committee was calculated to discover the names of the townships or districts in which leprosy prevails most, and to find the number of lepers and the population in each of such townships or districts, and the details of any post-mortem examinations. The Committee are compelled to observe in reference to it that no sufficient information has been received relative to the first portion of the interrogatory, and reference is made to the observations of Dr. Carter, of Bombay, already before the Profession, whilst a digest of Dr. Danielssen and Boeck's researches is appended—that is to say, no pathological information worth recording was obtained with the 250 communications that reached the hands of the Committee.

The chief object held in view was the ascertainment of facts upon which a decision could be formed as to the advisability of developing, annulling, or modifying the present restriction enforced against the intermingling of lepers with the community in some of our dependencies. The action of Government turns, of course, upon the final decision of scientific men as to the contagiousness or non-contagiousness of leprosy. The Committee say that "the replies received contain no evidence which, in their opinion, justifies any measures for the compulsory segregation of lepers." We venture to think that a good deal more work must be done before a correct conclusion can be arrived at. If we analyse the report carefully, we shall have reason to praise very highly the Committee of the College of Physicians for their arduous task, which they have completed most satisfactorily; but also to conlude that in reference to the most common features of leprosy, the widest difference of opinion prevails as to the influence of sex, contagion, the increase or diminution at present observable in various colonies, and especially a total absence of reliable pathological data—circumstances that ought to teach us that leprosy is an affair that must be investigated afresh in all its different aspects, and that much error, fostered by individual bias and traditional misinterpretation, has crept in upon the subject.

FEMALE CANDIDATES FOR THE LICENCE OF THE APOTHECARIES' SOCIETY.

It is reported that there is a strong feeling amongst the Court of Examiners of the Apothecaries' Society against the admission of females into the Medical Profession through the portals of the Hall. The admission of Miss Garrett, it is well known, was permitted under explicit legal advice obtained from barristers of high authority, who were referred to as to the construction to be put on the Act of 1815. But recent diversities in legal opinion on subjects of great importance to a sister profession may reasonably lead outsiders to ask whether "counsel's opinion" as to the interpretation of any Act of Parliament be infallible. The Apothecaries' Act, in several instances, speaks of the candidate as "he," and we think that to assert that "he" includes "she" is to assume a sense which certainly was never contemplated by the framers of the Act. For ourselves we hold that the admission of women into the ranks of Medicine is an egregious blunder, derogatory to the status and character of the female sex, and likely to be injurious in the highest degree to the interests and public estimation of the Profession which they seek to invade. We, therefore, sincerely hope that the Court of Examiners of the Hall will take the initiative in the matter, and endeavour to repair the evil which has been done; and we also hope that in this endeavour they will meet with the support not only of the authorities of their Society, but of the lecturers and teachers at the various schools. We have lately expressed opinions in favour of free trade in Medical teaching, but these opinions do not in any way clash with a conviction that the interests of the public and the Profession are not sufficiently protected if certificates of courses of "private lectures," given apart from the general class of the lecturer to particular students, are received by Examining Boards. We hope that it will be many years before a class of English gentlemen studying for the Profession of Medicine will permit the presence of ladies (*proh pudor!*) in the anatomical lecture or dissecting-room, and we can hardly conceive that an English girl of decent training and education would have the effrontery to attempt such a situation. But Medicine, if the State is to protect, through the medium of the licensing bodies, the lives and health of the public, must be taught publicly. This may be accepted by the most advanced reformers in Medical education. No examining body, therefore, is justified in receiving certificates of private instruction in the sense we have indicated. By insisting on the attendance of all students at the public-class delivery of anatomical lectures, and in the public-class dissecting-room, the only possible guarantee of uniformity of teaching will be obtained, and at the same time a difficulty will be placed in the way of female intrusion which it will not be easy for women of character, and clearly none else are eligible, to surmount.

We hope, however, that the Court of Examiners will not stop with the erection of the barrier we suggest, but that they will distinctly refuse to admit any female candidate to examination unless compelled by a legal decision from the Bench, and we also hope that they will be supported in such refusal by the Master and Wardens of the Society, as well as by the Profession out of doors.

We would only add that we would offer no obstacle whatever to any steps which women may think will be conducive to their own benefit. But if it be indispensable that they should study Anatomy and Medicine, let them, in the interests of common decency, have an educational institution and a licensing body of their own.

THE METROPOLITAN POOR BILL.

Some apprehension has been excited by the supposition that Mr. Hardy's measure, if passed into law, will jeopardise the existing appointments of Poor-law Medical Officers for Districts and Workhouses. There would certainly be ground for fear if the decision in the matter were left in the hands of the local authorities. Then every Board of Guardians that had taken umbrage at past manifestations of an independent desire on the part of its Medical officer to benefit the sick poor, or to appeal to the central authority, would look upon the measure as affording an opportunity for wiping off old scores. Under these circumstances it may be as well if we point out the exact scope of the Bill.

First, as to out-door relief. It is not proposed to seek any power of terminating the appointments of Medical men at present in office. Apparently the only power sought is

that of varying the existing contracts, as provided by clause 45. The preceding clause expressly requires that the Medical men in office shall so continue as if the Act had not been passed, subject only to the modifications above referred to. And, moreover, those modifications are not to be effected by the Guardians or local authorities, but by the Poor-law Board.

Then, as to indoor relief. The Bill proposes to give to the Poor-law Board the power either of varying the existing contracts or of determining the appointments of the present officers, but, at the same time, empowers that Board, if the appointments are terminated, to direct the Guardians to pay the officers affected thereby "compensation by way of an increased salary, or of an annuity, or of a gross sum, or otherwise."

So far as their powers have gone, the Poor-law Board appear to have hitherto done their best for Medical officers, and there seems no reason why they should now play them false. The proposal in the Bill to do away with the existing local Acts will confer permanent tenure of office on those Medical officers who have hitherto depended on the nod and beck of the Guardians. That these gentlemen do consider this last-mentioned proposal obnoxious to their interests is proved by their efforts of opposition. We understand that on Wednesday last deputations from the parishes of St. Marylebone and St. Pancras had an interview with the President of the Poor-law Board on the subject.

THE WEEK.

H.R.H. THE PRINCESS OF WALES.

Her Royal Highness, who had been suffering for a few days from a slight attack of acute rheumatism, was delivered early on the morning of the 20th of a Princess. Our readers may be assured that up to 4 o'clock on Thursday, the 21st, the situation of the Princess continues favourable, and such as to inspire her attendants with no uneasiness. We subjoin the bulletins, which tell their own story explicitly:—

"Marlborough House, Feb. 19, Evening.

"Her Royal Highness the Princess of Wales has for some days past suffered from acute rheumatism.

"The pains and the febrile action are somewhat less to-day than they were yesterday. The Princess has enjoyed several hours of calm sleep to-day.

"William Jenner, M.D. Arthur Farre, M.D.
Edward H. Sieveking, M.D."

"Marlborough House, Feb. 20, 1867, 8.30 a.m.

"Her Royal Highness the Princess of Wales was safely delivered of a Princess at 6.30 this morning.

"The confinement was most favourable, and was in no way affected by the rheumatism from which the Princess is suffering.

"Her Royal Highness and the infant Princess are going on quite well.

"Arthur Farre, M.D.
"William Jenner, M.D.
"Edward H. Sieveking, M.D."

"Marlborough House, Feb. 20, 2 p.m.

"Her Royal Highness the Princess of Wales has had some refreshing sleep.

"The infant Princess is quite well.

"Arthur Farre, M.D.
"William Jenner, M.D.
"E. H. Sieveking, M.D."

"Marlborough House, February 21, 11 a.m.

"Her Royal Highness the Princess of Wales, though still suffering from rheumatism, is making satisfactory progress.

"The infant Princess continues well.

"Arthur Farre, M.D.
"William Jenner, M.D.
"E. H. Sieveking, M.D."

ST. MARY'S HOSPITAL.

The election of Assistant-Surgeon, which has for some weeks past attracted a great deal of Professional attention, has just terminated in favour of Mr. A. T. Norton. The number of votes polled was as follows:—Norton, 330; Walter Coulson, 162; majority for Norton, 168.

THE PORTSEA ISLAND BOARD OF GUARDIANS AND THEIR MEDICAL OFFICERS.

We hear that the subject of the remuneration of the Portsea Poor-law Medical Officers for their services during the late cholera epidemic is to be again discussed by the Board of Guardians. It is evident that the conscience of the Board is not easy, and we only hope that the new discussion will end in an ample sum, with an apology, being presented to the Medical officers.

TESTIMONIAL TO MR. BEANEY.

We have received a *Melbourne Argus* of December 6, 1866, which contains an account of a meeting held for the purpose of presenting Mr. Beaney, the defendant in the recent Australian *cause célèbre*, with a written testimonial and a purse containing three hundred sovereigns. Mr. Crooke, a Surgeon, occupied the chair, and made an energetic speech, in which he described Mr. Beaney as the victim of a conspiracy. An idea of the warmth of colonial oratory will be furnished by the following quotation:—

"One other feature, the darkest and blackest in the whole, was the intentional removal of one piece of evidence which would have enabled the Medical men at that trial to have spoken with authority as to the possibility of Mr. Beaney having committed that offence—he referred to the abstraction of the ovaries of the deceased woman. The knowledge of a crime of so grave and infamous a character as that ought never to be wiped out until the offence was sheeted home to the man who perpetrated it, and until he suffered the punishment he deserved. He took upon himself the responsibility of saying that the ovaries were surreptitiously removed, and it was the duty of the Crown to find out the offender, because the Crown would yet be called upon to make recompense for the wrong done to Mr. Beaney, and they would be bound to show that these organs were not surreptitiously removed."

We doubt whether the establishment of Mr. Beaney's innocence by the verdict of the jury needs to be strengthened by imputing the worst motives and conduct to those Medical men who furnished the evidence on which the Crown founded their case.

THE SOUTHAMPTON INFIRMARY.

It is to be regretted that a Professional discussion, which, at least in the first instance, ought to have commenced either in the Board-room of the Southampton Infirmary or before the Medical Society of that town, should have been begun in the pages of the local newspapers. It is alleged by a Medical governor of the Infirmary—Mr. Scrase—that the surgery at that institution, as judged by its results, is of an inferior character, that operations are performed unsuccessfully, and that altogether the Surgical staff have not evinced that amount of Professional skill which might be reasonably expected from them. This may be true, or it may not, although it seems to us completely refuted by the statistics adduced by Dr. Lake when speaking in defence of the Surgical staff at the annual meeting of governors. However, Mr. Scrase asks for an investigation by a committee into certain cases of patients who have been operated on or treated in the institution. This inquiry, we believe, is to take place, and it would be manifestly at present premature to decide upon the merits of Mr. Scrase's charges. We hope, however, that a certain portion at least of the committee appointed to investigate the charges will be members of the Medical Profession, as it is clear that a lay committee must be incompetent to decide on the propriety of the treatment adopted in fractured thigh or diseased knee-joint, and of the six cases brought forward by Mr. Scrase two fall under these heads. Judging from the whole correspondence that has taken place, and from the scene enacted at the annual meeting, we think it a pity that the charges were not sub-

mitted to the collective judgment of the Profession in Southampton and the neighbourhood before they were referred even to the lay committee and governors of the institution.

THE "AZTECS."

We have just had an opportunity of examining these curious little individuals, and have been able to compare the appearances presented by their physical and mental condition with those exhibited by the same creatures thirteen years ago. The special points of change which have struck our eye are the greater development of the negroïd type than that evinced in 1853. The male is now 26 years of age; the female, 20, according to the statement of their proprietor, which statement we see no reason to doubt. The microcephalic condition of the brain appears to affect the intellect of the male to a greater extent than the female; and the same cause has probably rendered speech in the male more difficult. He appears to be entirely destitute of all musical ear, although capable of some idea of time, as evinced by his capability to dance the polka. A knowledge of conversational Spanish seems almost entirely wanting in both male and female. Although married, the two microcephali appear to be on good terms with each other. The abnormal condition of the forearm in the male, as noticed by Professor Owen in 1853, by which the forearm cannot be brought in a straight line with the humerus, is still present, and this fact has probably led to a shrunk and weakened condition of the long flexors and extensors of the arm. The little finger is abbreviated, and still only extends a little beyond the proximal phalanx of the ring-finger. The male stoops much more than in 1853. The legs, when sitting, or rather kneeling, are divaricated, so that the tibia is flexed outwardly at right angles to the axis of the body. The hair in both male and female is much longer than in 1853, and is so artificially arranged as to resemble the "mop" of the Papuans. Examination of the separate hairs shows, however, that the waved and crisp character of *chevelure* common in mulattos is present. On the whole, it may be said that the probability is strongly in favour of the individuals being microcephalic dwarfs, and appertaining to the mulatto or mixed Africano-European race, with possibly some admixture of native Central American aboriginal blood.

FROM ABROAD.—VACCINAL INFECTION THROUGH THE AIR-PASSAGES—PAYMENTS OF HOSPITAL MEDICAL OFFICERS IN FRANCE—M. DANET'S REPORT ON VACCINATION.

M. Chauveau, the distinguished veterinary Professor of Lyons, has been performing some experiments with vaccine virus, having for their object the illustration of the non-spontaneous character of virulent affections, which really are derived from absorption from without, although the mechanism of this may not always be discernible. On December 2 he deposited a drop of vaccine virus within the trachea of a horse, and seven days later insufflated the trachea of the same animal with the powder of the virus dried *in vacuo*. The horse being killed on December 18, no lesion or any trace of vaccine pustule was discovered in the trachea, but around the jaw four fine vaccine pustules were observed. Some objections having been raised to the mode of conducting the experiment, M. Chauveau instituted another, assimilating still nearer its conditions to those under which particles of virus floating in the air may gain access to the economy. Instead of forcing the vaccine powder into the trachea, he compelled the animal to aspire it from a tube introduced into the trachea, the mouth and nares being kept closed. The Lyons Medical Society has resolved to enter upon the discussion of the subject under the designation of the "Etiology of Virulent Diseases."

Although the Medical Officers of the French Hospitals do not, as with those of our own institutions, give their services gratuitously, the remuneration they receive is trifling to a degree—viz. 1200 francs per annum. M. Garin, Senior Physician at the Hôtel-Dieu, Lyons, retiring from his post, and therefore able to speak disinterestedly on the subject, in a most interesting address has called upon the Hospital administration of that city to augment these salaries, not only in the interest of the Medical Practitioners, but in a still greater degree in that of the patients. If matters go on as they are, he observes, a lower class of candidates for these offices will present themselves, men of higher pretensions preferring to at once endeavour to gain practice by a less circuitous process than ten years' service in the Hospitals, the most valuable hours of the day being thus consumed. He observes that the present salaries were fixed in 1802, and, as an illustration of how much less adequate they are now than they were then, he adduces the case of a respected Physician who pays now 2400 francs per annum for the same house for which in 1809 he paid 900 francs. The salaries, he maintains, to represent their former value, should be at least doubled, as has indeed been the case with almost all other *employés*; and he cannot see why the Medical Practitioner should be especially called upon to give his gratuitous or semi-gratuitous services. How little serviceable these posts often are in introducing to lucrative practice, as a substitute for niggardly payment, may be judged of by the fact that out of more than forty Physicians who have held them at Lyons not more than three or four have realised by their Profession alone more than a comfortable ease. The Hospital administration has shown itself somewhat moved by the remonstrance, having raised the salaries from 1200 francs to 2000 francs.

M. Garin, in answer to an objection that such increase could scarcely be called for at Lyons when it had not been accorded even in Paris, observes that not only an error or injustice committed in the capital forms no justification for its perpetration elsewhere, but that in fact the Paris Medical officers receive some compensation from their appointments being for life instead of for ten years only, as at Lyons, and that they far more readily led to lucrative practice. To this last statement, M. Olivier, of the *Revue de Thérapeutique*, demurs. He states that the sacrifice of time, and that during the most precious hours of the day, is so large on the part of candidates for Hospital appointments, and on the part of those who succeed in obtaining them, that few without private resources can afford to wait the advent of those higher positions in the Hospital hierarchy which may prove of service in introducing them to private practice.

M. Danet, Physician to the Ministère de l'Intérieur, having been commissioned by the minister of that department to undertake an investigation concerning vaccination, has just presented to the Academy of Medicine a voluminous report, embodying the results of his researches. The objects of his mission were to ascertain, by direct observation, the desirableness of revaccinating the *personnel* of the penitentiary establishments and other centres of agglomerated population, to investigate the best mode of performing this operation, and to examine into the truth of the charges that have been made against vaccination of influencing the mortality of early infancy, and of increasing the number of exemptions from military service. M. Danet practised 45,500 punctures in 8500 subjects of both sexes at every age and in every category, as well as on more than forty animals of various species, and he states that, investigating the parallel effects of vaccination made from the cow to man, and from arm to arm, he found that he succeeded in 40 per cent. of the cases treated by the former method, and in 26 per cent. by the latter. The following are the general conclusions of his report:—1. Variola and vaccinia are two different diseases. 2. Vaccination does not predispose to any disease. 3. Vaccination and variola after a certain time lose their antivariolic properties. 4. The vaccine virus, in whatever way it is transmitted, requires renewal. 5. The predisposition to variola is greatest in proportion as the subject is younger or very aged. 6. Revaccination

is absolutely necessary. 7. Those who have had variola should also be revaccinated. 8. The vaccine virus, while passing through the economy, may acquire some of its constitutional principles, so that it may be often dangerous to vaccinate from arm to arm. 9. The cow is refractory to syphilis. 10. Revaccination from the cow to man is the only means which presents full guarantee of success and security. 11. The febrile condition is generally a cause of failure. 12. The injection of preserved virus and the multiplicity of punctures are the means of procedure which offer the greatest chance of success. 13. Preserved virus should be revivified by transplantation on the heifer. 14. Vaccine virus from the fourth to the end of the sixth day after the operation should be only employed; never that of a later period.

Errata.—In our last, at p. 173, col. 1, line 20 from below, *for* "ascertained" *read* "overturned;" col. 2, line 6, *for* "domination" *read* "diminution;" line 25 from below, *for* "were" *read* "was."

PARLIAMENTARY.—NEW BILL FOR REGULATING CAPITAL AND OTHER PUNISHMENTS IN THE CASE OF MURDER AND INFANTICIDE—VACCINATION—SANITARY LAWS, SCOTLAND—THE CASE OF FLOGGING AT LIMERICK—THE MEDICAL OFFICERS OF THE GUARDS—CRIMINAL LAW REFORM.

On Thursday, February 14, Mr. Walpole moved for leave to introduce a Bill for amending the law relating to murder, and for giving further protection to new-born children. After referring to the Report of the Commission on Capital Punishment and the Bill sent down from the House of Lords in the last session, he stated certain objections to the details of that Bill, and especially expressed himself adverse to the ranging the crime of murder under different categories, as murder of the first degree or murder of the second degree. He held that the substantial object had in view by the Commissioners could be obtained without adopting a distinction which would not recommend itself to the feeling of the country. He then proceeded to explain in detail the provisions of the new Bill.

"The different cases of murder for which capital punishment will be inflicted, if the Bill becomes law, will be the following:—First, if any jury find that a man committed the crime with the deliberate intention to kill or to do some grievous bodily harm to the person killed, or to kill or do some grievous bodily harm to some other person. I substitute the words 'deliberate intention' for the words 'express malice aforethought.' Secondly, capital punishment will be inflicted if a jury find that a man committed the crime with a view to, and in or immediately before or immediately after, the commission by himself of any of the following felonies:—Rape, burglary, robbery, piracy, or the felony of unlawfully and maliciously setting fire to any dwelling-house or any person therein. The third case in which the punishment of death will be inflicted is when a jury find that a man committed the crime for the purpose of thereby enabling himself or any other person to commit any of the above-mentioned felonies. The fourth case in which capital punishment will be applicable is when a jury find that a man committed the crime in the act of escape from, or for the purpose of thereby enabling himself or any other person to escape from or avoid lawful arrest, immediately after he or such other person has committed or attempted to commit murder or any of the above-mentioned felonies; and the last and fifth case for the infliction of capital punishment was suggested by the Lord Chancellor, and it is the case with respect to which a jury shall find that a man murdered a constable or other peace officer acting in the discharge of his duty. These are the five and only cases in which, if this Bill passes into law, the crime of murder will be punished by death; and the Bill goes on to state that in any other case of murder the offender shall be liable, in the discretion of the court, to be kept in penal servitude for life, or for any term of not less than seven years. This is the whole of the Bill with respect to the law of murder. Another part of the Bill I am now asking to bring in relates to what is commonly called infanticide. I do not anticipate any great objection to this part of the Bill. It is quite clear that the crime of infanticide very often goes unpunished because a conviction may be followed by capital punishment, and I do not know that there is anything in this part of the Bill to which I need particularly refer. There is a clause in the Bill enabling a judge to abstain on a conviction for murder from pronouncing judgment of death, and in that case judgment of death shall be recorded against the offender. With respect to the other measure which it is my intention to ask leave to introduce, I may here state that it has for its object the carrying into effect capital punishments within prisons. The question which will arise in connexion with this measure is whether due securities are taken for carrying out the execution with propriety, and in a manner which will satisfy the law, leaving no doubt that the execution has taken place. There is power given in the Bill to certain officers to authorise the admission into a prison where any execution takes place of the relatives and friends of the criminal, in order that they may see the way in which the sentence is carried into effect. The Bill requires the Surgeon of the prison to certify to the death, and a coroner's inquisition is to be held after each case of execution. With all these securities it seems to me that the community may feel complete confidence as to the way in which the execution is carried into effect. The little public good which results from such scenes as occur at a public execution is a reason for changing the law, and those who object to the alteration will have the opportunity of urging their objections upon this distinct enactment."

Mr. Bright supported the principle adopted by the Commission of ranging murders under different classes, and several speakers, amongst whom were Mr. Henley and Mr. Neate, objected to certain provisions of the Bill. In his reply, Mr. Walpole stated that the Bill would only apply to England and Ireland, but that the attention of the Scotch law officers of the Crown would be drawn to the advisability of extending the provisions of the Bill to Scotland. If the intentions of the framers of the Bill were not, in the opinion of hon. members, fulfilled by it, he had no objection to its being amended. The Bill was then read a first time.

On Friday Mr. Bruce asked the Vice-President of the Committee of Council on Education whether it was his intention to reintroduce the Vaccination Bill as amended by the Select Committee last session. Mr. Corry said that it was his intention to introduce a Bill similar to that referred to.

On Monday, February 18, in answer to a question by Sir R. Anstruther, Mr. Walpole said that a Bill was in preparation for consolidating and amending the law relating to nuisances in Scotland.

Mr. Otway, who rose to ask a question of the Secretary of State for War in reference to an inquest on the body of Robert Symes, a private of the 74th regiment, on whom corporal punishment had been inflicted by sentence of a district court-martial, said that, as the question related to the life and death of one of Her Majesty's subjects, he hoped the House would permit him to state the facts on which he based the question. ("No, no.") He was quite in order in stating the facts. It had been stated in many newspapers, and especially in the *Lancet*, that a soldier belonging to the 74th Highlanders died in the Military Hospital at Limerick on the 9th inst., after receiving corporal punishment, having been sentenced to receive 50 lashes, and to be confined for 168 days. Shortly afterwards an inquest was held on the body, at which three military Medical officers and one civilian gave their evidence. The evidence was to the effect that his death was caused by fever, which set in owing to the punishment which had been inflicted, and the jury found that the deceased died in consequence of congestion of the brain supervening on the punishment to which he had been subjected. Now, he wished to ask the right hon. gentleman whether the statement given in the newspapers was substantially correct, and whether the punishment which the soldier had received was of undue and extraordinary severity, or no unusual punishment for offences such as he had committed.

General Peel: In consequence of the notice given by the hon. gentleman, I sent to Ireland for information on the facts, and I find that they are as follows:—Private Robert Sim, 74th Regiment, was tried by district court-martial on January 9, for an act of gross insubordination in having struck with his fist a sergeant of the regiment, and kicked him on the face when he was knocked down. He was sentenced to 365 days' imprisonment, with hard labour (197 of which were

remitted), and 50 lashes. The Staff-Surgeon examined the man on three different ocsasions and pronounced him to be in a good state of health, and fit to undergo corporal punishment; he was flogged on January 14, a Staff-Assistant-Surgeon being present at the parade. After punishment he was sent to the cells, where he was allowed bedding, etc., and seen daily by a Medical officer. On January 29 (14 days afterwards) he was admitted into Hospital suffering from fever; his back had nearly healed. On the next day erysipelas of the face and head commenced to set in, and he died on February 9. The post-mortem examination showed that death was occasioned by congestion of the brain consequent on the erysipelas; his back had healed at the time of his death; he had always been a healthy man, but of bad character.

On Tuesday Sir R. Anstruther asked the Secretary of State for War what compensation, if any, had been offered to those Medical officers of the Brigade of Guards whose prospects had been seriously damaged by the alteration of their system of promotion, under a warrant framed in 1860, but not promulgated till 1866.

General Peel said that the arrangement made by his predecessor was that the warrant of 1860 should be carried out. He had seen no reason to make any alteration, and promotion would, therefore, be in the brigade and not in particular regiments.

On Wednesday Mr. Russell Gurney, in moving the second reading of his Criminal Justice Bill, explained that its main objects were to enable Judges, in all cases where a charge had been originally dismissed by a magistrate, and the prosecutor had persisted in going before a grand jury, to fix the expenses of the accused on the prosecutor if they should be of opinion that the charge was unfounded; and to provide for the attendance and payment of witnesses necessary for the defence of prisoners at the discretion of the Judge.

The Bill was read a second time, after some remarks from Mr. Hurst and Mr. Denman.

THE CHOLERA AT JERSEY.

(*From our own Correspondent.*)

JERSEY, February 19, 1867.

I WILL do my best to describe, in few words, the outbreak and progress of the epidemic which is now raging in the midst of us. The first victims are generally believed to have been a sailor and his wife, who arrived from Cherbourg on the 7th. (It appears cholera is raging there.) They seem to have partaken heartily of winkles, and to have been seized and died. An Irishman who attended them was next attacked, and died; and *all who attended at his wake* were seized, and succumbed to the fatal disease after a duration of attack varying from four to twenty-four hours. The symptoms were cramps, profuse vomiting, and diarrhœa more or less severe, passing rapidly into a state of collapse, from which the patients did not rally. *Some* of the well-known marked characteristics of true Asiatic cholera were wanting. I mean the cold tongue, blueness of the skin, the peculiar puckering of the skin of the fingers like washerwomen's, the peculiar choleraic voice or whisper, suppression of urine, but above all the secretion of the rice-water discharge, which is so very marked a symptom of the *true* disease. I am aware that it has been seen in *some* of the cases reported, yet some of these symptoms have been present, some have been wanting.

The disease occurred in all parts of the town, yet was in a great measure confined to the low Irish and French, and almost all its first victims were drunkards; but others are now attacked. So far as I can ascertain up to this time, 84 cases have been reported, 43 are still under treatment, 39 have died, 2 have recovered. I will procure all the statistics in my power and forward them to you. I need scarcely tell you that the progress of the pestilence has been greatly favoured by the peculiarly misty state of the atmosphere, and the enormous quantity of rain that has fallen for months. I am not aware that any one has noticed the "*peculiar blue mist*" which I have read of in former outbreaks. Of course, *overcrowding, bad water, bad and insufficient food*, bad ventilation, imperfect drainage, insufficient clothing, and, above all, squalor and want, have contributed much to its spread. Only *one death* was reported this morning.

THE NEW ADMIRALTY CIRCULAR.

WE have received the following circular containing the new Regulations for the Medical Service of the Navy, and shall comment on it next week:—

Circular No. 4 W.
Cancelling Circular No. 22 W.

Admiralty, February 8, 1867.

(*Medical Officers of the Navy.*)

My Lords Commissioners of the Admiralty having had under their consideration the rank, pay, and position of Naval Medical Officers, are pleased, under the authority of her Majesty's Order in Council of July 6, 1866, to establish the following regulations:—

1. Staff Surgeons to be placed on a separate list, and promotion to that rank to be open to officers for distinguished or special service, although 20 years on full pay may not have been completed.

2. Surgeons specially promoted to be Staff Surgeons before serving 20 years are to have 16s. 6d. a day half-pay.

3. The whole time served on full pay as an Assistant-Surgeon, to be allowed to Surgeons to qualify for the rank of Staff Surgeon, provided the examination for Surgeon is passed before the Officer completes ten years' service.

4. The pay of Surgeons and Staff Surgeons to increase by periods of four years instead of five years as at present.

5. In order to put Naval Medical Officers on the same footing as Army Medical Officers, in respect of allowances in Hospitals at home and abroad, they are to receive the following money allowances in lieu of provisions for themselves and servants, and for fuel and light:—

	At home.	Abroad.
Inspectors of Hospitals	£85	£130
Deputy Inspectors.	67	112
Staff Surgeons and Surgeons	53	112
Assistant-Surgeons	39	108

All other allowances for provisions to cease.

In cases where Medical Officers draw provisions or fuel from public stores, they will be charged for the same at cost price.

6. The scale of travelling allowances, extra pay, lodging money, and compensation for losses to be fixed for Naval Medical Officers according to their relative rank with other Naval Officers.

7. In regard to cabins. To meet the requirements of the service it is necessary that the Senior Executive Officer and the Staff Commander, or Master, should have the cabins placed most advantageously for the performance of their special duties; with these exceptions Medical Officers are to have cabins according to their relative rank in the service. Cabins will be allotted to Assistant-Surgeons.

8. Staff Surgeons to be placed on the same footing as Commanders with regard to servants.

9. A Staff Surgeon to be appointed to all flag ships bearing the flag of a Commander-in-Chief on a foreign station, with an allowance of 5s. a day in addition to his established pay.

10. The periods of retirement by age to be fixed as follows:—

Surgeons and Assistant-Surgeons at	55 years of age.
Staff Surgeons	60 ,,
Inspectors General and Deputy Inspectors General	65 ,,

11. Assistant-Surgeons at home, after completing their time for examination for the rank of Surgeon, may be granted two months' leave of absence on full pay, on condition of their resuming their studies at a Medical School or Hospital.

12. To place Staff Surgeons on an equality in rank with

Surgeons-Major in the Army, they are to rank with Commanders according to date of commission.

13. Officers in command of Her Majesty's ships must, on all occasions, whether on shore or afloat, take rank and precedence of officers placed under their command. A ship must always be represented by an executive or combatant officer, after whom all officers are to take precedence according to their relative rank.

14. The pay of Naval Medical Officers to be increased in accordance with the following scale:—

Rank.	Pay per Diem.							
	Under 5 Years' Service.	Above 5 Years' Service.	Above 10 Years' Service.	Above 14 Years' Service.	Above 18 Years' Service.	Above 22 Years' Service.	Above 26 Years' Service.	Above 30 Years' Service.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Assistant-Surgeons	10 0	12 6	15 0	17 6*	..	..	..	..
Surgeons	..	..	17 6†	20 0	22 0	..	..	..
Staff-Surgeons	..	..	..	..	24 0†	27 0	29 0	..
Deputy-Inspectors-General of Hospitals and Fleets	..	..	..	..	30 0†	32 0	35 0	37 0
Inspectors-General of Hospitals and Fleets	..	..	..	..	..	45 0†	47 0	50 0

* Provided he passes his Examination before 10 years' service.
† Or on promotion.

15. Naval Medical Officers to be permitted to retire after 20 years' service on full pay, but the rate of half-pay awarded to officers so retiring not to exceed five-tenths of the full pay to which they may be entitled from length of service.

16. As a special reward to officers of long and good service, who, owing to the comparatively small numbers of the inspectorial ranks, have not been promoted to any higher position than that of Staff Surgeon, such officers of the rank of Staff Surgeon as have served for 25 years on full pay to be allowed the half pay of £1 a day, on being compulsorily retired at 60 years of age, or retired on Medical survey.

17. My Lords will consider and publish hereafter the manner in which it may be found most advisable to assist Naval Medical Officers in their professional education after examination and admission into the Navy.

The new scale of pay to come into operation from the 1st January, 1867; the other arrangements, including the increased allowances in clause 5, from the 12th July, 1866, the date of Circular No. 22.

By command of their Lordships,

Henry G. Lennox.

To all Commanders-in-Chief, Captains, Commanders, and Commanding Officers of Her Majesty's Ships and Vessels.

THE ANNUAL REPORT OF THE CORONER FOR MIDDLESEX.

For the last three years Dr. Lankester, the Coroner, has read an annual report before the Social Science Association, and on Monday night detailed the experience he had gained during the year 1865-6. His communication was interspersed with an immense amount of tabular matter, which we now proceed to analyse. In the first place, making due allowance for the increase of population, the number of inquests held last year, amounting to 1385, was excessive. Taking the four parishes of St. Pancras, St. Marylebone, Islington, and Hampstead, the returns show an excess of 140 inquests in these four districts alone; yet whilst there has been some special cause at work, it is true that the most general and permanent influence is the increase in population. In St. Pancras, the rise in the number of cases in the two classes of accidental death and infanticide was represented by the numbers 18 and 13 respectively. The increase of deaths in Marylebone is equally divided between natural and accidental deaths and infanticide. In Islington, it consists in natural deaths and infanticide. In Hampstead, entirely in natural deaths. The increase of inquests in the four above-named parishes thus classified, consists of 80 from natural deaths, 40 accidental, 2 suicide, and 19 infanticide. A comparison between 1863-4 and 1865-6 shows that there has been only an increase of 39 in natural deaths; and in the last report it was pointed out that the diminution of sudden deaths and persons found dead in 1864-5 depended on atmospheric influences, whilst a more correct appreciation of the causes of death has considerably diminished the number of deaths classed under "unknown causes," and which evidently increases the number of deaths placed under the head of "natural." The two general causes of death, headed "accidental" and "infanticide," have steadily increased, and, apparently, at a greater rate than can be accounted for by a mere increase of population. Season has considerable influence on inquests—the greatest number are held in December, the least in October. "With my present experience," says the Coroner, "it would be difficult to give any explanation as to why the months of December and January should be intercalated with the month of March, and how January should be separated from February by April. The obvious conclusion is, that, whatever be the irregularity of the colder months of the year, there is a regular succession in the warm months, and that the deaths requiring the coroner's inquest diminish from June to October, in which there are the fewest inquests held." The majority is brought about by the more frequent occurrence of sudden death in the cold weather. One of the tables shows the number of inquests in public institutions, the remarkable point being a decrease of inquests held in the House of Correction; whereas they numbered thirty-six in 1863-4 and forty-seven in 1864-5. Last year they amounted to twenty-nine only.

Dr. Lankester next gives a table of the inquests held on deaths from natural causes. In fourteen instances a verdict of stillborn was returned; and those cases where the child has been shown to have breathed and died subsequently are included under the head of deaths of newly born children. Dr. Lankester argues, in reference to many cases, that there is as much reason to think that the lives of the children have been sacrificed as there is of those who are shown to have breathed after they came into the world; and this is probable from the fact not only that no preparation has been made for the birth of the child, but also that attempts are made to conceal it, or to dispose of its body subsequently. The mother is guilty, under these circumstances, of jeopardising her own life; for, instead of the necessary rest in the recumbent position, these women go about their ordinary avocations, and thus render themselves liable to disease, that speedily kills, or makes them feeble and ailing in after-life. The section "general diseases" includes many forms of contagious maladies, such as typhus, small-pox, scarlet fever, and suchlike, which become the subject of inquests under two circumstances. A person may die suddenly by them without attendance, or under circumstances of a suspicious character, indicating, especially, neglect. In some instances the most gross neglect of the most ordinary sanitary arrangements has led to death, and the verdict of the jury has caused immediate improvements to be made. Dr. Lankester remarks that "the public are not fully alive to the benefit to be derived from investigation by the coroner's court into the causes of preventible deaths from fevers, small-pox, and other diseases." Amongst the general diseases will be found, for the first time, an entry that demands serious attention. In 1865-6 inquests have been held upon five persons who died of hydrophobia, which seems to have suddenly made its appearance among dogs, and, "by a general disregard of the fact of its existence, this disease may be so propagated that human life may be more largely sacrificed than during the past year. Like the beginnings of cattle-plague, small-pox, typhus, cholera, and other zymotic diseases, it may be allowed to extend till at last our legislators will be alarmed, and, after the sacrifice of a large amount of human life, precautions will be taken too late to deal effectually with the evil." The verdict of intoxication is a difficult one to extract from a jury, and many of the cases returned as death from internal diseases are the direct results of excessive intemperance; whilst under the head of accidental deaths, suicides, homicides, etc., the "terrible effects of this indulgence are seen in the bills of indictment which coroners' verdicts return against the drinking habits of society." Accidents have increased, and at the present time there is often "great interest exercised to prevent inquiry in cases of accidental deaths," and great facilities exist for their concealment. Against this the coroner appeals, and thinks that violent deaths may often escape detection. Burns and overlaying, as causes of death, have diminished, but where "one child is killed fifty are permanently injured and

diseased for life by a system of management which excludes from the child an abundant supply of air," all of which is in great measure due to ignorance on the part of parents. In the central district of Middlesex, in consequence of the formation of the New Midland Extension Line, many accidents and several deaths have occurred, as a rule, the result of carelessness and a disregard to regulations on the part of the injured. In many of the accidents in connexion with buildings the men are intoxicated. In Dr. Lankester's district last year sixty-three persons were killed in the streets, and they were of all ages and conditions in society. The number of suicides is an increasing one—last year seventy-nine—equally divided between the sexes, whilst the modes of self-destruction vary but little. Under the head of murder and manslaughter, it is stated that the destruction of infant life is on the increase. The verdicts delivered in the coroner's court form no index of the number of deaths of newly-born children found exposed in the streets: the judicial statistics give only the verdicts of wilful murder and the number of inquests held on children of all kinds under one year of age, and it would be of very great service if a return could be made embodying the number of newly-born children found dead and exposed in the streets, and separating the "legitimate" from the "illegitimate." Dr. Lankester still adheres to his statement, founded on deductive inquiry, that the number of infants who may reasonably be believed to have met their deaths by foul play is much larger than is generally supposed. In one year ninety-eight inquests have been held on newly-born children found dead and exposed, and perhaps seventeen or eighteen women die each year in central Middlesex from ills that follow directly from the concealment of pregnancy and parturition.

Under the head of unknown causes, which contains twenty-nine cases, Dr. Lankester enters fully into the present mode of conducting post-mortem examinations, and suggests the desirability of appointing special officers, whose duty it should be to make all necessary examination, including chemical analysis, keep a true record of the various cases that come under the notice of coroners and juries.

Acknowledging freely that the coroner is bound to send for the Medical Practitioner who last saw or attended the patient, and that such Practitioner has good ground for complaint if the order for the post-mortem were given to another Medical man, yet one change might be effected by which the Practitioner in attendance might give his evidence, but a specially appointed Medical man undertake the investigation into the cause of death by examination of the body and its contents; and in connexion with this Dr. Lankester advocates the erection of mortuaries in different parts of London, where the various post-mortems might be made, and in which special appliances and facilities for conducting such examination could be always at hand, and to which also should be attached a proper room where the jury might hold the inquest; upon anatomical considerations, this seems a very desirable plan. The Sanitary Act of 1866 gives to the Nuisance Authority power for the erection of such places.

Lastly, Dr. Lankester observes that the present movement in favour of workhouse reform originated with the coroner's inquiries in the case of Daly at the Strand, and that of Gibson in the St. Giles's Workhouse, and only showed the desirability of allowing inquests to be held in all cases of death in workhouses. The beneficial effect of inquests held in prisons and lunatic asylums is acknowledged, and a similar good result would ensue if the same rule held good with regard to workhouses. With the best possible intentions on the part of superintendents and officers, in all public establishments, abuses creep in which are alone effectually investigated before a jury.

Faculty of Medicine of Paris.—By Imperial decree the following Professors have just been appointed:—MM. Lasègue, Pathology and General Therapeutics; Vulpian, Pathological Anatomy; Sée, Therapeutics and Materia Medica; Broca, External Pathology; Axenfeld, Internal Pathology; Hardy, Internal Pathology. It is said that Professor Nélaton is on the eve of resigning his chair of Clinical Surgery.

Poor-law Medical Officers and the late Cholera Epidemic.—The Alverstoke Board of Guardians have resolved not to present to their Medical officers any gratuity for extra services rendered during the cholera. They decline on the ground that the ratepayers would object to it, and that there was difficulty in knowing how much should be given. The easiest solution of the latter knotty point is to give nothing at all, and they adopt it.

SUCCESSFUL CANDIDATES FOR THE ARMY MEDICAL SERVICE.

The Director-General of the Army Medical Department presents his compliments to the editor of the *Medical Times and Gazette*, and begs to enclose a list of the candidates of her Majesty's British service who were successful at the competitive examination in August last, and who have passed through a course at the Army Medical School, showing the combined results of the examination.

Army Medical Department, February 16, 1867.

Names.	Studied at	No. of Marks.
Collins, W.	Cork	4980
Harman, W. M.	Dublin	4753
Fernandez, A. L.	Edinburgh	4508
Moore, S.	Dublin	4410
Gibson, G. J.	Cork	4315
Nugent, H.	Dublin	3963
Williamson, J.	Aberdeen	3892
Steele, W. H.	Dublin	3758
Archdall, T. G.	Dublin	3637
Major, N. B.	London	3585
Ratigan, A. H.	Dublin	3550
Richards, C. F.	Dublin	3475
Clifton, G. H.	London	3376
Cornish, H.	Edinburgh	3363
Fitzmaurice, J.	Dublin	3155
Armstrong, C.	Dublin	3137
O'Neill, C. J.	Dublin	3106
Macartney, J.	Galway	3031
Lougheed, W.	Dublin	2945
Dunn, G. C.	Edinburgh	2840
Gamble, S. B.	Dublin	2768

REVIEWS.

Clinical Surgery. Part VII: On Ovariotomy. By Thomas Bryant, F.R.C.S. London: Churchill and Sons. 1867. 8vo. Pp. 148.

Our Surgical readers are, or ought to be, well acquainted with the valuable series of monographs which Mr. Bryant has published during the last six years under the term "Clinical Surgery." The first, published in 1860, treated of injuries and diseases of the nervous system; the second, of the air passages and organs of circulation; the third, of the digestive tube, from harelip to affections of the rectum; the fourth, of the urinary organs; the fifth, of tumours, especially of the breast; the sixth, of excision of joints. Each part is constructed on the plan of giving principles and details as they have occurred to the author from his experience and that of his colleagues at Guy's Hospital. Statistical tables are given from the same source, and altogether it would be difficult to point to a more safe and satisfactory set of Surgical treatises. The seventh deals with ovariotomy.

In an "Appendix" by Mr. Phillips, Demonstrator of Anatomy at Guy's Hospital, there is contained a really important addition to our knowledge of the natural history of ovarian diseases. In the form of tables we find "an analysis of almost all the recorded cases of ovarian disease which have occurred at Guy's Hospital during the last forty years." The number of cases analysed is eighty-eight. In all these cases the disease ran its course in at least 75 per cent. within two years. Several other propositions are based on the analysis; but the cases are far too few in number to give much weight to conclusions drawn from so meagre an array of facts. Still, as far as they go, the cases succinctly grouped in the tables are of considerable value. We cannot say as much for Mr. Bryant's chapters entitled "Is ovariotomy to be regarded as a justifiable operation?" "History of the operation;" "On the causes of death in ovarian disease;" "The statistics of ovariotomy;" and "When and under what circumstances should the operation be undertaken?" In all these chapters there is a very fair and judicious commentary on the several subjects discussed. But there is nothing which can be considered as any addition to our knowledge; or as anything more than a summary of the discussions at the Medico-Chirurgical, Obstetrical, and Pathological Societies, with which the Profession is already familiar. The statistical chapter is

especially defective; nor in the chapter on the operation is there anything to be learned from Mr. Bryant's reports of his own experience. Indeed, we think his experience, as recorded in his twenty-eight cases, and the conclusions he draws from this experience, are quite at variance in more than one particular. Take, for instance, his conclusions as to treating the pedicle. He says, page 602, "We are ready to accept the principle that the right treatment of the pedicle lies in its division, its being dropped back into the abdomen, and the subsequent closure of the wound; but it is yet to be determined under what circumstances the pedicle is to be divided and ligatured, and under what conditions it is to be divided by the cautery with safety." Mr. Bryant does not appear to have tried the cautery in any case; but out of his twenty-eight cases he has tied the pedicle, dropped it back into the abdomen, and closed the wound in twelve cases. In nine cases he has used the clamp. In seven cases he has tied the pedicle, leaving the ends hanging out of the wound in one case, fixing the tied end of the pedicle between the lips of the wound in two cases, and in the other four not stating what he did with the pedicle after tying it. Now let us see the results:—

	Cases.	Recoveries.	Deaths.
Pedicle tied and dropped in	12	8	4
Clamp	9	7	2
Ligature	7	2	5
	28	17	11

Why, with such a frightful mortality after the ligature, such a mere average of success after tying and dropping in, and such happy results from the clamp in his own experience, Mr. Bryant should be led by reports of the success of other operators to ignore his own, is not one of the least curious questions in the history of ovariotomy. However, his success in the aggregate is so great that he will hereafter, in the history of Surgery, rank as one of the most useful and best known of the many good Surgeons reared and ripened at "Guy's."

The English and their Origin; a Prologue to Authentic English History. By Luke Owen Pike, Esq., M.A., F.A.S.L. London: Longmans. 1866.

We have been thoroughly accustomed within the last ten years to hear expressions repeated ever and anon which would lead us to believe that "Anglo-Saxon" civilisation was on the ascendant. We have been told, even by such dispassionate map-makers as Sprüner, wondrous generalisations respecting the marvellous increase of the Teutonic or Anglo-Saxon influence over the world. The word "Teutonic" is so much employed to denote the population of Great Britain and of the United States, that Mr. L. O. Pike ventures, not we think unreasonably, to question the grounds on which this popular belief is founded. In doing so it appears that he has gone over a vast field of evidence, and we confess we think that whilst in some cases he has utterly disproved the "Teutonic" theory of the origin of the English, in others he has made out at least a satisfactory *primâ facie* case in favour of his views. His remarks naturally go over the historical, the philological, the physical, and the psychical evidences.

The last, perhaps, are the most disagreeable to our Teutonic friends, and we think that the unmerited obloquy which has met Mr. Pike at the hands of the Germans is quite uncalled for. The physical evidence in the hands of Mr. Pike, who is not, we believe, a professed anatomist, is manipulated with an accuracy, an exactitude, and an acumen, which reflects the highest credit on this amateur investigator. The philological evidence, on the whole, is not weaker than philological evidence is generally, whilst the historical evidence reposes on a series of proofs which were naturally of convenient and ready access to a gentleman in Mr. Pike's official position.

We shall first consider the historical evidence. The testimony on which historians who give the account of the early Saxon migrations into England rely is that of Gildas, a predecessor of Beda, whose existence is so far mythical that its precise date is undefined, and who expressly states that he compiled his history "not from any British written documents, because, if there ever were any (*si qua fuerint*), they were either burnt by the enemy, or carried across the sea by the fugitives, but from accounts obtained abroad, which must necessarily be obscure by reason of the numerous gaps which they leave in the narrative." There being not the slightest evidence that Gildas was an eye-witness to the events which he describes, Mr. Pike examines the probabilities furnished by the history of other countries, and by the geographical position and extent of various districts. Such considerations suggest, according to his argument, a probability that pre-Roman Britain was almost exclusively non-Teutonic; that the Roman occupation could have had but little effect upon a population so numerous as that of ancient Britain; that the number of Saxon invaders must have been small when compared with that of the Britons; that the Saxon element must have suffered more than the British element from the Danes; that the Norman Conquest could not have effected any great change in the character of the population; and, finally, that, even after the whole series of invasions and conquests, it was not improbable that the British element, such as it was before the Roman occupation, might still have preponderated even in the eastern portion of the island. Every one of these conclusions is diametrically at variance with the teachings of popular anthropology; yet we are bound to confess that Mr. Pike arrives at them by a chain of argument which, according to the method of tension that we have adopted, cannot be broken. The fact appears painfully manifest at the conclusion of the investigation that we are unable to separate early English history from the domain of myth and imagination. Contemporary evidence does not exist, and the probabilities of the case appear to us beyond all ordinary certitude, that the so-called Saxon invasion of England was an event of far less historical importance than we were taught at school.

The philological evidence might have been expected to be powerful enough to utterly demolish Mr. Pike's argument. Yet this hardy champion, with an adroitness and an ingenuity worthy of an ancient Roman *retiarius*, even admitting the partly Anglo-Saxon character of the English language, shows that this does not imply the Anglo-Saxon origin of the English people. For he brings forward numerous instances to show that the same language may be spoken by nations of different blood; the Goths and Moors of Spain, both of whom spoke a Latin language, being the most striking example. Again, a change of language in any country by no means implies a total change of people. The Koromantyn maroon of Jamaica and the Congo negro slave of the same locality both speak a debased English, yet their ethnic origins are very different. It is pointed out that there is not only a small Kymric element in the English vocabulary, but that the Kymric pronunciation has produced a well-marked distinction between English and other languages of Teutonic origin. So far the philological evidence certainly did not destroy Mr. Pike's theory, whilst some parts of it rather tended to support it.

But the most conclusive part of the work is certainly that in which our readers will take most interest—*i.e.*, the anatomical portion—for Mr. Pike reviews the evidences of stature, complexion, and cranial form with a profundity which marks the present as a text-book amongst English anthropological works. First, to investigate what is the prevalent colour of the hair amongst existing Englishmen. The Germans—at least the Northern Germans from amongst whom the intruding population termed Saxons proceeded—were, and are admittedly, a light-haired people. The colour of the hair is often amongst Germans almost flaxen. But, asks Mr. Pike, "Are the English a fair-haired people? Can it be said that 90 per cent. of them are fair-haired? Certainly not. But any greater proportion than 50 per cent. would perhaps constitute them a fair-haired people. And are there more than 50 per cent. of fair-haired men and women amongst the English? Certainly not. There are not 40 per cent., nor 30 per cent., of even moderately light-haired people amongst them. They are, beyond all question, generally dark-haired." These assertions Mr. Pike conclusively proves to be based upon the most rigorous evidence. He quotes Dr. Beddoe's percentages, which extend over more than 6000 cases, and on the whole closely agree with the estimate of Prichard that there are about 80 per cent. of dark-haired people in England. And although the latter author was frequently inexact and unreliable, there seems no doubt that his estimates are generally founded on a correct estimate of the actual numerical percentage. Decidedly flaxen hair, *chevelure dorée* (hear this, ye fashionable ladies, and bow before anthropological truth!), and true auburn are equally uncommon. Mr. Pike admits that amongst the inhabitants of the north of England the testimony of Worsaae is right, that the colour is lighter than in the south, but on the whole this does not affect the common average. These Northerners, however, resemble closely the Germans of whom Tacitus spoke when he described the Germans—"*omnibus truces et cærulei oculi, rutilæ comæ, magna*

corpora." It may be certainly admitted that the Germans, even in the north, are not all flaxen-haired, but it is incontestable that the Northern Germans and Scandinavians present a less proportion of decidedly black and brown hair than any other races. For Roman readers, therefore, they were not unfairly described as generally fair-haired. They were certainly fairer-haired than the British (index of nigrescence 70 per cent.), and the large proportion of dark-haired individuals which we possess amongst us forms, therefore, an argument against the Germanic origin of the English people. But when we turn to the cranial conformation of the ancient British and contrast it with that of the Germans, Mr. Pike's argument becomes stronger still, for we have distinctly the fact demonstrated that the typical ancient British skull was not exclusively brachycephalic nor exclusively dolichocephalic, but that there was a coexistence of the two types. The theory promulgated by Dr. Thurnam that in certain long barrows long skulls are invariably found, whereas in short barrows short skulls are found, apart from the *à priori* impossibility which such a *bizarre* classification appears to carry on its very face, has been proved to be altogether baseless. And the converse theory which Dr. Barnard Davis has maintained, that on the whole a short-headed or brachycephalic type was most numerous in the ancient barrows of England, has been generally accepted. Mr. Pike, however, has a tendency to attribute to the English a far more long-headed type still. Wiltshire, for example, produces, on the average, the longest heads found in any part of Europe. Dr. Beddoe has discovered that in Wiltshire the average cephalic index is ·76. Mr. Pike adopts the conclusions that the Celts had long, and often very long and narrow, brain-cases. Wilson, Retzius, and Pruner-Bey advocate this theory. Huxley, King, and Blake have described river-bed skulls from Ireland which are probably Celtic, and which frequently exhibit the maximum of dolichocephaly. Lane Fox has discovered in the ancient cathedrals of Cork evidences of an extreme dolichocephalic form of skull. The typical Irish head, like the typical English one, is remarkable for its length. The typical German head is, on the other hand, exceptionally broad. This is alike proved by the testimony of Retzius and of Ecker, although Mr. Pike does not adduce the latter author, as he might well have done, in favour of his conclusions. He enters at some length into the comparison of the cranial form of the Cymry, the aboriginal population of Great Britain, with that of the ancient Greeks, who were also dolichocephalic, and points out that the type which is conventionally associated with that of the Apollo Belvedere is identical with the Cymric type of skull. He further points out that, out of seven decidedly ancient Greek skulls, six are dolichocephalic—a fact which is sufficient to show that, on the whole, brachycephaly was a rare condition amongst the ancient Greeks.

The psychological part of the author's work was naturally the one in which it was impossible for him to write without giving offence to some one. It so happens that he has given a minute comparison of the mental and moral qualities of the Germans, comparing them with those of the English. And by accident some of the qualities which he considers Englishmen especially to possess, are precisely those for which the Germans are not especially celebrated. *Hinc illæ lacrymæ.* For this argument, which of itself is of the most trivial character, Mr. Pike has been assailed by vigorous and vociferous Teutonic advocates, some of whom have been led away by "race-antagonism" to such an extent that they have altogether forgotten the historical, linguistic, and cranial evidences, which also form important links in the chain of argument. If you tell a Teutonic that Gildas did not exist, that Cymric and Greek have many words in common, or that his cephalic index is ·79, he will not be offended. Perhaps he does not see the true bearing of the argument. But if you say with Mr. Pike, in one of his epigrammatic sentences, "In England men and women seem to be generally modest without making any violent effort to be so; on the Continent, men, women, and governments seem to make very praiseworthy efforts to be modest, without succeeding," the Germans are especially offended. The "wunderschön" of such a proposition appals him. For, as Pike well shows, Goethe's *Wilhelm Meister* is, on the whole, a more "naïvely nasty" production than those of Fielding and Smollett. He, however, does not write an essay on morals. "It is not necessary to argue that either nation is better or worse than the other; let it only be granted that they differ."

Mr. Pike's book, elaborate though it may be, can only be considered as the commencement of an investigation which, sooner or later, must place comparative anthropology upon a certain and an assured foundation. Whatever may be the value of the facts in the work, and we confess we have detected no errors, the method of inquiry which has been adopted appears to us perfectly scientific. Such works are truly needed in the present day, to remove comparative anthropology from the stigma with which recent investigations into the races of South America has marked the science. And, to avoid such ridiculous failures, evoking the laughter of *savants*, as the interpretation of the "Maya alphabet"(a) given a few months ago by an ignorant and unqualified person, prudent anthropologists will in future feel that they have to measure many skulls, to compare many vocabularies, to investigate many histories, and to attain a clear knowledge of the mental and moral characters of many individuals, before they can generalise respecting the origin of any particular nation. This task Mr. Pike has accomplished, and has accomplished well.

GENERAL CORRESPONDENCE.

A FURTHER SUBSTANTIATION.

LETTER FROM DR. WALTER MOXON.

[To the Editor of the Medical Times and Gazette.]

SIR,—Dr. Johnson's letter in your number of the 9th inst. shows an extent of inadvertency which would be very astonishing if it were not for the unfortunate irritation which that letter discloses. He brings against me four instances of what he calls "culpable misrepresentation." I will now show that my representation in each of those instances was strictly just and true. While Dr. Johnson confines his complaints to my tone and style, he will always draw from me expressions of regret; for, whatever my object in writing—entire stranger as he rightly calls me—may have been, it did not include any wish to hurt his feelings; but when he attacks the subject-matter of my papers he will find me ready to substantiate every assertion, and to vindicate every suggestion.

His first charge I have already answered once, and his rejoinder does not touch my reply. The facts stand thus for your readers' judgment:—A gentleman writes a big book to expound a new view. Time passes, and that gentleman writes a little book to expound the same view. He states in his preface, firstly, that he wrote the little book because those to whom the big book was addressed took no heed of the new view it expounded, and then, secondly, that what keep people from heeding new views in general are indolence, pride, and love of error. Need he speak plainer? Can that gentleman plead injured innocence if those who did not heed the big book take the remarks about indolence, pride, and love of error, as alluding to them? The second charge is of a like nature. The facts are thus:—The gentleman says the little book is to sweep away a certain view which is held by those who did not heed the big book, and further on in the little book he, while in argument with these people upon their view, addresses a supposed impersonation of their view as "indignant orthodoxy." Can that gentleman complain if the words "sweeping away" are put in apposition with the word orthodoxy, when the object is only to point at the tone and style of the gentleman's writing?

Now, I do not want to be tenacious, and fix on Dr. Johnson the true construction of his writing. I will be charitable, and reflect that some people couple forms of expression, and throughout never see what is the real import of their language. Nay, further, some people are beyond this in the lack of self-knowledge, and actually do not critically know the motive which prompts their language. To such people the true import of their language will not, if I may so speak, be the same as its export, but will appear to be a misrepresentation of the thoughts and meanings they intended their language to convey. If such people apply odious terms to the statement of the true signification of their language when it is shown them, one does not well to be angry, but rather patiently convince them that such and such is the true signification of their language, all the while sincerely allowing that this may, nevertheless, not have been their intended meaning.

If Dr. Johnson repudiates this charity, then I must beg to remark that, as he availed himself of whatever effect he was to gain by using such terms as I pointed at (the unsuitable pomposity of which I am glad that he now recognises), it is a

(a) Mem. Anthrop. Soc. Lond. vol. ii. page 46.

question for him to consider whether it is graceful on his part that he should now strive to elude the ill-effects which are sure to follow the use of strong language.

Dr. Johnson's third charge is more serious. If I had raised prejudice against Dr. Johnson for leaving out of account the action of astringents when he took it into account, then I should have dealt unfairly by him, and have been worthy of severe censure, but I did not so. I say what Dr. Johnson quotes: "Why does Dr. Johnson in his examination examine the effect of castor oil and leave out the examination of the effects of astringents? Are the beneficial effects of the action of castor oil so much better attested than the beneficial effects of astringents that the first should be made a cardinal point in argument upon cholera, and the second left wholly out of account?" Dr. Johnson is perfectly right. I do mean to insinuate that he advantages his argument by not examining the effects of astringents, and especially by not alluding to such testimony for their good effects as, I infer, is as good as, if it is not better than, the testimony in favour of castor oil. Now what does he say in reply? He urges that he said "I was also deeply impressed by observing that during that epidemic the arrest of the purging by opiates was in several instances followed by the worst symptoms of collapse, and a painful question arose, etc." Is he serious? Is that an examination? The facts are thus:—Section III. (to which this part of my criticism is stated to be limited, and which purports to examine the bearing of the effects of various and opposite modes of treatment on the question at issue) is divided into four parts; each part is headed in italics with the name of the mode of treatment to be examined. These four headings are:—1. The Effect of Alcoholic Stimulants. 2. The Effect of Venesection. 3. The Effect of Purgatives. 4. The Effect of Injections into the Veins.

Each of these is put up for a full consideration, while the class of astringents, the most important and generally tried class of all the remedies, has no place, but is treated in the person of opium to a passing slur in explaining the origin of the idea of purging. It was at this that my first question was pointed; as for my second, I ask for their beneficial effects, not for their ill effects. That we have enough of the latter I would at any time allow. What I asked is, why the beneficial effect (so dubious) of purgatives is made much of, and yet whatever testimony there may be to the beneficial effect of astringents is not alluded to. At the time I wrote that question it appeared humanly certain that this great city had been spared decimation by the terrible scourge about which we trifle through the timely and general use of astringent remedies. Their use was advised and urged from door to door in the infected districts; and though, at the time Dr. Johnson wrote his little book, this had not come to pass, enough was said even then to merit a fair share of notice in a fair inquiry. Such a fair inquiry, judicial and equitable, is promised by the terms of the heading of Section III., yet we get nothing but one-sided advocacy. That is what I meant, and what I said, and I repeat it; I ask the question again, and without wishing to restrict Dr. Johnson in his answer, I beg to stipulate that before referring to the offensive part of his vacabulary to clothe his reply, he will take the trouble to understand my question.

Now, Sir, I confess I did feel some regret on reading the above charges, because the points they bring up are utterly irrelevant to my argument against Dr. Johnson's "theory" of cholera, and can only serve to divert attention from the issue before us. It was, then, with sincere pleasure that I found the fourth charge to concern the foundation of my case against Dr. Johnson's theory. Dr. Johnson quotes many passages in which I affirm that Dr. Parkes's account of the post-mortem appearances in cholera is directly opposed to Dr. Johnson's diagram and descriptions which are professedly drawn from them, and that this opposition is in the very point essential to Dr. Johnson's theory. That is exactly what I meant.

In my last paper I proved that Dr. Johnson, in support of his "theory," intensifies his own description by allusive terms, though he gives that description as quoting. He says in reply nothing to the point; he only gives us this generality, that "extremely anæmic is a perfectly correct expression of the fact that during the collapse of cholera the lungs are, as a rule, more anæmic than in any other disease." Now this statement, which he calls a fact, is the very thing I deny, and the proposition I proved as above sums up the proof that sustains my denial. Dr. Johnson must see that it is futile merely to repeat a statement after I have proved away its false basis, which I did when I showed his intensification of his description.

I also showed in my last paper that it was a most unwarrantable thing that Dr. Johnson should describe an "entire agreement" as to the anæmia of the lung among all competent authors on cholera. He now concedes this. His statement dwindles down, or concentrates into Dr. Parkes's. Even Briquet and Mignot are discarded as "not quite accurate" on the very point they were cited to support. But what matters? The opposite does just as well for our author's purpose. The "comparative emptiness" of the liver and spleen is as good support to this most accommodating theory as was the comparative hyperæmia on which it stood before. But see how the thing has declined. From the "entire agreement" we have got to Dr. Parkes alone; that narrows the issue to a manageable scope. We now see exactly how the matter stands. Dr. Johnson's theory perched on the shoulders of Dr. Parkes's, in total disregard of the fact that Dr. Parkes's theory has a head of its own. But necessity knows no law, and as Dr. Johnson's has no serviceable legs, there it sits as remorseless as Sindbad's old man of the sea, throttling its unhappy bearer in despairing grip. That Dr. Parkes should see his offspring die thus is no concern of mine; I agree with him that such things are plentiful enough, they are easily made, but the violence shown by Dr. Johnson's rouses one to pull it off its perch and let it starve.

I profess I am astonished at the way in which Dr. Johnson trifles with the point I raise against him in reference to his distortion of Dr. Parkes's account of the pulmonary veins. This is the essential ground of his theory. Dr. Johnson's theory differs from Dr. Parkes's earlier theory in this—that while Dr. Parkes considers the blood to have become unfit for respiration in cholera, Dr. Johnson urges that a spasm of the pulmonary arteries prevents the onflow of the blood. Now, to support Dr. Parkes's view, I suppose the ordinary appearances after death by suffocation would be expected—viz., full right heart and pulmonary artery, with emptier left heart. These Dr. Parkes affirms to exist. But the theory of Dr. Johnson differs essentially in being extraordinary, and hence wants some proportionately exceptional condition to prove it. Otherwise its extraordinary nature would be gratuitous, and gratuitously extraordinary theories are unendurable, where there is such easy scope for wildness as in theoretic pathology. This extraordinary condition Dr. Johnson professes to find in the state of the pulmonary veins. These he represents in description and diagram as very empty—very strikingly so, so much so that one is prepared accepting his diagram for some equally extraordinary explanation of such a strange and wonderful appearance. This is the turning point towards his theory. I beg Dr. Johnson's particular notice here, and ask him to dwell on the points I have raised as to the discrepancy between his account and Dr. Parkes's, until he fully understands them. Then we shall reach a desirable end, and hear no more of Dr. Johnson's "theory" of cholera. I will not again give those points, because I *proved* them in my last paper. I will, to bring the question to a single issue, only ask him, without any challenges or protests or other evolutions of angry defiance, *to quote from Dr. Parkes any description to justify his diagram and descriptions of the state of the pulmonary veins.* I wish to add that no evidence about the state of the cavities of the heart need apply for acceptance. The very simple points concerning the weight of the lung, and the general fact of a free flow of blood from *any* divided vessels in a body opened soon after death, while the body is yet hot, and the article of death is scarce complete, I will consider with the morbid anatomy of cholera.

I am, &c.

6, Finsbury-circus. W. Moxon.

"GRATUITOUS MEDICAL SERVICE."

Letter from Dr. Septimus Gibbon.

[To the Editor of the Medical Times and Gazette.]

Sir,—As an opponent of the above system when given to the public, I send you a copy of a circular just received, asking for "facts and cases," "dates and details," "opinions and illustrations," of the recent cholera epidemic. To answer this in a full and satisfactory manner would require a week's work. Both before and during the epidemic, in common with other Health Officers, I worked hard without as yet receiving any addition to a very moderate salary. I sent weekly returns of all cases, recoveries, and deaths to the Medical Department of the Privy Council. I question, therefore, whether Medical Officers of Health ought to be called upon further to contribute

gratuitously to the annual report of that department. It is generally understood that their report is well paid for (as it ought to be) by the country.

I do not for a moment question the great importance to science and humanity of having the details and history of the epidemic in the metropolis well recorded, but in order that it may be well done all the contributors should be paid; unpaid labour in a matter of this kind is sure to be unprofitable labour. I trust, therefore, Mr. Radcliffe will induce the Lord President of the Council, who is reputed to be an excellent man of business, to pay for the assistance which he or any other man must require in such a task.

I am, &c.

Septimus Gibbon, A.B. and M.B. Cantab.,
Medical Officer of Health.

13, Finsbury-square, E.C., February 14.

[copy.]

"Privy Council Office, February 12, 1867.

"Sir,—I am preparing for the Privy Council a report on the recent outbreak of cholera in the Metropolis. I am anxious to obtain additional information on the following points:—

"(1.) The week when epidemic diarrhœa first became prevalent last year in your health district.

"(2.) The date when house-to-house visitation, if carried out, was first adopted.

"(3.) The influence which communication with the Eastern districts exercised upon the progress of the epidemic in your district, as shown by the importation of cases, or otherwise; with dates and details of imported cases or of cases in which the disease was apparently contracted in the Eastern districts; also illustrations of transmission of the malady.

"I should feel deeply obliged if you would kindly favour me, at your earliest convenience, with the information sought, and I trust that you will deem the object for which I seek it a sufficient apology for troubling you.

"I have the honour to be, Sir,
"Your obedient servant,
"To Dr. Gibbon." "J. N. Radcliffe.

THE WONDERS OF STATISTICS.

[To the Editor of the Medical Times and Gazette.]

Sir,—Coming up to town by train, one looks out at Basingstoke for the *Times* to beguile the last hour's journey, and to-day, in an obscure paragraph, there was certainly enough to set one thinking. The marvels of what is called the "science of statistics" are truly unfathomable. The paragraph in question purports to be derived from a report by Dr. Stark, of the Scottish Register Office, and treats of the influence of marriage on the death-rate of men.

"Between 20 and 25 years of age the death-rate of bachelors was found to be actually double that of married men."

Between 25 and 30 the deaths of the single to those of married men were as 13·7 to 8·6.

Between 30 and 35 it was 14·7 to 9.

The difference in favour of marriage is constant at every quinquennial period, and though it decreases as life advances, it never disappears.

"The figures imply that bachelorhood is more destructive to life than unwholesome trades or unhealthy houses."

Men, as a rule, have a chance of living eleven years longer if married than if remaining single. Such are the revelations of Dr. Stark, if the *Times* is to be trusted.

It appears to me that this is one of the most transparent fallacies in "statistics," falsely so called—the assuming that a given constant condition is a "cause," whereas it may be a mere concomitant effect of preceding causes. Marriage, in the case before us, is assumed to be the cause of longevity because married men are found to live longer than single ones.

If the same line of argument were carried out to the full, a statistical prophet, shutting his eyes, as is his wont, to all collateral and antecedent circumstances, might argue that marriage made women's fathers rich because it was found that the property of men whose daughters married was 50 per cent. greater than that of men whose daughters remained single; or he might argue that marriage made women's hair yellow because the district registrar of a fashionable parish finds that the mothers of 75 per cent. of the infants born in Belgrave-square have yellow hair—or any other absurdity.

Is it not the fact that the healthy men, and those disposed to longevity by constitution and occupation, are those who marry; and that marriage is only a concomitant, or consequence, and in a very slight degree a cause of good health, and hence of longevity?

A young Physician hired a house in Savile-row, and put his flunkey into plush breeches. He argued that the Physicians living in Savile-row are in large practice, and all have footmen with plush breeches. He might have added that they had each a good service of plate and cellar of wine. But it is said that this Physician found that a large house and plush-clad flunkey were not real causes of Medical prosperity.

The corollary which ought to be drawn (if the world were foolish enough) from statistics such as these, is, that marriage absolutely prolongs life. Will Dr. Stark venture to say this? Will he take his two classes of men between 20 and 25, and will he venture to affirm that universal marriage would diminish the death-rate (of those who now are single) one half? Men who marry between 20 and 25 are either of the easiest and wealthiest classes, or of the poorest and most robust. Will Dr. Stark tell us that the scrofulous, phthisical, stunted, etiolated young men of the manufacturing towns would be converted by marriage into robust and viable men? Either his statistics prove this or nothing; and, if they show nothing, they were better left undone.

I must not forget that I am writing from a newspaper version of Dr. Stark's paper, and not from the original; and that possibly this version may be very different from the original, and may be unjust to Dr. Stark. I am, &c.

London, February 20. A Weary Traveller.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, February 12, 1867.

Dr. James Alderson, F.R.S., President.

Dr. William H. Dickinson read a paper

ON THE NATURE OF THE WAXY, LARDACEOUS, OR "AMYLOID" DEGENERATION.

The organic change formerly described as "waxy," latterly as "amyloid," affects many parts of the body at the same time. It consits of a morbid deposit first occurring in the walls of the small arteries, afterwards penetrating their coats and infiltrating the neighbouring tissues. It may be recognised by the action of iodine, which gives to the affected parts a reddish-brown colour, instead of the yellow tint which the same reagent bestows upon the healthy tissues. The solid viscera are increased in bulk by the exudation, while the same change in the mucous membranes renders them liable to extravagant secretion. The change was described in detail in the kidney, and shown to consist of a fibrinous exudation into the substance of the organ, and into the tubes in the form of casts. The casts are sometimes susceptible of the characteristic reaction. The conclusion that the material is essentially fibrinous was based upon the results of ultimate analysis, the contractile tendency of the deposit, its convertibility into fibrous tissue, and its apparent identity with fibrinous casts. The disease was considered as affecting the whole body—not as confined to any particular organ. In the place of the general belief that the disorder is associated with tubercle, syphilis, or some other cachexia, it was shown that in a vast majority of cases it is produced by the loss of pus, or of some analogous discharge. This view was based upon an analysis of sixty cases of the "amyloid" or waxy disease which came under the observation of the author. In fifty-two of these the change was apparently associated with the formation of pus. In detail, there were forty-seven cases out of the sixty in which there was direct evidence of profuse and long-continued suppuration. In five the post-mortem appearances were such as to lead to the inference that a loss of pus had taken place at some antecedent period. Excepting in the concurrence of suppuration with "amyloid" change, these cases had no resemblance to each other. Syphilis had existed in some, tubercular disease in others, while in several there was no evidence but of local mischief. In eight cases in which there was no evidence bearing upon the ostensible discharge of pus, there were four in which there was reason to believe

that there had been albuminuria of the kind connected with tubular nephritis, the quantity of albumen being very large. A drain of albumen by the urine is equivalent in some respects to a discharge of pus. There remain four cases in which, from the imperfection of the notes and other circumstances, the disorder was not traced to its source. The conclusion which associates the "amyloid" or waxy infiltration with the suppurative process was tested by an examination of the cases of the disease recorded by Dr. Wilks and Dr. Grainger Stewart. These writers have together reported 109 cases in which the body was examined and the antecedent disease was traced. Eighty-three, or more than three-quarters, depended upon undoubted loss of pus, while in the remaining twenty-six the disorders are of such a nature that it is not possible to doubt that suppuration must have existed in the majority, if not in all. It is sufficiently striking that so large a proportion should have been mentioned as associated with suppuration, considering that these authors appear to have recorded their cases without particular regard to this condition. The connexion between the discharge of pus and the so-called amyloid deposit is such that more or less of the organic change may be predicted whenever the long continuance of suppuration has been ascertained. The view that the disease is necessarily associated with syphilis, tubercle, or any especial cachexia, is disproved by several of the cases recorded. In one case it came on in consequence of suppuration from dilated bronchial tubes; in another after suppuration from a compound fracture; in a third from profuse discharge after an amputation; in two after pelvic abscess consequent upon labour. The fact having been established that the removal of pus from the system causes a deposition of the characteristic material in the organs, the nature of the connexion was examined. Pus is an albuminous fluid which is alkaline, owing to the presence of potass and soda. The alkaline and earthy salts of pus amount, on an average, to 1 per cent. of the discharge; of this, the salts of potass and soda form about nine-tenths. Details are given, showing that the proportion of alkaline salts in the secretion is greater than in the corresponding blood, and it was shown how large an amount of alkali is by this means removed from the system. A discharge of pus is equivalent to a removal from the blood of albumen and alkali. The characters of the "amyloid" deposit formed the next branch of the inquiry. Essentially consisting of fibrin, it remains to be seen on what the peculiar reaction depends. Ordinary fibrin is coloured yellow by iodine, as are the healthy tissues; while the "amyloid" deposit takes the characteristic deep brown. It was shown that if the diseased tissue were allowed to absorb a small quantity of potass or soda the peculiar reaction was destroyed, the tissue afterwards behaving in all respects as in health. This power of destroying the "amyloid" reaction is confined to potass and soda. It was next shown that the "amyloid" deposit has a distinctive action with sulphate of indigo. Healthy tissue destroys the colour, while the "amyloid" retains it. The power of destroying the colour of sulphate of indigo is due to the free alkali present in the healthy tissue, absent from the "amyloid." Next were given the results of analyses of healthy and "amyloid" livers, in which it appeared, from the examination of seven healthy and seven "amyloid" organs, that the latter contained a proportion of alkaline salts diminished, on an average, by one-fourth, the potass and soda being diminished equally. Finally, it was shown that the "amyloid" substance could be made artificially out of fibrin or albumen by removing or neutralising the alkali with which they are combined. This artificial "amyloid" matter was shown to the Society, and had all the reactions with iodine and indigo which are characteristic of the morbid deposit. The following were stated as the conclusions of the inquiry:—The so-called "amyloid" deposit consists of dealkalised fibrin. It is not necessary to repeat the reasons for supposing the deposit to be fibrinous. That it is wanting in an alkali is shown by these considerations:—1. The morbid deposit loses its characteristic reactions when it has been allowed to absorb potass or soda. 2. Organs containing this deposit yield on analysis a smaller proportion of the alkalies than do the same organs in a state of health. 3. Ordinary fibrin or albumen can be made to exhibit all the peculiarities of "amyloid" tissue by depriving them of alkali by artificial means. The morbid deposit is of the nature of a residuum. It occurs in cases where the system has been drained by an alkaline and albuminous discharge, the blood, therefore, retaining an excess of fibrin with a deficiency of potass and soda. The most frequent cause by which this deposit is produced is suppuration—a cause which is active certainly in five cases out of six. The loss of albumen by the urine has a feeble action of the same kind. The term "amyloid" must fall into disuse as founded upon error. The author proposes the word *depurative*—depending upon the removal of pus—as fitted to describe the disease. The frequency of the change, the generally obvious nature of its cause, and the readiness with which it is detected during life, combine to give it great practical importance. It supplies a large proportion of the albuminuria which comes under the care of the Physician, and is of constant occurrence in Surgical wards, modifying the course of disease and the results of operations. A suggestion may be made with regard to patients subject to a purulent discharge. The food may be regulated so as to compensate, as far as possible, for the loss of albumen, and liquor potassæ and liquor sodæ may be given so as to make up for the loss of alkali.

Mr. Gant asked if this so-called amyloid deposit could actually be converted into fibrous tissue or even into fibrin, seeing that it was already a degeneration. He remarked that if it could be shown that there was a distinct connexion between the occurrence of this degeneration and prolonged suppuration, it would be of very great importance.

Dr. Murchison had received great pleasure in listening to Dr. Dickinson's paper, and would state his opinions more especially as to the practical points involved in it. He doubted if the degeneration was so very frequently associated with previous suppuration, although there could be no doubt of its often being so, especially with suppuration of bone. On referring back to his own cases, he found that some had no history of suppuration, but instead of it constitutional syphilis or ague. As to the treatment which would be founded on Dr. Dickinson's theory, his was quite the reverse; instead of alkalies he relied on mineral acids, which he looked on as among the best remedies in such cases, as they invariably effected a great improvement in the system. With regard to the substance deposited in the tubules of the kidney, he looked upon it as fibrinous instead of being amyloid, and he would remark that the urine was not alkaline in those of his cases where it was tested.

Mr. Holmes referred to the frequency of the association of this degeneration with suppuration, especially of bone, and considered this an additional argument for getting rid of the diseased bone as soon as possible. He thought that many lives and limbs were sacrificed by neglect of this rule; for in his opinion it was advisable to remove the diseased structure before the constitution became affected, as he thought that many of these diseases were originally local, but became constitutional from their protracted influence on the system. Billroth had pointed out that external disease produced internal degeneration, and had operated on the former for relief of the latter.

Dr. Headlam Greenhow said it was a good thing to investigate the chemistry of disease, but he objected to the statement that suppuration was the invariable cause of amyloid degeneration, as he had lately had two cases, in one of which there was extensive amyloid disease, yet there had been no suppuration for twenty-three years, though the man had suffered from syphilis two years before that time, and had been affected with rheumatic fever and ague since the former period. Another had been perfectly healthy until his abdomen began to enlarge, and in this instance there was no history of syphilis. These cases, however, did not entirely disprove Dr. Dickinson's views.

Dr. Pavy considered the term amyloid to be a very bad one; the material effused was neither contractile nor organisable. In the spleen it was found in masses of a granular character, and without any organisation. In the liver it was generally diffused, the cells of that organ becoming angular by its means. He objected to the term *depurative*—first, because there might be suppuration without amyloid disease; and secondly, there might be lardaceous organs without preceding suppuration.

Mr. Solly said that the facts elicited showed the importance of early operation in disease of bone, and spoke of a case of disease of the hip-joint which had apparently induced lardaceous liver.

Dr. A. P. Stewart had had two cases—one fatal, the other improved. In neither was there the history of any suppuration of importance; in one none at all. In treating such he chiefly relied on the mineral acids. He asked whether the albumen in the urine was the cause or consequence of the disease. In both his cases albumen had been present.

Dr. Dickinson thanked the Society for the way it had

received his paper. In reply to Mr. Gant he stated that all fibrous structures became thickened by the effusion, and the changes can be seen going on in all stages. He agreed with Dr. Murchison that there were many cases without the history of previous suppuration. All he contended for was that such a history would be found in a majority of cases. Referring to Dr. Greenhow's remarks, he objected that in one of his cases there had been no post-mortem examination. As to Dr. Pavy's statement that the substance was not contractile, he would refer to the condition of the liver and kidneys in a recent case, for in the more chronic cases they became enlarged. With regard to the treatment by acids, that was in the more advanced stages, where they would do good as tonics; it was only while suppuration was going on that he would propose alkalies.

THE PATHOLOGICAL SOCIETY.

TUESDAY, FEBRUARY 5, 1867.

JOHN SIMON, Esq., President, in the Chair.

MR. NUNN exhibited a specimen of what had been supposed to be subluxation of the elbow-joint (with bones partially displaced inwards), seen in a subject brought into the dissecting-room, but which really turned out to be fracture above the elbow. There was a cast of a case presenting a similar appearance; the subject, a gentleman, some two years before had fallen and injured his elbow, which afterwards presented the peculiar appearance of having the salient angle turned away from the trunk instead of towards it. Mr. Arnott had seen the cast, and considered the case very rare indeed, but, as was now shown, it might be simulated by a fracture above the joint. He then exhibited the head of a humerus which had been excised. The disease dated six years back, and two years ago the patient was admitted into University College Hospital for pain in the shoulder, but improved, and was sent out. In January, 1866, inflammation having been set up again, excision was proposed, but objected to. The patient again improved, and the disease remained latent for a year, and on reappearing the head of the bone was excised. This showed the processes of repair and destruction going on at the same time in the same bone. Mr. Nunn then drew attention to an exostosis on the distal phalanx of the great toe. This Mr. Annandale had pronounced to be not uncommon, but he (Mr. Nunn) had only seen it rarely. When only to a slight extent, it might be mistaken for another affection, as ingrowing of the toe-nail, and one gentleman suffering from it had been treated for gout.

Mr. SPENCER WATSON had a patient aged 25 whose great toe became painful, and presented a similar appearance to that described by Mr. Nunn. The toe-nail was cut away, when the exostosis was easily removed. After a time a small nail was formed in the place of the former one. This affection was first described by Dupuytren.

Mr. PRESCOT HEWETT had not uncommonly found these exostosis. He remarked that when on the great toe they could readily be cut away, but when on the small toe the phalanx had to be removed. In one case he had seen the nail of the great toe lifted up by what might have been taken for an exostosis, but was in reality a wart.

Mr. HOLMES had seen a great many, usually in young women, and had found them recover perfectly.

Mr. NUNN suggested that their frequency in Scotland might arise from the practice of going barefooted being more common there than here.

Dr. HILTON FAGGE exhibited a specimen of

YELLOW ATROPHY OF THE LIVER, PROBABLY SUPERVENING UPON A MORBID CHANGE DUE TO SECONDARY SYPHILIS.

The organ was taken from a woman, aged 23, who died in Guy's Hospital. She came as an out-patient under Dr. Fagge's care, suffering from jaundice. At the same time, it was observed that there were patches of well-marked syphilitic psoriasis on the arms and other parts of the body. She was therefore recommended for admission into the Hospital, when she came under the care of Dr. Wilks, who at once recognised the syphilitic character of the eruption. The history she gave was, that she had given birth to a child ten months before; that the eruption on the skin had existed for six months; and that for four months she had been affected with jaundice. There was nothing in her condition on admission to suggest that the case was anything more than one of simple jaundice. The skin was of a bright orange-yellow colour. The evacuations were thrown away, although she was directed to keep them for examination. They were described as being pale, but not as being entirely devoid of bile. She suffered greatly from sickness; and on the eighth day after admission she was drowsy. The next day she was unconscious; the pupils dilated, and insensible to light. The liver could be felt by pushing the fingers up beneath the ribs; the area of dulness was natural. On the following day, however, the dulness was much diminished; the symptoms were still more severe; and she died the same evening. On post-mortem examination, the liver was found to weigh only forty-six ounces. It consisted of two distinct portions, a yellow and a red. It was flabby, but tolerably firm, the yellow parts being softer than the red. Microscopically, it was found that the structure was entirely destroyed in the yellow portions. No cells were to be seen, their place being taken by a quantity of granular matter. There were also some fat globules; but these were not very numerous. The kidneys were markedly affected. The tubes in the cortical substance were loaded with granular cells, stained by bile. The urine had been found before death to contain casts. No crystals of leucine or tyrosine were discovered on a rough examination of the urine; but a large quantity of tyrosine crystals appeared on the cut surface of the liver, a few days after its removal from the body. Dr. Fagge remarked that the change in the liver was clearly that described as yellow atrophy; but the main interest of the case, in his eyes, depended on the question how far the condition of the liver and the jaundice were associated with the secondary syphilis with which the woman was affected. On examining the red portions of the liver, he found that they contained a large quantity of a nucleated material, which might be called fibroid tissue, and which seemed to obliterate the texture, so that scarcely any cells were to be seen. Dr. Moxon, who examined the organ independently, observed this change, and compared it to the condition of the liver in congenital syphilis, as in a specimen exhibited by Dr. Wilks in 1865. The only doubt as to the nature of this fibroid material in the liver was whether it belonged merely to an early stage of the yellow atrophy. Frerichs had described a greyish new material as present in this affection; but it did not appear that it occupied the whole substance of the organ as in this case. The history was, in Dr. Fagge's case, not that of the ordinary cases of yellow atrophy, for the jaundice had lasted four months. He was, therefore, disposed to associate the new material found in the liver with the secondary syphilis under which the woman laboured. The occurrence of jaundice with early secondary syphilis had been described by Portal and by Gubler, and it was especially mentioned in the recent work on syphilis by Lancéreaux. This writer speaks of twenty-one cases as having been recorded; none of these terminated fatally. It was supposed by Gubler and Lancéreaux that the jaundice was due to a congestion of the liver, analogous to the congestion of the skin which constituted the exanthematous rash. But if the syphilitic nature of this fibroid material in the liver be admitted, there would still be a question whether the yellow atrophy was directly associated with this condition, or merely an accident supervening, as it is liable to do in various diseases of the organ. The latter view was the one which was originally taken by Dr. Fagge; but he found that Lebert and others had described syphilis as one of the causes of yellow atrophy. An instance of this association also occurred in a case brought before the Society by Dr. Andrew in 1866. Dr. Fagge, therefore, thought it an open question whether some of the cases hitherto ascribed to yellow atrophy were not really due to syphilis, the destruction of the liver-cells being, perhaps, in these cases preceded by the deposition of a nucleated fibroid material.

Dr. LEARED exhibited a specimen of

ANEURISM OF THE AORTA.

A tumour had been detected during life, but its character had not been made out. The patient had only complained of gastralgia. She died suddenly, and on a post-mortem examination the posterior mediastinum was found full of blood. The aneurism consisted of two sacs, the one on the ascending aorta with a constriction at the origin of the left subclavian. It again enlarged, and the enlargement extended some ten inches along the vessel, all the coats of which were involved. The upper cavity contained coagulated blood only, the lower lamellated fibrine also.

Dr. BALLARD exhibited the mesentery and intestines of an

infant 22 months old, conglomerated into a mass by what was supposed to be cancerous deposit. The parents were healthy, but the paternal grandmother had died of cancer. The child appeared well till 12 months old, when the umbilicus began to protrude, and the abdomen was found to contain a large hard mass. As this continued to enlarge the child wasted, and finally died of exhaustion. All the other organs were healthy. Some of the substance of the tumour was working its way through the recti muscles.

Dr. Murchison doubted whether this was a case of cancer, as primary disease of this kind was very rare in the young, and the resulting inflammation was rarely of an adhesive character as it was in this instance. He rather thought the mass was tubercular.

Mr. Holmes thought this showed the great benefit to be got from Mr. Hulke's Cancer Committee. He had seen such masses, but only as secondary cancer.

Drs. Cayley and Bristowe were appointed to examine the deposit, and report upon it.

Mr. John Wood narrated the case of a man, aged 45, on whom he had operated for lithotomy six weeks ago. The patient had suffered from symptoms of stone from infancy, but latterly these had been very greatly exacerbated. When taken into King's College Hospital he complained a good deal of pain over the pubes, but his general health was good. The stone was easily detected far up in the bladder, but subsequently it seated itself behind the pubes and above the prostate, so that the sound passed behind it. Lithotomy was performed in a somewhat peculiar manner: a free incision was made in the perineum nearly as in the bilateral operation, but the arch of the pubes was found to be narrow and the perineum very deep. The neck of the bladder was very tight, and the finger could not be introduced until the staff was removed. When introduced the bladder was found to be very rough and the stone out of reach. It was at last got, but great resistance was experienced in withdrawing it; however, this was at length effected. But little blood was lost, and urine was not long in making its appearance, yet the patient died two days after the operation. A post-mortem examination showed old-standing disease of the rectus muscle and superior false and right true ligaments of the bladder. The recto-vesical pouch of peritoneum was perfectly healthy. The bladder was firmly contracted. On its right side near the pubes was a dense mass of areolar tissue, constituting a cyst opening through the enormously hypertrophied muscular wall into the bladder. On the opposite side of the bladder was found a similar depression—not, however, extending to perforation—just above the prostate; from one to the other of these the stone had evidently extended. The mucous membrane had cysts projecting from its surface, and the bladder itself had no *bas fond*. By the pressure of the stone the right ureter had become completely occluded, and both were enormously enlarged and thickened. The right kidney was about one-third its normal size, and converted into a single sac; the left was four times its natural size, with several cysts in the cortical portion. There was no extravasation into the peritoneum. Some cases of the same kind had been recorded before, but none of these was exactly similar.

Mr. Prescott Hewett had a case last year much like the former; the symptoms of stone had continued many years, but the stone itself had only recently been detected. By the lithotrite it could only be touched, so lithotomy was had recourse to. On making an opening into the bladder no stone could be felt by the finger, until Mr. H. Lee pressed on the left side of the abdomen. Something was felt to squeeze through, and the stone was caught by the forceps. The patient recovered, but only after the formation of a large abscess in the left iliac fossa, from the opening of which pus is still discharging, nearly a year after the operation.

Dr. Bristowe, in showing a specimen of Acute Necrosis of the Femur, in continuation of a series brought forward some time previously, remarked on the frequency with which this disease is confounded with rheumatism. The patient, aged 17, some few weeks ago complained of pain in the right hand. Suppuration supervened, and a week after he was attacked with pain in the thigh. Little matter escaped from the abscess there formed until it was fully opened. Some days after the operation a gush of blood came from the opening, and the patient died of hæmorrhage. On examination it was found that the bone was exposed in nearly its whole length, but that there was some new bone formed. The joint of the affected finger was destroyed.

The President remarked on the frequency with which more than one bone was affected. The constitutional disturbance, he said, had been years ago spoken of as necrosal fever, as when several bones were affected this disturbance, to a certain extent, simulated continued fever.

Dr. Bristowe had a case of a cabman, aged 45, who, after being drowsy some days, became unconscious, with incomplete paralysis of the right side. His speech was imperfect, and his manner foolish. For three weeks there was slight improvement, but he then became worse, and after three days' illness died comatose. On examining the brain, a clot surrounded with partially softened brain matter was found in the posterior part of the pons. Both the basilar and posterior cerebral arteries were found obstructed. Dr. Bristowe supposed that the obstruction of the arteries had preceded the softening.

Dr. Dickenson showed a specimen of Uric Acid from the Brain of a young woman who had died of albuminuria. He had operated on half the brain for urea, of which he had not been able to detect any, but had found the uric acid exhibited. He also narrated a case of croup, where tracheotomy had been performed, and where the child had died from pyæmia, the result of a deep ulcer in front of the trachea, where the tube had been introduced. A small tube, and then a large one, had been introduced. The child went on well for a fortnight, after which signs of pyæmia appeared.

Mr. Wood narrated a case where the tube had ulcerated its way through the innominate artery, and the child died of hæmorrhage.

Mr. Prescott Hewett said the operation often failed from the tube being kept in too long. In some of his cases it was removed in four days.

Dr. Hillier said that at the Children's Hospital they removed the tube as soon as possible.

Dr. Dickenson remarked that in his case the child could not dispense with the tube at night.

Mr. Holmes exhibited a patient on whom he had operated for extroversion of the bladder with great relief to the patient. The urine does not now escape on to the abdomen, and a urinal could be worn. Mr. Wood and he had performed this operation with great success in healthy children. Mr. Simon had suggested turning the urine into the rectum, but this plan had not yet succeeded.

OBITUARY.

LEWIS POWELL, ESQ., M.D., F.S.A., ETC., OF JOHN-STREET.

Our readers will be sorry to learn that the tall figure and cheery face of this well-known Surgeon have disappeared from this earthly scene. Mr. Powell was born in 1796, at Trecastle, in South Wales, was educated at St. George's Hospital, and took the degree of M.D. at Edinburgh in 1823.

For thirty years he resided in John-street, Berkeley-square, and during the latter part of the term in partnership with Mr. J. T. Smith. Whatever time he could spare from his strictly Professional duties he devoted to the task of doing good. He was an active member of the Royal Institution, and took a great share in the management of Queen Charlotte's Lying-in Hospital, but more especially of St. George's. There the memory of his good deeds is preserved by the "Powell Ward," which derives its name from the deceased.

NEW BOOKS, WITH SHORT CRITIQUES.

Sull' Utilità e Necessità della-Chirurgia. Discorso pronunziato dal Dr. Ludovico Bernard. Valletta. 1866.
On the Utility and Necessity of Surgery. A Discourse delivered by Dr. L. Bernard. Malta. 1866.

*** To show the benefits derived from Surgery, Dr. Bernard, on the twenty-eighth anniversary of the reinstitution of the Malta Medical Society of Encouragement, directed attention to four cases which had recently been under his care. The first was one of a contused and lacerated wound of the great toe of the right foot, with fracture of its phalanges; the second a contused and lacerated wound of the second finger of the right hand; the third cancer of the penis, entailing amputation; and, fourthly, a gunshot wound of the right forearm and hand, with comminuted fracture of the radius and dislocation of the ulna. These cases certainly show that our Maltese brethren are not behind in a knowledge of what can be done by modern Surgery.

The Anatriptic Art; or, Medical Rubbing. With Illustrative Cases. By Walter Johnson, M.B. London: Simpkin. Pp. 122.

*** Walter Johnson, M.B., has written a work of fifty pages, with an appendix of seventy-two more, on Medical Rubbing. The former part of

the book is enriched with an exuberant display of classical knowledge. The *motto of the work* is a quotation from Littré's Hippocrates (which, by the bye, very conveniently gives Greek and French on alternate pages), and *contains more than one error, to say nothing of an entire absence of accentuation in one part of it.* Rubbing, like homœopathic medicine, can, it seems, only be practised by the initiated; otherwise, as is well known, the consequences are fearful in the extreme. Need we say that the illustrative cases are chiefly supplied by letters from confiding and grateful patients, who, of course, delight to honour the man at whose *hands* they have received the priceless benefit of renewed health and strength? The scientific part of the work is beneath criticism.

Hospital Economics, including an Analysis of the Expenditure of the Bath United Hospital for 1865. By R. W. Falconer, M.D., &c. Bath: Peach. Pamphlet.

*** It has come to be a very important question why one Hospital with a small number of beds can apparently effect more good, reckoning by the number of cases, than one with much greater resources; also why an in-patient at Westminster costs only £2 2s. 8d., while in the Metropolitan Free each costs £6 16s.; again, each out-patient at the Broadnought costs 19s., whilst at the Great Northern each costs twopence. Dr. Falconer examines the accounts of the Bath United Hospital, and then shows well how the statistics of one Hospital cannot be applied to another.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At a general meeting of the Fellows held on Wednesday, February 20, the following gentlemen, having undergone the necessary Examination, and satisfied the College of their proficiency in the science and practice of Medicine, Surgery, and Midwifery, were duly admitted to practise Physic as Licentiates of the College:—

Richard Walter Owen Withers, Shrewsbury; Herbert Ray Archer, 7, Boyne-terrace, Notting-hill; John Casceden, M.D. Toronto, St. Thomas, Canada West; Joseph Goodall, 355, Walworth road; George Stokell, Hobart Town, Tasmania; Herbert Goldingham Budd, Guy's Hospital; Henry Searle Gaye, Newton Abbot, Devon; William James Hunt, Hoxton House Asylum, Hoxton.

At the same meeting the following gentlemen were reported by the Examiners to have passed the Primary Examination for the Licence:—

George Andrews, Guy's Hospital; Charles Higgins, Guy's Hospital; Litchfield Jones Moseley, Guy's Hospital; James Prime Bartlett, University College; William Price, University College; Edward Jackson, St. George's Hospital; John Edward Kenyon, St. George's Hospital; John Archibald Lorimer, St. Bartholomew's Hospital; Dalrymple Kinloch Robertson, St. Bartholomew's Hospital; Walter William Godfrey Stables, St. Bartholomew's Hospital.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, February 7, 1867:—

Herbert William Fagge, Hyth, Kent.

On Thursday, February 14:—

William Davies, Llanpumsaint, Caermarthen; Charles Henry Furnivall, Westminster Hospital; John Latham Rushton, Macclesfield; Richard Careless Sanders, Moulton Vicarage, Northampton; Fred. William Fowke, Byfield, Northamptonshire.

As Assistants:—

William Jones, White House, Lyth-hill, near Shrewsbury; Alfred Henry Buckett, 5, Liverpool-street, E.C.

The following gentlemen also, on February 7, passed their First Examination:—

Charles Lewis, Guy's Hospital.

On February 14:—

Charles Howard Orfeur, King's College Hospital; Walter Wm. Godfrey Stables, St. Bartholomew's Hospital; George Andrews, Guy's Hospital; Charles Higgens, Guy's Hospital.

APPOINTMENTS.

***** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.**

ANDERSON, Dr. J. G., has been appointed Resident Obstetric Officer to St. Mary's Hospital.

BEIGEL, H., M.D., has been elected Honorary Physician to the Farringdon Dispensary.

CAMPBELL, J. A., M.D., has been appointed Assistant Medical Officer to the Cumberland and Westmoreland Asylum, Garlands, Carlisle.

COLEMAN, A., M.R.C.S.E., Lecturer on Dental Surgery at St. Bartholomew's Hospital, has been appointed Dental Surgeon to the Hospital, *vice* S. J. Tracy, M.R.C.S.E., resigned.

GILCHRIST, G. C., C.M., has been elected Surgeon to the Newcastle-on-Tyne Lying-in Hospital.

HOPE, Mr. J., has been elected an additional Medical Officer to the Hospital for Women, Newcastle-on-Tyne.

MEYRICK, Ed. W. WARREN, M.R.C.S.L., L.F.P.S.G., &c., has been appointed Junior House-Surgeon to the Ardwick and Ancoats Dispensary, Manchester.

NESHAM, T. C., M.D., has been elected an additional Medical Officer to the Hospital for Women, Newcastle-on-Tyne.

BIRTHS.

FOTHERBY.—On February 19, at 40, Trinity-square, Tower, E.C., the wife of Henry J. Fotherby, M.B., of a daughter.

GOODING.—On February 11, at Cheltenham, the wife of J. C. Gooding, M.D., of a daughter.

URE.—On February 13, at the Minster-yard, York, the wife of John Ure, M.D., of a son.

MARRIAGES.

FAWSSETT—BOUCHER.—On February 14, at Fulbourn, F. Fawssett, M.D., of Wisbeach, to Ellen Eliza, daughter of the late C. Boucher, Esq., Wisbeach.

GANGE—WHITECHURCH.—On February 12, at Harlton, F. A. Gange, M.D., of Faversham, to Susan, second daughter of W. Whitechurch, Esq., Harlton, Cambridge. No cards.

HYLAND—QUINN.—On February 7, at the Cathedral, Marlborough-street, Dublin, J. K. Hyland, M.R.C.S., to Lizzie Helena, youngest daughter of M. Quinn, Esq., Middleton-park, Co. Longford.

KILBURN—JOBSON.—On February 9, at Upleatham, Yorkshire, J. E. Kilburn, Surgeon, Middlesborough-on-Tees, to Sarah, third daughter of the late W. Jobson, Esq., Waltnamstow, Essex.

MILLER—PORTER.—On February 13, at St. John's Church, Stadley, Trowbridge, Wilts, L. Miller, L.R.C.P. Edin., to Minnie, third daughter of the late Rev. C. Porter, Rectory, Holly Mount, Co. Mayo. No cards.

DEATHS.

DAY, H. G., M.R.C.S.E., of Isleworth, on February 14, aged 53.

DYER, T., M.D. St. And., at Forest-hill, on February 14, aged 57.

ELSDALE, R., M.R.C.S.E., of Moulton, Spalding, Lincolnshire, on January 25.

FISHER, Dr. A. L., at 14, York-place, Portman-square, on February 9, aged 69.

GOLDIN, W. C., M.D., Surgeon R.N., at the Naval Hospital, Plymouth, aged 46.

MARTIN, T., F.R.C.S.E., at Reigate, on February 12, in his 88th year.

POWELL, D., M.R.C.S.E., at 16, Amwell-street, Pentonville, on February 14, aged 63.

POWELL, L., M.D. Edin., at 13, John-street, Berkeley-square, on February 18, aged 70.

VACANCIES.

LIVERPOOL ROYAL INFIRMARY.—House-Surgeon.

UNITED HOSPITAL, BATH.—Honorary House-Surgeon.

SOUTH STAFFORDSHIRE GENERAL HOSPITAL.—Third Physician.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Bellingham Union.—Mr. E. C. Robertson has resigned the Fourth District; area 9860; population 285; salary £6 per annum.

Ipswich Union.—Mr. Webster Adams has resigned the St. Clement's District; population 10,797; salary £90 per annum.

Linton Union.—The Linton District is vacant; area 16,103; population 4813; salary £72 per annum.

St. George's-in-the-East Parish.—Mr. Henry Beattie has resigned the Eastern District; area 50½; population 14,522; salary £60 per annum.

Ulverstone Union.—The Ulverstone District is vacant; area 8463; population 8759; salary £35 per annum. Also the Workhouse; salary £25 per annum.

APPOINTMENTS.

Godstone Union.—Thomas Bailey, M.R.C.S.E., L.S.A., to the Western District and the Workhouse.

Newcastle-upon-Tyne Union.—George C. Gilchrist, M.C. Dur., L.M. Dur., to the Third District.

Ormskirk Union.—Thomas Dandy, M.R.C.S.E., L.S.A., to the Fourth District.

Seisdon Union.—Thomas W. Haslehurst, M.R.C.S.E., L.S.A., to the Trysull District.

St. Thomas Union.—James Somer, M.R.C.S.E., L.S.A., to the Broadclist District.

Tynemouth Union.—George B. Hislop, L.R.C.P. Edin., L.M., L.F.P. & S. Glas., to the Longbenton West District.

ROYAL COLLEGE OF SURGEONS.—The discussion on the motion of Mr. Charles Hawkins, that the pleasure of the Council be ascertained as to Messrs. South and Luke, who were elected Examiners under the charter of 1843, continuing to hold that office, came on before a full attendance of the Council specially convened for that purpose on Thursday last. Mr. Hawkins simply moved the adoption of the motion, and, with Sir William Fergusson, who seconded it, disclaimed all personal motives in the performance of what they conceived a duty. Mr. South, in a short and dignified reply, stated that it had been suggested he should retire, and thus save the Council from arriving at an adverse decision to himself; but whatever might be his future intentions, he should decline yielding to any pressure, and, feeling that his reputation and character were perfectly safe with a majority of his colleagues, requested permission to retire from the meeting, in order to

allow a more free discussion. The debate having closed, the voting commenced, and after a few minutes the President declared that the motion had been lost by 17 to 6; and, as this gentleman did not vote, it is evident that the whole of the Council was present, including Mr. Turner, from Manchester, and Mr. Paget, from Leicester.

Dinner of the Pharmaceutical Society. — The dinner in aid of the Benevolent Fund of the Pharmaceutical Society was held on Wednesday in Willis's Rooms, the President, Mr. Sandford, in the chair. The meeting was highly successful from every point of view—the dinner was good; the company, about 260 in number, appeared to enjoy themselves; the speeches and music were good; and no less a sum than £1450 was subscribed in aid of the fund.

Presentation to Dr. Wray.—A number of the supporters and friends of the Brixton, Streatham-hill, and Herne-hill Dispensary have presented Dr. Wray with his portrait in testimony of the energy and perseverance exhibited by him in founding and carrying on during seventeen years the Dispensary. At the meeting for presentation the chair was taken by the Rev. N. A. Garland, the incumbent of Brixton. Dr. Wray, in returning thanks, begged to be allowed to present the portrait given him to the institution.

The Hunterian Society has recently celebrated the 48th anniversary of its existence. The general meeting for the election of officers and for other business was held on Wednesday, the 13th inst., when the following list was proposed by the Council: — *President:* John Jackson, Esq. *Vice-Presidents:* Thomas B. Crosby, M.D.; D. de Berdt Hovell, Esq.; Esquire Dukes, Esq.; Augustus Hess, M.D. *Treasurer:* William Cooke, M.D. *For the Oration of* 1868: J. Braxton Hicks, M.D. *Librarian:* Robert Fowler, M.D. *Secretaries:* H. I. Fotherby, M.B.; W. Allingham, Esq., F.R.C.S. *Council:* Robert Barnes, M.D.; Thomas Brown, Esq.; Thomas Bryant, Esq.; P. Lodwick Burchell, M.B.; Thomas Mee Daldy, M.D.; C. F. Maunder, Esq.; John Couper, Esq.; Henry Gervis, M.D.; P. Y. Gowlland, Esq.; J. Braxton Hicks, M.D.; James Hinton, Esq.; Stephen H. Ward, M.D. The oration was then delivered in the theatre of the London Institution, by Dr. Sedgwick Saunders, who gave for his subject a sketch of the history of Medicine, treating it more especially from the social point of view, and illustrating it more particularly from the Mosaic, Egyptian, and classic eras. The lecture displayed great historical research and ability, and was listened to with much interest. On Friday the annual dinner took place, the retiring President, Dr. S. Ward, being in the chair. A goodly number of the members and their friends were present, and enjoyed a pleasant evening. Besides the usual loyal, patriotic, and Professional toasts was that of "the London Institution," in whose building the Hunterian Society is now located. Among the guests were Professor Owen, Dr. Hare (President of the Medical Society), and Professor Brayley (of the London Institution). It appears that, notwithstanding a heavy loss of members by death during the past year, the roll of members is increasing, and the prospects of the Society are very satisfactory.

Cambridge Philosophical Society, Monday, February 18.—A communication was made by Dr. Airy, the Astronomer Royal, "On the continued Change in an Eye affected with a peculiar Malformation." Professor Humphry read a paper "On some Points in the Anatomy of the Chimpanzee, and the Consideration of the Term 'Quadrumanous,' as applied to that Animal." His remarks were the results of the recent dissection of two chimpanzees, and referred chiefly to the differences between their lower limbs and those of man. He pointed out that the outer condyle of the thighbone is round instead of being prolonged from before backwards, and flattened beneath, as in man. Hence there is comparatively little security afforded by the ligaments in the straight position, and little provision for the maintenance of the erect posture. The bones and joints of the ankle were shown to be constructed so as to permit free movement rather than to bear weight. With regard to the term "hand," and the objections which have been urged to its application to the lower limb of the monkey, Professor Humphry remarked that if we use the term to designate a certain modification of the fore limb—a certain deviation, that is, from the ordinary fore foot—we may with equal propriety apply it to a corresponding modification of the hind limb—a corresponding deviation, that is, from the ordinary hind foot. We must not expect it closely to resemble the human hand, but merely to present such a similarity to it as the special features of a hand—viz., the shortness, mobility, and opposableness of the thumb and the relative length of the other digits—would give it. Judging by this rule, it is as correct to speak of the "hind hand" of a monkey as of the "fore hand," though, forasmuch as both are employed in progression, it may, perhaps, be better to use some other term, such as "cheiropod," for the designation of the class, leaving the term "bimanous" to indicate the characteristic feature of man. The psychical qualities should not be omitted in considering the distinctive features of man; and the importance of the long, strong, firm great toe in this respect was pointed out. Some other peculiarities in the limbs and in the prostate gland of the chimpanzee were described.

Mutual Insurance Office.—In consequence of the death of Dr. William Brinton, F.R.S., a vacancy has occurred in the office of Physician to this Society. Notice has been given that applications for the appointment of a successor should reach the directors not later than the 28th inst. Physicians holding office in any other assurance society are ineligible. The name of the successful candidate will be announced on March 13.—*Insurance Times.*

Danger of taking a Turkish Bath without Medical Advice.—Mitchell *v.* Lacy (*Nisi Prius*, Guildhall, before Mr. Justice Lush).—This was an action brought to recover compensation in damages for injuries alleged to have been sustained by the plaintiff by reason of the alleged negligence of the defendant's servant. The defendant pleaded "Not Guilty." The plaintiff was a tailor's foreman, and the defendant proprietor of some Turkish baths in Exmouth-street, Commercial-road. On June 23 last the plaintiff went to the defendant's establishment for the purpose of having a Turkish bath. He was told to strip himself, and he was then taken into a warm room, where he remained for about ten minutes. He was then taken into a room called the hot room, which was heated up to 150° by means of hot tiles on the floor. After the plaintiff had sat on the wooden settle for about five minutes, he began to feel faint, and mentioned the fact to the assistant, who said that people usually did feel faint in that room, but that it was nothing, and that he would get him a glass of water, which would put him all right. The assistant then left the room, and, according to the plaintiff's statement, he was absent for more than five minutes. During his absence the plaintiff fainted and fell upon the hot tiles, which severely burnt his legs and back. The plaintiff was sent home in blankets and was confined to his bed for twenty-nine weeks. It was contended that there was negligence on the part of the defendant in putting the plaintiff into too hot a room. The defence was that the plaintiff was to blame for taking a hot bath without Medical advice. The plaintiff had fainted while the assistant was handing him the water, and in falling he had knocked the assistant down. He had been picked up and removed to a cooler atmosphere within fifteen seconds after falling. Every proper care had been taken by the defendant. The jury returned a verdict for the defendant.

Charge of Poisoning Horses in Cambridgeshire.—A case of wilful poisoning domestic animals is reported from Cambridgeshire, and we regret to add that suspicion has fallen upon a member of the Medical Profession. The *Pall-mall Gazette* states that:—"Mr. G. S. Hall, solicitor, of Ely, lost within a few days a valuable dog, a sow pig, and, finally, two horses of great value, the cause of death in each case being proved to be the administration of strychnine. The services of Sergeant Clarke, an officer of the metropolitan detective force, were secured, and yesterday (Thursday), as the result of his investigations, Dr. Henry Pearson, a Physician of about 20 years' standing at Ely, was arrested on a warrant, and charged before the Isle of Ely magistrates with poisoning two horses, the property of Mr. Hall, on January 21. The examination lasted nearly five hours. The evidence went to show that on January 21 last Mr. Hall left home at about half-past 11, to attend the skating match at Littleport. Before starting, he went into his stables and saw the horses in question in excellent health, and on his return home he found them both dead and rigid, their jaws so closely locked that they would break rather than open. On the same afternoon, after ascertaining that Mr. Hall, his chief clerk, and his groom were out of the way, Dr. Pearson was seen coming away from the stable, and he evinced a good deal of confusion at this discovery. It was proved that a day or two previously he was seen with strychnine in his possession, and he asked a veterinary Surgeon how much was necessary to kill a horse. Before going to

Mr. Hall's stable he was proved to have provided himself with about a handful of wet bran, and on the discovery of the death of the animals, though they were left at noon-time without the slightest particle of food in their manger, a small quantity of bran was observed, which Mr. Hall gathered together and showed Dr. Pearson, who was present, and he at once stated that it contained crystals of strychnine, which he alleged he could see with his naked eye." At a subsequent sitting, Professor Tuson, of the Royal Veterinary College, London, having proved that crystals of strychnine had been found in the bran and in the stomachs of the horses in quantity sufficient to cause their death, and other witnesses having been examined, the magistrates committed the prisoner for trial, accepting bail—the prisoner's own recognisance of £500, and two sureties of £250 each. Bail had not been procured up to the rising of the Court.

Committal of an Unqualified Practitioner for Wilful Murder.—On Tuesday an inquest was held in Manchester on the body of Phœbe Locke, aged 37, wife of Charles George Locke, of 43, Ashton Old-road, chemist and druggist, whose death was said to have been occasioned by violence used towards her by Alfred Thomas Heap. Heap is an unqualified practitioner residing at West Gorton, and 33 years of age. It appears that the husband of the deceased and Heap had been acquainted for a considerable time, and that Mrs. Locke had applied to Heap for assistance, under peculiar circumstances, unknown to her husband. She died on the 12th instant, after giving birth to a premature child. Facts afterwards came to the knowledge of the police, which excited suspicion as to the cause of death, and by order of the coroner the body was a few days since exhumed. A post-mortem examination was afterwards held by the city police Surgeon, Mr. Fletcher, who now stated to the coroner and jury that he found the body was excessively pale from loss of blood, and free from any external marks. The internal organs were pale from loss of blood, and the left side of the heart empty. The heart itself was soft, and the liver flabby. He was satisfied that the deceased had been prematurely delivered, and the cause of death was no doubt hæmorrhage from that cause. He found no indications of injury; and, if carefully done, premature labour might be brought on without any visible appearances. The long instrument now produced might be used to procure abortion. Alfred Thomas Heap volunteered the statement that he had not used the instrument for the purpose implied. The jury, after a brief consultation, brought in a verdict of wilful murder against Alfred Thomas Heap, and he was committed for trial on the coroner's warrant.

Prosecution for Illegal Practice.—On Wednesday, at Worship-street, Mr. Edward Lucien Meall, of 33, Pollard's-road, Bethnal-green-road, was summoned at the instance of Dr. Brotherton, of Bethnal-green-road, and Mr. Colden, Resident Medical Officer of the Queen Adelaide Dispensary, Bethnal-green, for falsely representing himself to be a legally qualified Medical Practitioner. Mr. Poland, barrister, prosecuted. The first witness, Mr. Edward Colden, stated that he is a Member of the Royal College of Surgeons of England and Resident Medical Officer of the Queen Adelaide Dispensary, Bethnal-green-road. The defendant resides a few doors from the Dispensary, and on the door of his house is a brass plate, bearing the inscription "Mr. Meall, Surgeon and Accoucheur." In the autumn of last year the defendant called upon him and asked him if he wanted a *locum tenens*. The witness replied that he did, and asked defendant the remuneration he required. The defendant said 30s. or £2 2s., on which the witness said the terms were so high that he presumed the defendant was a legally qualified Practitioner. The defendant said that he was not at present, but he hoped to be so, and the witness then said that, not being a registered Surgeon, he could not employ him. The duties required were dispensing for three hours in the day. In cross-examination the witness said that when the defendant called on him he did not represent himself to be a registered Practitioner. The witness offered the defendant 25s. a week before he discovered his disqualification, but they parted in consequence of the illegality of defendant's course of proceeding, and not because of the amount of salary. Elizabeth Short, the keeper of a coffee-house in the Bethnal-green-road, said that, being ill in November last, she was attended by the defendant, who had for some time past frequented her house to see periodicals. She was supplied with medicine, for which she was charged 1s. 6d. per bottle. He saw her about seven or eight times. Her servant usually fetched the medicine from defendant's house, but on one occasion he brought it in his pocket. It was not from seeing the plate on defendant's door she had recourse to his advice. She went to defendant's house once, when he prescribed and gave her medicine. She believed him to be a Surgeon. In cross-examination the witness said she was not aware that the defendant had ever represented himself to be a properly qualified Practitioner. She believed he was, as he had attended midwifery cases. Mrs. Ward, of 2, Gurnett-place, Bethnal-green, said that she went to the defendant's house in the end of January, and asked him why he had not come the night before to see her husband when she sent her daughter to him. The defendant asked her what was the matter, and she told him that her husband was in a consumption. The defendant said, "What's the use of attending for consumption?" and then asked for a guinea as his attendance fee. She said she could not afford it. He then said that he attended some free of charge when recommended by the clergyman. He told her to go to Dr. Jarvis, who would attend her husband for 1s. or 1s. 6d. She had been reccommended to the defendant by Mr. Colden. In cross-examination the witness said she applied to the defendant as a last resource, as her husband was very ill. She was not told by Mr. Colden that it was a trap. Mr. Edward Trimmer, Secretary to the Royal College of Surgeons, was called to prove that the defendant was not a Member of the College, and therefore not legally qualified. The defendant contended that having practised as a Surgeon before the passing of the Medical Registration Act, he did not come within the meaning of the Statute. He had been employed by Medical men, and had invariably acquitted himself to their satisfaction. Mr. Newton said that he regarded the case as proved, but, as there was no evidence to show that the defendant had made money by it, the penalty would be mitigated to £5 and costs. The defendant was understood to say that he should appeal against the magistrate's decision.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

A Student.—Advertisements of the days of examination will appear next week.

Sanguisuga.—The Sydney mail states that 3,000,000 leeches are now sent annually to this country from Victoria.

Archæologist—Cases of the kind mentioned are not so rare as you suppose; Richard Fitz-Nigel, who died Bishop of London, had been apothecary to Henry II., and at the present moment the Calendar of the Royal College of Surgeons contains a bishop, who is supported in the same list by several clergymen.

Dr. Pepys.—You will find an abstract of the trial Rex *v.* Martin Van Butchell in Willcock's Laws relating to the Profession. The defendant was charged with causing death by thrusting a "round piece of ivory into and up the fundament and against the rectum, producing one perforation, laceration, wound," etc. He was honourably acquitted.

Mr. Thompson.—The credit is due to Mr. George Alfred Walker of closing our metropolitan graveyards. He has retired from the practice of his Profession; was for many years the greatest sanitary reformer of the day.

M.D.—Dr. Arbuthnot was a Fellow of the Royal Society, and Physician to Queen Anne. His portrait was engraved from a scarce print in the collection of Sir C. Musgrave, Bart. A visit to the libraries of the College of Surgeons and Medical and Chirurgical Society might give you the desired information.

A Metropolitan Fellow.—According to the last published accounts, the sum of £3095 4s. 6d. was paid in fees to members of the Court of Examiners during the past year. Both Mr. South and Mr. Luke have twice filled the President's chair. The former was elected a member of the Court of Examiners in 1848, and the latter in 1851. Mr. South resides at Blackheath, Mr. Luke at Maidenhead. Write to the Secretary, who will send you the blank forms.

Corrigendum.—In our last number Dr. G. H. Porter, F.R.C.S.I., should have been described as Surgeon to the Meath Hospital and County of Dublin Infirmary.

The *Talbot Leader* is responsible for the following:—

"A singular discovery with reference to the curative properties of kerosene has been brought under our notice. It seems a few days since a man saw a horse, in a most dilapidated condition, grazing in a paddock not far from Talbot. Its skin was partly peeled from the body, and there were several sores in the flesh. With a view to put the animal out of its misery, and thinking his remedy would have this effect, the man suggested to the owner that he should throw kerosene over it. The idea seemed a happy one to the owner, and he put it into practice. A few days afterwards, however, he was gratified by seeing his horse gyrating

about the paddock apparently in the happiest state of mind possible in a quadruped, and with a beautiful, glossy, and whole skin, in place of the unsightly and dilapidated one it had before the kerosene was applied."

Carbolic Acid in Diphtheria.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In your paper of Saturday last I see that Dr. Sansom mentions that he has employed carbolic acid in diphtheria, etc. I beg to state that I have been in the habit of using it ever since June, 1863, with the greatest success, both in diphtheria and ulcerated tonsils. I have mentioned it to several of my Medical friends, but they do not seem to have tried it. Although of a disagreeable taste, I have found that my patients do not object to it after the first application, as it generally affords such great relief. I usually give it in the form of a gargle, but in children by swabbing the throat out freely with it on a piece of sponge. When the disease has been taken early I have not failed in a single case, but have lost some where it had gone too far for Medical treatment to be of any service. Carbolic acid has a decided effect upon the false membrane thrown out. The following is the form I usually prescribe:—℞ Acidi carbolici ℥xx., acidi acetici ʒss., mellis ʒij., tinct. myrrhæ ʒij., aquæ q.s. ut fiat gargarisma ʒvj. The carbolic and acetic acids to be well shaken together, the mel to be added with the aqua gradually. With it I usually give tinct. ferri and quinine.

I am, &c. Charles Sedgwick, Jun.

Hollingbourn, Maidstone, February 20.

General *v.* Special.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I have read with extreme disgust and regret the letter in your last impression (February 16), signed William Hewitt—disgust that any member of the Profession should be guilty of such illiberal and detestable conduct as that described—and regret that Mr. Hewitt should have thoughtlessly and hastily thrown the odium of this conduct on the class of men called "specialists." He might as well have thrown it upon the Profession at large. He is resolved, however, "to use every exertion to throw contempt and ridicule on speciality and specialists, and to warn all patients against their allurements and artful designs." Now this seems unreasonable. Are there no black sheep among general Practitioners? Is Mr. Hewitt prepared to say that all specialists are of necessity illiberal and unprofessional? Let him think again. Specialism is seldom or never a chosen position. If a general Practitioner happens to pay great attention to a certain class of diseases and publishes his views and experience for the benefit of his Profession, it generally happens that the public concludes that because he understands this particular branch of Professional practice, therefore he cannot possibly be acquainted with any other. His general practice accordingly forsakes him, and he is driven into specialism, shut up in it, against his will. Is it not so? And who can help it? Is a man to refuse to practise because he well understands the only cases in which he is consulted? Is he to be reprobated and scorned and ridiculed because he is doing his best to enlighten the Profession on subjects more familiar to him than to the Profession at large? He may be a quack or an illiberal member of the Profession, or he may be, and often is, an ornament to it.

I am, &c. A General Practitioner.

COMMUNICATIONS have been received from—

Dr. Gibbon; Delta; Dr. J. E. Morgan; A General Practitioner; Dr. Crane; Dr. Porter; Mr. De Tatham; Dr. Duckworth; Dr. Laycock; Dr. Fayrer; Dr. Fotherby; Mr. E. M. Wrench; Dr. Suckling; A Country P.L.M.O.; Mr. Sagar; Mr. James; Mr. Sedgwick; Mr. Smyth; Dr. Moxon; Dr. Lionel Beale; Mr. J. Chatto; Dr. Hughlings Jackson; Mr. J. K. Spender; Mr. T. Spencer Wells; Dr. M'Cormac.

BOOKS RECEIVED—

Report of the Manchester Nurse Training Institution—Shore's Domestic Medicine—Wurtz on Chemical Philosophy—Grimshaw on the Pulse of Typhus—Black's Guide to Paris—New York Medical Journal—Cox's Representative Reform.

NEWSPAPERS RECEIVED—

Southampton Times—North British Agriculturist—Gazette des Hôpitaux—L'Union Médicale—Gazette Hebdomadaire—Sunday Gazette—Gazette Médicale de Paris—Hampshire Telegraph—Melbourne Argus—Le Mouvement Médical—Insurance Times—Medical Press and Circular.

VITAL STATISTICS OF LONDON.

Week ending Saturday, February 16, 1867.

BIRTHS.

Births of Boys, 1244; Girls, 1186; Total, 2430.
Average of 10 corresponding weeks, 1857-66, 1977·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	706	683	1389
Average of the ten years 1857-66	686·3	680·2	1366·5
Average corrected to increased population..	..	..	1503
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,388	4	2	1	2	10	7	1	..
North ..	618,210	10	5	6	1	14	20	7	..
Central	378,058	3	..	2	3	4	5	..	..
East ..	571,158	4	5	5	2	15	10	1	..
South ..	773,175	6	2	6	2	17	2	9	..
Total ..	2,803,989	27	14	20	10	60	44	18	..

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, February 16, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending Feb. 16.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending Feb. 16.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	30·5	2430	1421	1389	57·1	37·9	46·7	0·38	38
Bristol (City) . .	165572	35·3	126	74	‡73	55·6	37 3	46·7	0·70	71
Birmingham (Boro')	343948	43·9	308	167	160	57·0	37·1	47·2	0·49	49
Liverpool (Borough)	492439	96·4	431	285	288	53·2	37·1	45·3	0·21	21
Manchester (City) .	362823	80·9	286	205	‡211	56·0	37·2	46 0	0·67	68
Salford (Borough) .	115913	22 2	132	58	62	55·4	37·0	46·2	0·64	65
Sheffield (Borough).	225199	9·9	182	119	114	53·1	36 5	44·3	0·28	28
Leeds (Borough) .	232428	10·8	270	118	125	56·0	32 5	44·9	0·25	25
Hull (Borough) .	103740	30·0	93	49	52	..	..	..	..	..
Newcstl-on-Tyne, &c.	124960	23·4	103	66	89	52·0	37·0	45·4	0·17	17
Edinburgh (City) .	176081	39·8	133	85	95	49·7	33·0	44·1	0·50	51
Glasgow (City) .	449079	87·1	348	257	255	49·6	32 7	42·6	0·60	61
Dublin (City and some suburbs) .	319210	32·8	190	†157	207	54·9	33·5	45·7	0·20	20
Total of 13 large Towns . . .	6187764	34·3	5032	3061	3120	57·1	32·5	45·4	0·42	42
					Week ending Feb. 9	Week ending Feb. 9.				
Vienna (City) . .	(1863) 560090	..	..	..	389	..	..	§ 41·0	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·947 in. The barometrical reading decreased from 30·23 in. on Wednesday to 29·62 in. on Friday.

The general direction of the wind was variable.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 43·4°.

APPOINTMENTS FOR THE WEEK.

February 23. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

Royal Institution, 3 p.m. G. A. Macfarren, Esq., "On Harmony."

25. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

Royal College of Surgeons, 4 p.m. A Lecture, by Professor Huxley.

26. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

Ethnological Society of London, 8 p.m. H. H. Howorth, Esq., "On the Archæology of Bronze in Connexion with Ethnology." Hon. George Campbell, "On the Non-Hindoo Tribes of the Borders of Hindostan."

Royal Medical and Chirurgical Society, 8½ p.m. Mr. T. P. Teale, Jun., "On Enucleation of Nævus." Mr. T. Bryant, "On Internal Strangulation of the Bowel, with Hernia."

Royal Institution, 3 p.m. Professor Tyndall, F.R.S., "On Vibratory Motion and Sound."

27. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 2 p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

Hunterian Society (Council, 7½ p.m.), 8 p.m. Dr. Braxton Hicks, "On the Treatment of Cicatrices of the Vagina, with Remarks."

Royal College of Surgeons, 4 p.m. A Lecture, by Professor Huxley.

28. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

Royal Institution, 3 p.m. Professor Tyndall, F.R.S., "On Vibratory Motion and Sound."

March 1. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.

Royal College of Surgeons, 4 p.m. A Lecture, by Professor Huxley.

Royal Institution, 8 p.m. Captain Majendie, "On Breech-loading Small Arms."

Western Medical and Surgical Society, 8 p.m. Narration of Cases.

ORIGINAL LECTURES.

CLINICAL LECTURES ON THE REMEDIAL USES OF THE PRUNUS VIRGINIANA;

WITH SOME FURTHER REMARKS ON DISEASES OF THE HEART.(a)

DELIVERED AT

The Leeds General Infirmary.

By Dr. CLIFFORD ALLBUTT.

(Concluded from page 163.)

It is in mitral regurgitation, perhaps, that I find the wild cherry most valuable. Here, as you know, a slight maladaptation may cause most painful disturbance. It is too clear that to increase the propelling power only in these cases can but increase also the suffering by making more violent the reverberation upon organs already overdone. Could we but strengthen the right side of the heart, leaving the left ventricle as it was, our task would be easier. To strengthen one chamber, however, is to strengthen all; and, moreover, we cannot trust the tricuspid valve at a push as we can the mitral. As we may not, then, increase the power, we must diminish the weight. A recumbent position must be observed, and a careful treatment by baths, light purgatives, diuretics, dry cupping, etc., must be set on foot.

Steel is not often admissible in any stage of this disease. An excellent and favourite remedy exists in the foxglove, often and usefully aided by iodide of potassium. It is in carrying out the good effects of the foxglove that I find the wild cherry also so valuable in these cases.

On turning over the notes of 28 cases of mitral disease carefully observed throughout, I see, however, that one in five found some difficulty in supporting digitalis, however prescribed. On the other hand, I have seldom seen the slightest discomfort follow the use of *Prunus virginiana*. I shall report a few cases out of many in which I have obtained a good result from it. Did I pour out all the contents of my note-book before you, it would be insufficient for proof of its virtues. I select, therefore, a few well-marked cases by way only of illustration. Having drawn your attention to the matter, you must prove the value of the medicine each one for himself. To bring a century of cases of happy result to prove the medicinal value of any medicine would be as great a waste of time as to bring a hundred fat people in proof of a good government. After some practice a Physician begins to feel the power of his agents as a skilful rider his horse's mouth, and all those little details and passing impressions which go to make up his judgment in particulars are mostly omitted in descriptions, being often indeed indescribable. I shall only, then, assure you of my own belief in the matter, and advise you in accordance with my interpretation of my own experience.

Miss E. W., aged 27, subject to palpitation on exertion for eighteen months, also to cardiac oppression, spasmodic dyspnœa, occasional dim vision and fainting sensations; slight cough of some weeks' standing; occasional pain and puffiness about the ankles towards evening; bowels irregular; urine often scanty and high-coloured; has spit a little blood once or twice. Consulted me last August on increase of these sufferings. I found mitral regurgitation; her complexion was dusky, her lips bluish, her pulse small and irregular. Her father died, about the age of 45, of heart disease. Ordered salines and diaphoretics to relieve congestion; bowels kept free. ℞ Tinct. pruni virginianæ ♏xx.—xxx. five or six times a day as required. The next day but one, on seeing her, she expressed to me much gratitude for the "drops," which gave her marked relief. After omitting the other medicines, the drops were continued, and she improved daily. The heart became much more quiet, the pulse more certain and full, the cough disappeared, and she became able to go up and down stairs without any great dyspnœa. ℞ Pot. iodid. gr. iv.; sp. æth. nit., tinct. aurant., āā ʒss.; inf. pruni virginianæ ʒvij. Three times a day. From this time her improvement became rapid, and in seven weeks from the beginning she undertook a somewhat fatiguing journey with my consent.

The next case is from my out-patient list at the Hospital. J. G., aged 45, mill-hand, complains of cough, occasional blood-spitting, and of wearing pain in left arm; also of palpitation, dyspnœa, and occasional slight anasarca. There is decided, but not unmanageable, venous congestion of the viscera, etc., a poor and irregular pulse, and a "mitral regurgitant murmur." ℞ Infus. pruni virgin. ʒj., three times a day. The week following the patient paid a spontaneous tribute to the power of the medicine, and in six weeks had regained considerable ease.

I might tell you of twenty such cases. In nearly all the patients were left to give their own opinion, and, in addition to ease at the heart, they often expressed much pleasure at the restoration of appetite. Loss of appetite, probably due to congestion of the capillaries of the stomach, and consequent suppression of gastric secretion, is a frequent symptom of heart disease affecting the venous flow. Take, again, the following:—

W. H., aged 49. Rheumatic fever ten years ago. Now complains of cardiac oppression and dyspnœa. Slight cough, and occasional streaking of spittle with blood. Transient anasarca frequent. The lips are blue, the breathing is laboured, and there is dilatation of the right heart and disease of the mitral valves. I had W. H. under my care in the Hospital for many months. At length I ordered, in addition to a diuretic draught which he had taken regularly for some weeks, tinct. pruni virginianæ ♏xxv., when the breathing is short. He returned in a fortnight, and his first words were—"Eh! them drops does do my breathing a deal o' good. I've not been such a man for many a month." Since that time he or his friends regularly begged for the drops, and he obtained at least great temporary relief from them.

I will only relate one more case of mitral disease, and that one where life was in immediate danger:—

J. P., aged 71. Degenerative disease of arteries affecting especially the aortic and mitral valves of the heart, the mitral more severely. The blood is venous in character all over the body, and the lungs and abdominal viscera are heavily congested. The cough is excessive, with frequent hæmoptysis; the urine scanty and full of lithates; no albumen; the bowels torpid; legs greatly swollen, and some ascites. ℞ Tinct. scillæ et tinct. digitalis, āā ♏xx.; mist. potass iodid. ʒj.; every six hours. Vapour bath every other morning. Rest in bed. By these means the dangerous period was tided over.

Now, I have no expectation that the wild cherry will be proved to have the wonderful remedial power of digitalis in such cases as this, and I should not have been justified at a time of such danger in neglecting a remedy of known for one of unknown virtue. But, the immediate danger being past, I now began a course of the wild cherry combined with squills as a diuretic and expectorant, and the patient made a very good recovery. As I before said, it is not for a sudden salvation, but for purposes of gradual restoration, that I use the wild cherry.

It is unnecessary for me to relate to you any more of the many cases of mitral disease which I have treated with this medicine, and which for the most part differ only incidentally. Let me now draw your attention to two cases out of three or four in which I used the wild cherry in disease of the great vessels. You will readily see that it is admirably adapted for the long sedative treatment of such cases, and, in fact, it has seemed to me to have almost a marvellous effect for good when distress arises from such a cause. The first case is a very interesting one on many grounds. R. W., of middle age, and going about his daily business, consulted me in the spring of 1866 for "nervousness." Of late he had eschewed doctors, for they told him that he was hypochondriacal and vapourish, and urged him to improve first his mental and thence his bodily condition. Meanwhile he took more than one course of "tonics," which, as he declared, made him worse. He could give little account of himself beyond the great depression of spirits to which he was liable. He apprehended evil without reason. He rested ill at nights, and awoke unrefreshed. His appetite was capricious, though he had not lost much flesh. On the slightest noise, he started in his chair; he almost shrank from being spoken to; and the race of barrel-organ grinders made his life a burden to him. In the fresh air and the perfect stillness of the country he found most relief; and from this fact I suspected that the symptoms were not the results of morbid imaginings. Such symptoms solitude intensifies. He was free from anxieties in business, dissipating habits, family trials, and the like. More and more I became convinced that some organ was in fault, and

(a) The original divisions of the Lectures have not been retained, and some few things have been added.

that organic disease lay hid somewhere. A straightforward, intelligent man, or a well-educated and sensible girl, does not often complain of this kind of nervous instability without some discoverable cause. To call such cases hysteria is to confess our ignorance. Change within the head was unlikely in this case, the motor and sensory functions being perfect and the mind unimpaired. I suspected disease in the abdomen implicating the sympathetic system, but did not suspect what I discovered—namely, aneurism of the aorta. On examining the chest my patient said, with a smile, "I think, Sir, you will not find the mischief there." Yet there was slight but decided hypertrophy of the heart, occasional but certain intermission in the action of it, and a varying strength of stroke. These latter symptoms were to be detected in the pulses when forewarned, but might otherwise have been easily overlooked (b) I now found some dulness about the level of the third rib, near the sternum, on the right side of it, and a slight but unmistakable murmur at the same place coincident with the beat of the heart. The patient now spoke of a long-standing but not intolerable pain between the shoulders, and occasional palpitations. These feelings, however, as being the least obtrusive, he had merged in the general expression of aches, weakness, and nervousness. This case was a valuable lesson to me. I took it up some time after my brethren had been consulted, and when the disease was in a more advanced stage. Had I examined the case when they did, no doubt I should have concurred with them in the hypochondriacal theory. Now, in advance of my own expectation, I gave this patient great relief with the wild cherry. It calmed the nervous irritability, it made the appetite better and steadier, it stilled the heart, it procured, or seemed to procure, quiet slumber at night. It is in such a case as this that the new remedy has so great an advantage over the foxglove, seeing that it may be given (as far as I know) for any length of time and without special need of watchfulness. Unlike foxglove, the wild cherry may be prescribed for any chance patient, knowing that he cannot harm himself much with it, and feeling pretty certain that it is not likely to disagree. On the other hand, it is far inferior to the foxglove at a push, and you see that I still give the latter to all patients brought into the house half choked with thoracic and abdominal congestions. The foxglove in such cases often acts like a charm, and does what no other known medicine can attempt. When the corner is turned comes the wild cherry to aid in the long process of restoration. Its use is not so much to regain equilibrium as to give it stability when regained.

The preceding was a case of incipient aneurism; the following is one of confirmed and far advanced disease:—

W. V., aged 42, was transferred to me from Mr. S. Hey on account of well-marked aneurism of the aorta. He remained for some time in Ward No. 4, where many of you had the opportunity of examining him. There were loud murmurs, both valvular and saccular, and a tumour to the right of the sternum over which was complete dulness and a thrill. This poor man's sufferings from thoracic oppression and neuralgia subsequently amounted to absolute torment, and during his stay in the house were very severe. Half-grain doses of morphia could alone insure him any sort of comfort, and sometimes he took that dose twice or even three times before he could settle into anything like ease. As an experiment I ordered him twenty or thirty drops of the tincture of wild cherry from time to time during the day to ease the palpitations and spasms of short breathing. To my surprise, it gave him considerable ease. Inured as he was to agony, no persuasion would have brought him to acknowledge any fictitious relief. He knew only too well what palpitation and dyspnœa can be, and no fancied comfort would have satisfied him. And yet day after day he assured me that the drops gave him much ease. I thought to myself that if they relieved him they would relieve anything. W. V. remained under my care as an out-patient until his death. He took from two to four grains of morphia daily, whether I liked it or not, and, moreover, complained of its inefficacy. And even then he clung to the "drops," and begged his wife never to forget them. I need not say that I had nothing to do with his faith.

I shall now add some observations on the value of *Prunus virginiana* in a few other diseases. In chronic bronchitis depending upon or accompanied by valvular disease or dilatation of the chambers of the heart, I have found it of great service. Such cases are, you know, but too common. In them I always found my best remedy in digitalis; I now find the *Prunus virginiana* do nearly as well—I have often thought quite as well—in calming the cough and so-called asthma, and it is infinitely preferable in that it also improves the appetite and strength, and may be given continuously and fearlessly. These patients are among the crosses of the Hospital Physician; incurable, but capable of passing relief, they hang on winter after winter, gasping forth their weekly tale of inevitable sorrows. One of these unhappy old fellows, whose daily food was gin and sulphuric ether, and every one of whose weeks was to have been his last for many a month, pleaded so hard for some medicine of supernatural virtues that, from whim rather than calculation, I ordered him twenty drops of tincture of wild cherry every two or three hours. The old gentleman did not appear for a fortnight; then he appeared, as usual, and I had resigned myself to the invariable beginning—"Eh, sir, I thought last week I should have"—when, to my amazement, he concluded—"recovered altogether. Them drops made me over again, and I thought I shouldn't 'a come no more, but they only lasted me out ten days, and now I'm as bad as ever." It is needless to say that he was supplied with an infinite series of drops, and every week he invented some new form of panegyric upon their virtues. He has long withdrawn his injurious opinions of the science of Medicine, and of my skill in particular; he has magnanimously overlooked the illimitable iniquity of the Poor-law guardians, and at last he informed me that he was about to begin life afresh as a retail dealer in oranges. In all seriousness, I believe that any one who gives the tincture of *Prunus virginiana* in these forms of bronchitis will not be disappointed. Bronchitis depending upon scrofulous, gouty, or any such affection of the mucous membrane of the lung, has nothing in common with the former disease except coughing and spitting, and these cases have their own remedies. I have not found the wild cherry infusion of much service in the dyspepsia of phthisis—that is, of no more service than any other vegetable bitter. It is valuable, however, in these and all other cases where much nervous susceptibility is present with vascular irritability. Generally speaking, I use the infusion when I want the so-called "tonic and stomachic" effects of the medicine, and the tincture when I want more especially to relieve distress in the chest. I think the distinction is worth noting.

In conclusion, I may say that in many cases of the kind remediable by *Prunus virginiana* I have tried other vegetable bitters with hydrocyanic acid added. I have not found this imitation to answer, and I believe, therefore, that the good effects of the drug depend upon something more than the prussic acid it contains. I shall refer those who wish to gain some knowledge of the botanical and chemical characters of the *Prunus virginiana* to the excellent description by Professor Bentley, published by him in the new series of the *Pharmaceutical Journal*, at page 97 of Volume V. My sincere thanks are also due to Mr. Reynolds (of the firm of Harvey and Reynolds, 13, Briggate, Leeds) for his extremely valuable aid in this, as in all instances where I have investigated the properties of drugs. I am sure he will gladly answer any questions concerning the *Prunus virginiana* and its preparations.

(b) The sphygmograph would have been invaluable in this case, but I had not then begun the use of it.

Dr. Mary Walker.—This lady is unfortunate. Twice has she attempted to lecture in St. James's-hall, and twice has she been interrupted—rudely and wrongly, no doubt—by a set of young men who represent themselves as Medical students. We have not a word to say in justification of the authors of the disturbance of Thursday last, but we do not agree with the magistrate in attributing it to the "jealousy" of male Medical students—supposing the authors to be veritable students of Medicine. Something must be allowed for the indignation which may be reasonably felt at seeing Medicine caricatured by a lady in such a costume, and under such circumstances.

Merton College, Oxford.—On Saturday, May 4, there will be held an election at this College to one Natural Science Scholarship, value £60 per annum, tenable for five years. Candidates for the above must be under 20 years of age, and will be examined in the ordinary classical matriculation subjects—viz., a portion of a Greek and Latin author, Latin writing, grammar, arithmetic, and algebra, and to those who pass this examination, papers will be offered in physics, chemistry, and physiology. Candidates are requested to send to the Warden, on or before Monday, April 29, certificates of age and testimonials of conduct. The examination will begin on April 30, at 9.30 a.m.

ORIGINAL COMMUNICATIONS.

NOTES ON ARTIFICIAL PRODUCTION OF OXALURIA.

By DYCE DUCKWORTH, M.D.,
Assistant-Physician to the Royal General Dispensary; Medical Tutor, St. Bartholomew's Hospital.

It is well known that certain articles of diet induce a temporary form of oxaluria. This fact has been most frequently observed after partaking of rhubarb; however, turnips, sorrel, and tomatoes likewise contain oxalic acid in various combinations within their tissues. In the case of rhubarb that has been softened by parboiling, octohedral crystals of oxalate of lime may be set free in water by simply teasing out the fibres.

Now, if the urine be examined within an hour or two after taking any of the above vegetables, abundant octohedral crystals are found suspended in it—that is, they exist in the bladder before emission, and are certainly not produced afterwards. It is the exception that any noteworthy symptoms are set up by this temporary oxaluria; sometimes, however, irritation is referred to some part of the course of the urethra. In these instances soluble oxalates of soda, potass, and ammonia, as well as insoluble oxalate of lime, are introduced into the circulation, and we need only conceive the occurrence of a simple transformation, founded on the predilection of oxalic acid for lime, to account for the oxaluria.

I desire, however, in this paper to direct attention to the results of some experiments which I performed at the suggestion of my friend, Dr. Arthur Leared. They were devised and carried out in the first instance by that gentleman, who laid the details of them before the Profession in an able lecture on oxaluria delivered in November, 1865, at the Royal Infirmary for Diseases of the Chest. Although these experiments have for their immediate object the artificial induction of oxaluria, yet they have an important bearing on the pathology of the confirmed or permanent form of oxaluria—a grave disease.

Dr. Leared is, I believe, inclined to the view held by Beneke—that the important symptoms of severe oxaluria, as with those of so-called phosphaturia, are to be attributed more to the drain of lime from the system than to the effects of excess of oxalic or phosphoric acids respectively. His experiments consisted in examining the morning urine of health after standing twenty-four hours, in order to prove the absence of oxalate of lime. At bedtime he took f.ʒiij. of aqua calcis. On examination of the urine passed the following morning he found an abundant deposition of oxalate of lime. On another occasion he took at bedtime, after carefully examining the urine as before, gr. iij. of oxalic acid well diluted with distilled water. The examination of the morning urine next day, in this case, showed no evidence of oxalate of lime. Dr. Leared repeated both of these experiments several times, and always with the same results.

I likewise repeated them, and with the following slight modifications.(a) After examining the morning urine that had stood for twenty-four hours, to satisfy myself of the absence of oxalates—I was taking a holiday on the Devonshire coast at the time—I took f.ʒiij. of aqua calcis at bedtime. In an hour afterwards I passed urine. This, after standing eight hours, showed a characteristic mucoid deposit of oxalate of lime. In the morning urine of next day, only a small deposit of this occurred. I should mention that I employed the microscope on all occasions. I found the same result after taking f.ʒj. of aqua calcis in my own person, and also in the case of a strong healthy man. Thus far my results exactly confirmed those of Dr. Leared.

I next proceeded to observe the effects of oxalic acid. I made a dilute solution of gr. iij. in water, and took a third part of this at bedtime. Feeling cramping pain in the stomach, I confess I did not like to finish the draught. In an hour I passed f. ʒij. of urine, and in this, after standing overnight, I found a characteristic mucoid deposit, and recognised myriads of octohedral crystals. On another occasion I took gr. j. of oxalic acid in f. ʒij. of distilled water. Passed urine an hour afterwards. Result same as in last experiment, and I experienced no gastric uneasiness after taking the dose It thus appeared that an artificial oxaluria could be produced by the respective ingestion of caustic lime and oxalic acid.

It will be seen that my results with the latter do not accord with those of Dr. Leared, and at present I am unable to account for the discrepancy. I simply put forth the facts, not, however, without some diffidence, since they do not tally with those obtained by so well-known an observer as Dr. Leared.

The results are certainly remarkable. Let it be remembered that aqua calcis contains only gr. ss. of caustic lime in the ounce, and that from this amount and from gr. j. of oxalic acid abundant depositions of oxalate of lime occurred in each case.

The experiments are well worthy of repetition, though it is hardly to be expected that many will volunteer assistance in partaking of oxalic acid.

In conclusion, I may remark that the result with lime water seems to favour the belief that oxalic acid is a natural constituent of the blood, and for experimental evidence on this latter point the Profession is indebted to the labours of Drs. Garrod and Parkes.

70, Wimpole-street.

(a) In vol. ii. of the *St. Bartholomew's Hospital Reports* (1866) I have recorded these experiments at length, but without reference to Dr. Leared's researches.

OPERA MINORA.

By BENJAMIN W. RICHARDSON, M.A., M.D., F.R.C.P.,
Senior Physician to the Royal Infirmary for Diseases of the Chest.

ON DIABETIC PHTHISIS AND ITS TREATMENT.

The Physician who has occasion to treat large numbers of patients suffering from phthisis pulmonalis soon becomes aware of the fact that the disease is not a single and simple organic lesion depending only on one primary condition, but that, manifesting a remarkable unity in respect to symptoms, it may exhibit as remarkable a diversity in relation to cause, and may be allied with many and varying forms of disease. Thus there is a true form of phthisis connected with alcoholic degeneration of the tissues—*alcoholic phthisis;* there is a form of phthisis in children connected with cyanosis—*cyanotic phthisis;* there is a *bronchial phthisis;* there is a form of phthisis from inhalation of foreign substances—*mechanically excited phthisis;* there is the *ordinary phthisis* of the young, hereditary or acquired; and, lastly, there is the peculiar form of phthisis which is sometimes coincident with diabetes, and to which I would now direct attention—*diabetic phthisis.*

Diabetic phthisis is, by comparison, a rare disease. In the course of twelve years' practice at the Royal Infirmary for Diseases of the Chest I have met with not more than eight cases, and in private practice I have met with three only. On the whole, judging from experience, I should think that of fifteen hundred cases of a phthisical character, not more than one would be a case of diabetic phthisis. Further, the disease diabetes may prove fatal without any of the symptoms of phthisis. For all this, diabetic phthisis, when once set up, is a well-marked form of disease; it is something more than a complication of diabetes when it appears, for it soon stands out first, and becomes the actual life-destroyer.

In three of my cases the patients presented themselves unconscious that they were eliminating large quantities of sugar by the urine, and complaining solely of the affection of the chest. In all the other cases the symptoms of diabetes had been recognised prior to the development of pulmonary mischief; this, I have no doubt, is the general rule, and I believe in every case where the history of the symptoms can be clearly traced it will be found that the diabetes was the antecedent affection, although the patient was not conversant of the fact. When in the course of diabetes the phthisical condition is developed, the newly diseased state is not usually an early complication, but, once developed, it speedily runs its fatal course.

The first general symptom is severe hectic, the hot stage of which is very extreme, and, instead of being followed by profuse sweating, is succeeded by great coldness of the surface of the body, depression, and copious elimination of urine. Difficulty of breathing is a marked symptom; cough is common, but is usually hacking only, and is unattended with any quantity of expectoration. Hæmoptysis, in the strict sense of the word, I have not seen; but sputa of a rusty character in small quantities is frequent. There is little acute thoracic pain, but great oppression. Waste of bodily substance is extreme.

The physical signs are well marked. If the disease is seen early, patches of lung, like so many centres, give signs of dry crepitation; rapidly this crepitation extends over the whole lung. In one of my cases, during the last six weeks of life I could put the stethoscope over no part of the chest without hearing crepitation. The crepitation is distinctly that of early tubercle; it is wanting in the fineness of early pneumonic crepitation. In course of time there is some tendency to softening of tubercle, but this is very limited, and I have but once observed the actual formation of cavity. Death takes place, in fact, too early to give time for softening or absorption of tubercle; added to this, the diabetic condition seems to interfere with the process of softening, probably by the removal of water from the tissues.

Percussion over the chest where there is crepitation may be dull, but this sign is not essential.

Whenever there is clearly developed diabetic phthisis the *prognosis* is inevitably bad, according to our present knowledge of treatment. Further, the prognosis is almost definite as to time: I have not seen a case that survived four months after the tubercular condition had been obviously present. From six to ten weeks is the common duration of the term of life from the period of severe and definitely recurring hectic.

After death the condition of lung is peculiar, and in three cases—the only cases I could be allowed to inspect—the condition was the same. The lungs were much shrunken and dry; they were greyish and darkly mottled in colour; the tissue was filled with small dark—I had almost said gritty—tubercle, and there were a few patches of deep vascular congestion. There was no pleuritic adhesion, no serous effusion, no pulmonary cavity.

In every case of diabetic phthisis I have seen there has been disease of the base of the brain. In one case there was a growth of bone pressing upon the under surface of the medulla oblongata; in another case there was softening of brain substance, and in a third case there was disease of the vessels with thickening of the membranes and old adhesions. In one of these cases the patient had been under the late Dr. Baly for "acute meningitis," and his symptoms of diabetes followed that attack immediately. As he recovered from his acute illness he discovered himself diabetic.

The pathological relationship of diabetes and phthisis of the lung seems to me to be through the nervous system. That there is a functional and an organic type of diabetes; that the functional type is largely curable, and the organic absolutely incurable; and that the functional type is connected with a false digestion, owing to temporary interference with nerve action—these, I think, are facts which every scientific Physician must be prepared to accept.

Some difference of opinion, however, yet exists as to the relationship of diabetes to disease of the brain. The progress of experimental inquiry has all been to the effect that lesion of brain structure is an efficient cause of the diabetic condition; but Dr. Ogle has recently, in a most laboured and able paper, maintained that the brain lesion sometimes found in diabetes is a result of structural change incident to the diabetic state, and a result instead of a cause. I do not propose to discuss this refined question now, but I would point out that when phthisis of the lung is developed during diabetes, the morbid change appears to be the result of what may truly be called innervation of the lung tissue. That the change is not due merely to modification of the blood is certain from the fact that diabetes may exist or prove fatal without the occurrence of pulmonary phthisis or any sign of it. The occurrence of the phthisis also takes place, as I think experience shows, only when the diabetes depends on lesion at the base of the brain. It is fair to presume, therefore, that in such cases the nervous injury has so extended as to involve at their source the nerves from which the pulmonic structure is supplied.

Regarding treatment in diabetic phthisis. I have tried various plans—oxygen by inhalation, oxygen by peroxide of hydrogen, special diet, change of air—and all to no purpose. Still there are certain points of practice which are worthy of note. I name two especially.

1. I am convinced that in this malady oxygen and its allies, chlorine, iodine, or their compounds, do harm: they increase elimination, and reduce accordingly.

2. I am equally certain that a diet restricted to albuminous products is utterly wrong both in theory and in practice. I believe that in functional diabetes a great deal can be effected by restricted diet, coupled with the method first suggested by Rollo, of giving with such diet ammonia and iron freely. I doubt, however, the practice of restricted diet in every case of organic diabetes, and in cases where there is the faintest indication of phthisis the restricted diet becomes, I feel sure, a positive evil. So soon as diabetic phthisis is established the general dietetic rules for phthisis alone are the rules, and the only rules, to follow. In the way of affirmative treatment the principles are—to sustain warmth of body, to check waste by opium and quinine, and to sustain by good food, especially by the free use of animal oil. In the next case I have to treat I will give animal oil, not by the spoonful, but by the half-pint at a time. I will give it as the Esquimaux takes it, and for the same reason, to sustain the lost caloric in his case too rapidly carried away by the surrounding cold, and in the case of the diabetic man by the excessive formation, dissolution, and elimination of sugar. To this last remark I would add that, in respect to the treatment of organic diabetes altogether, there is more hope in the free use of animal oil than in any other remedy. Here is an unexplored field of practice before us, a very simple practice, and easily put to the test, but a practice strictly rational and based on the true institutes of Medicine.

ON THOSE INFLAMMATIONS NOT ENDING IN SUPPURATION OR SLOUGH, WHICH MAY BE TERMED RESOLVING.

By J. H. JAMES, F.R.C.S.

This group differs most materially from those which precede it; their characters are to suppurate, slough, or ulcerate, excepting superficial erysipelas, which very often resolves. On the contrary, the group now presented neither suppurate, slough, nor ulcerate, their tendency being either to resolve or to pass into a chronic state. It is true that two of them (gout and rheumatism) are apt to produce deposits which impede the future functions of the part affected; but there is this remarkable difference between the preceding group and this, that the products of the former are so irritating *that nature provides an exit for them*, and then the affair ends in a great measure, while the deposits from gout and rheumatism are so much less irritating to the tissues in which they occur, that they are allowed to remain, permanently impairing the functions of the part.

The inflammations of the preceding groups result from constitutional disorder, but that has no permanent character, and they may never be repeated; but in the present a permanent condition is established which is almost sure to produce a repetition of local inflammation at some future time (diathesis), and in many instances maintains an abnormal condition of the general health.

The former groups generally pursue a definite course within certain periods, but in these the periods are always uncertain, often short, and while in the former metastasis is hardly known (excepting in the second group), in two of these it is especially common (gout and rheumatism). An explanation of this circumstance may perhaps be suggested—namely, that in the three first groups there are definite processes going on at certain points, which, if I may so say, attach and fix the inflammation around these points until the processes are completed; whereas, no such circumstances belonging to these, the inflammation may vanish as fast as it appeared, and in the case of gout both the accession and disappearance are often equally sudden. This constitutes a very material difference; for although the action may generally be transferred to other external parts, it also not unfrequently takes effect in vital or more important organs.

The principal diseases of this group are mumps, gout, rheumatism, and some forms of scrofula.

Mumps.—The first of these, mumps, resolves after a short but known period, and for the most part by metastasis to the testis in males and the mammæ in females, is infectious, and rarely repeated. It has been said to suppurate, but I believe this is a mistake. Phlegmon occurs in early life under the angles of the jaw, in the same situation as the angina externa of Kirkland in people of advanced age; and also lymphatic glands may inflame and suppurate in that situation; but the distinction from mumps is clear, as the latter occupy the whole of the parotid gland, and consequently are above as well as below the angle of the jaw. These I have never known to suppurate. Also the infectious character of mumps proves the nature of the disease.

Gout.—Of the resolving inflammations gout offers the most perfect example, and we will attempt to sketch some of the leading differences between this and the preceding groups. In them the inflammation commences, as just stated, at a definite point, generally speaking, which may be considered as a focus from which the inflammatory processes extend, and by which they seem to be fixed until those processes are completed—this is especially so in the limited group—whereas gout commences suddenly and invades a considerable space at once. It has no distinct central point to which the processes are attracted, and it often disappears from the part invaded as rapidly as it attacked them. On this, in all probability, the characteristic properties of gouty inflammation mainly depend, speaking especially of the early fits of gout; while in the preceding groups, especially in the first, such metastasis from the causes stated is exceedingly rare.

In the treatment of gout, or, I should rather say, the conduct of such cases, this character is most important; for if it be repelled, or if retrocedent, the consequences are often fatal. Of repelled gout the following is a striking example. My predecessor at the Hospital, an excellent Surgeon, plunged a gouty foot into cold water; the gout was cured, but he presently died of apoplexy. The following is a striking example of retrocedent gout:—A gentleman 80 years of age, but hale and strong, in whom I was deeply interested, got a severe attack of pneumonia from a chill. A few days afterwards gout, which had been due, came out on the wrist and elbow, with decided relief to the pulmonic symptoms. His ordinary Medical attendant and myself did all in our power to keep it out, but, unfortunately, in vain; and as it receded the former inflammation was lighted up and speedily proved fatal. These and many other cases would illustrate the same important facts—*i.e.*, the resolving character of gout and its consequences.

If we look at the history of the former groups, we shall find that they produce pus or sloughs—matters highly irritating and working their own cure by an exit on the surface—while in gout, if there is any product, which after a few attacks is often the case, the deposits are of a much less irritating nature, and the inflammation subsides, leaving them in the tissues of the part, which, however, they seriously embarrass. These are the main points which appear to me as distinctive of the gouty from the other inflammations. But there are some other circumstances which deserve attention. All the former groups are connected with constitutional disturbance, but with the attack that passes away; and if we wished to reproduce the disease — say carbuncular abscess, or paronychia, etc.—we could not do it. But in gout there is this permanent alteration (diathesis) established, and we could almost produce a fit of the gout at pleasure by certain articles of diet or drink.

These permanent changes in the constitution belong to other members of this group, as rheumatism or scrofula; and it is worthy of remark that they may be considered as permanent in gout and rheumatism, increasing as age advances, and the state of health gradually declines; while in scrofula the increased health and strength of the parties in many cases would seem to indicate that the disease was worn out. This, however, can hardly be deemed to be true; for long after every indication has disappeared it will still be found that in case of marriage the children will very often inherit a scrofulous diathesis.

With regard to the actual inflammation of gout, there are also some circumstances worthy of notice when compared with other inflammations. Thus the colour is peculiarly dark. There is a strong halitus perfectly well known. There is an amount of sensibility to pain quite excessive, and the relief to the system appears to bear a certain relation to the amount of this sensibility; for what is called dumb gout rarely produces this benefit, and this inflammation will often advantageously bear the application of warm, dry, and light materials, which would greatly aggravate those of the former groups. There can be little question that the condition of the blood is materially affected, and to a considerable extent, in its chemical condition; for treatment whose basis is strictly chemical very often proves highly serviceable. At the same time it is not a little remarkable that a particular vegetable (colchicum) of no peculiar chemical qualities will produce the same results, and I have reason to believe that this will be to a considerable degree in a direct proportion to the quantities given in well-observed doses.

There is no disease that I know of in which the subject of diathesis can be more advantageously investigated. In the present instance the diathesis may exist during a long life, and produce its peculiar effects without occasioning gouty inflammation on the surface. It is well known that persons of a hale and vigorous constitution, enjoying what is called good living, will generally throw out gouty inflammation on the surface; while those of a more weakly frame, as females, and feeble persons of either sex, may during a long life be harassed by anomalous disorders—may even ultimately die from them, without gout appearing in the tables of the Registrar-General or in those of insurance offices. How long it may remain without producing external symptoms will appear from the following case:—A lady, descended from gouty parents, was the subject of very frequent disorders, all of which, I was satisfied, proceeded from a gouty diathesis, which was shown to be the case. After she had passed her 18th year she threw out a genuine attack of gout in her foot.

How gout is prevented and how produced may be illustrated on a large scale by a regiment of soldiers, among whom we shall scarcely find a single case among the privates, while when they reach the rank of quartermaster, less exercise and a stimulating diet will be found to affect no small number.

I am not aware that there has been any distinct attempt to deal with the question of Diatheses generally, but perhaps there is no disease which offers so good an opportunity of discussing this important subject as gout. What does a diathesis depend upon? In the case of gout it may be either hereditary or created. If hereditary, is it transmitted from the parent to the offspring's solids or fluids? *A priori*, it might be assumed that it could be transmitted to the solids, inasmuch as the child who inherited the father's features might also have such a deviation from the normal state of the vital organs as to entail this tendency. But this is a mere conjecture, and it is materially diminished in probability by the fact that gouty diathesis may be produced by habits of life as well as by transmission, and it is difficult to conceive how this should act precisely in the same way as the said transmission. Why a habit of drinking port wine or claret should produce such an alteration as is here supposed to be given by inheritance is not easy to comprehend. The probability, therefore, is rather that the impression is on the fluids (blood). If, then, we assume, for the sake of argument, that the departure from the normal type which constitutes a diathesis is developed in the blood, the question is in what part, or indeed if in any particular part of that fluid, it is effected. It has, I believe, been argued of late, upon authority which must be respected, that in the case of gout it is the corpuscles in which it resides, and which continue to generate corpuscles of similar character throughout life. This may be so; but I believe that hitherto no proof has been obtained, and here I must submit a point which I do not think has ever been adverted to, or certainly considered as it ought—namely, *that there are not only diatheses which involve the development of disease, but others which might well be denominated protective, for that is not less a diathesis which defends a person from a repetition of small-pox and several other infectious diseases than that which determines gout.* But, according to this hypothesis, we must also suppose that the protective change is due to the corpuscles also; thus we must admit that after small-pox, measles, scarlatina, typhus, plague, cholera, etc., in each and every one of them some change has occurred in the corpuscles. But one can hardly contemplate the possibility of such extensive changes in their condition. It has also been referred to the party having been born with certain materials in his blood, which are carried off during the processes of these diseases when they occur; but to say nothing of the condition that this implies, that the person may carry in his blood such materials during the course of a long life, for we often find that small-pox, for instance, shall visit tribes and even nations, and sweep off multitudes of people of all ages. But there is a much stronger objection—namely, that a person having a slight attack of small-pox, we will say, shall be as effectually guaranteed as another who may have had it very severely with a very copious eruption; and it is not easy to understand how in both cases the supposed materials may be equally swept away. So as to other infectious diseases, it still being considered that it is some change in the blood which produces the protective diathesis. It will perhaps be better explained on the supposition *that the blood en masse has powers and properties which may assimilate it to an organ*—an hypothesis which I ventured to propose in a memoir on the causes of mortality after amputations. (*Provincial Med. Chir. Trans.*, vols. xvii. and xviii.) This is not the place to go into arguments in support of this, but I have

since met with a passage in no less an authority than Harvey (a) which strongly supports it.

Rheumatism.—Is it legitimately included in a group whose essential character is to resolve and not to suppurate? There can be no difficulty as to the first point. Various forms, such as lumbago, cricq, &c., notoriously resolve, sometimes without leaving any trace of their existence, coming suddenly and going suddenly, like some attacks of gout; but, on the other hand, it not unfrequently happens that rheumatism becomes a fixture for weeks, months, years, or even life, still, however, resolving under certain modes of treatment, although, perhaps, never perfectly. The question of suppuration it may be more difficult to determine, although I believe, excepting in cases of rheumatic fever, where the heart and its serofibrous membranes are affected, or where, falling upon some of the joints in combination with a strong scrofulous diathesis, that it does not proceed to suppuration. Rheumatism and rheumatic are convenient *noms de guerre*, and many painful affections are placed to this account which really do not deserve to be so; and, should suppuration occur, it cannot be counted as purely rheumatic. Thus it is not uncommon for painful affections of the thigh to be hastily considered as rheumatic, and a disastrous plan of treatment pursued, until it is found that inflammation of the periosteum and bone has terminated in necrosis. Again, we often have severe pains in the hip considered as rheumatic, the patient encouraged to move the limb and otherwise be treated as for that disease, when, in point of fact, it is a more formidable disease (morbus coxarius), ending probably in suppuration, and this considered as a proof that rheumatism suppurates. The diagnosis may be sometimes difficult, but if the patient neither has nor had any other rheumatic attack, and more especially if it is accompanied with a rapid pulse and other febrile symptoms, the case probably is morbus coxarius. The diagnosis in the case of shoulder, elbow, or wrist, is much easier than the hip, and I have never known a pure case of these to suppurate. Rheumatism may lame a person, and very often does, but if sufficient attention is paid, the true character may generally be discriminated. If, however, rheumatism does not suppurate, like gout, it is very apt to produce an effusion in the tissues, not like gout, but animalised, and often glueing the tissues in such a way as to be destructive of the motions of the part. It is very important to observe, and may again be repeated, that these effusions, unlike those where pus and sloughs are the product (which, after much suffering, work their own cure), remain, exciting no effort to throw them off, but constituting a permanent embarrassment to the tissues in which they remain.

These distinctions may, perhaps, be held to be the "curiosities of (Medical) literature;" but it is really far from being so, for if, on the one hand, there is nothing to prevent the cure by resolution of such inflammations, and while the consequences of effusions are so important and permanent, no time should be lost in terminating such an attack, unless it be the fear of metastasis. Now, as far as I have had an opportunity of seeing, metastasis is comparatively rare in rheumatism, excepting in the case of highly acute attacks, or of rheumatic fever.

The question of diathesis is, as in gout, an important one. It may be inherited as well as acquired, but if acquired, it is by very different means than in the latter disease. High and imtemperate living will create gout; poor living, damp, and cold, rheumatism. A fit of the gout will often give great temporary relief to the system. I never could find that an attack of rheumatism had anything to recommend it. And on this point I speak but too feelingly myself. A fit of the gout so often serves, that patients are sent to Bath to obtain one. It is much otherwise with rheumatic cases, for we send them to Buxton to get cured, if it be possible.

Scrofula.—So various are the forms of this disease, that it is very difficult to class it. Scrofulous inflammation very often results in a weak and crude suppuration; therefore it cannot be deemed a resolving inflammation, take it altogether. But a great number of scrofulous inflammations do resolve, some by their own action, others by remedies employed; and when they resolve like the two preceding diseases, it is often by metastasis, that unfortunately falling upon some vital organ. This, indeed, is one of the most important pathological distinctions of these resolving inflammations as contrasted with those which, as before stated, tend to produce suppuration or slough. In another respect, scrofula more resembles the two last I have alluded to, in depending upon a determinate diathesis.

It would be endless to go into the various forms of scrofula, but there is one on which I would venture to offer a few remarks. It is on those enormous bronchoceles, which often threaten, and sometimes actually terminate, life. Soft, elastic, and spongy, supplied with large arteries, they greatly resemble some of the large nævi. I have known several instances in which iodine has been, I think from misconception, used as an application for their cure, but has stimulated them to greater activity. A more successful treatment is by applications which lessen the vascular action, and I may mention one, a lotion consisting of acetate of lead two drachms in a strong decoction of digitalis one pint, constantly applied. I have to mention another mode of treatment which could hardly by any *à priori* mode of reasoning be considered a favourable one—namely, setons passed through the tumours. In the beginning of the century M. Quadri, of Naples, published some cases in which he had passed setons through these tubers; the evidence of benefit appeared so strong that I determined to try it in two cases which were published in the *Med. Chir. Trans.*, vol. xi., having been communicated by Dr. Thompson, who published some favourable cases of his own. Other cases have since occurred to me, but the state of my health prevents me from obtaining the data. I principally mention these facts for the purpose of stating the instrument I used. The parts are so highly vascular that cutting edges are dangerous. I therefore had an instrument made like a long skewer, cylindrical and conical, terminating in a fine point. This requires force to be pushed through, but it is comparatively very safe. I have used smaller ones for large nævi, and with much benefit.

(a) Palmer's Works of Hunter, vol. iii. p. 105.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

THE GERMAN HOSPITAL, DALSTON.

Objects of the Hospital—The New Building—Nursing—Private Rooms—Medical Staff—Out-patients—Statistics of Last Two Years—Remarks on the Treatment of the more frequent Injuries and Diseases—A Case of Traumatic Pneumothorax—Gunshot Wound in the Walls of Abdomen—Case of Tremor Mercurialis—Case of Paresis of different Cerebral Nerves on the Left Side, and of the Lower Extremities, but more markedly of the left one.

A NEW era has commenced for this Hospital with the opening of the new building two years ago. It is principally intended for the reception of Germans, who form a very considerable part of the working population of the metropolis. All parts of Germany are represented in them, but North Germany more especially, supplying sugar-bakers and labourers; the Rhenish provinces and Würtemberg, bakers and butchers, as well as domestic servants in great number; whilst street musicians come from the small district of Rhenish Bavaria. Many work in very unhealthy trades—*e.g.*, as skindressers, or as labourers in lead and other factories. As the greatest part of them live in streets and districts in the east of London quite among themselves, many, even after some years' residence in this country, have not learned the language. For these, as well as for German sailors, who form a considerable part of the fluctuating foreign population of London, and for many others who, when out of work by sickness, soon become utterly destitute, and who are without friends to fall back upon, an Hospital where their native tongue is spoken is a great boon.

Of the various and important remedial measures an Hospital has to offer besides those of the Pharmacopœia, this is one not to be undervalued; for to be among his countrymen has a marked influence on the *morale* of a patient who, having fallen ill in a foreign country, is sure to feel his lonely and desolate position.

Germans and other foreigners speaking German are, in case of sickness, admitted into the Hospital at all times, as long as there is room. As out-patients they are seen at special hours without recommendation at the Hospital, as well as at the two Dispensaries established in the east and west of the metropolis.

The north-east of London, where the Hospital is situated,

being, without this Hospital, entirely devoid of Hospital accommodation, it was by the founders from the first considered as a small instalment of their sense of gratitude for the kind hospitality with which all foreigners are received in this country, to make it available also for cases of accident occurring in the neighbourhood, and for English out-patients. Thus it was from the first open to English accidents and out-patients, for the latter upon the recommendation of a governor.

The new Hospital is built on a spacious ground in the garden of the old establishment, and consists of two blocks of building. The smaller one in front—containing the entire household accommodation, the apartments of the officers, sisters, etc., and a few rooms for paying patients, one room for special Surgical cases, and the operating theatre—is connected by three corridors for the different floors with the larger one behind, containing the wards. This forms a long narrow building, and contains seven wards, accommodation for out-patients, the Dispensary, and the chapel. The wards are of different size, two of them being large enough to hold twenty beds, four to contain ten beds each, and one for eight beds, the cubic space allotted to each bed being about 1500 cubic feet. Altogether the Hospital is constructed to contain 100 beds, of which at present about eighty are in use, one of the large wards being still unoccupied for want of funds; but during the late epidemic of cholera the whole of the number had been made available for the reception of patients.

The ventilation is entirely carried on by the windows, which are opposite each other, by different small openings in the walls and the open fireplaces. The latter having been found insufficient in severe weather to heat the larger wards, one small Gurney's stove has been put up in each of them instead of one of the fireplaces. The floors of the wards are stained in a light-brown colour, and varnished similarly to what is usual in Hospitals in Germany, and what is also recommended by Miss Nightingale as the best kind of floor for Hospitals. This has been found of great advantage, doing away with the damp, and disagreeable, and, no doubt, also injurious atmosphere produced by common white deal floors whenever they are scrubbed. These floors are simply washed every morning, and can very easily be rubbed quite dry afterwards. They are less slippery than waxed floors, and no complaints have been made on that account by patients walking on crutches. They have proved to wear very well, but a fresh coat of varnish ought to be put on at least once in twelve months. Attached to each ward is a small—rather too small—room, with bath, lavatory, and closet, and on the other side a room for the sister.

The nursing has, ever since the first opening of the Hospital, been in the hands of sisters coming from one of the institutions for training nurses in Germany, and the Medical staff, as well as the patients, have at all times felt the greatest satisfaction and gratitude at the manner in which they performed their duties. They have some women, besides two male attendants for the male wards, to help them.

It has already been mentioned that in the front building a few rooms are set apart for paying patients. These are only available for Germans, and especially single clerks in mercantile houses, of whom there is also a great number always staying in London, or governesses and others not belonging to the lower classes, but who, in case of sickness, are entirely helpless, and soon become even destitute, have availed themselves of this home among their countrymen. In 1865, twenty-six, and last year thirty, patients have been admitted into these private rooms.

The members of the Medical staff must be either Germans or fully conversant with the German language. It consists of two honorary Physicians, Dr. Sutro and Dr. Hermann Weber; two honorary Surgeons, Mr. de Méric and Dr. Lichtenberg; one honorary Assistant-Physician, Dr. Bäumler; and two resident Medical Officers, Dr. Burger and Dr. Hirsch. The honorary Physician to the Eastern Dispensary is Dr. Rasch, and to that in the West-end Dr. Castañeda. The attendance of the honorary Medical officers at the Hospital is regulated in the same way as in the other metropolitan Hospitals, the patients being visited by them twice a week, or as often as required. The resident Medical officers, each of whom has half of the in-patients under his charge, visit them twice a day at 9 a.m. and 6 p.m., and at these visits they take notes of the principal cases.

In all febrile cases of any importance, Surgical as well as Medical, thermometric observations are made twice a day at the hours mentioned, and a great many instances have proved their great value in facilitating diagnosis and prognosis and in generally elucidating the case. In future reports we shall take an opportunity more fully to return to this subject.

The resident Medical officers have also to see part of the out-patients, besides the Assistant-Physician, the Surgical cases being seen by the honorary Surgeons. In the out-patients' department a special room is provided, which also on one day of the week is used by the honorary Dentist, Mr. Statham, containing the necessary appliances for examinations with the speculum, the ophthalmoscope, and laryngoscope. These instruments are frequently used, and would be still more used if the number of out-patients admitted of more time being allotted to each case. A slight improvement in this respect has, however, taken place, the number of letters allowed to the governors having been limited to six for every vote, and a stricter supervision having been exercised over the patients. These measures appear to have had some effect upon the numbers of the out-patients, as well as upon the class they belong to; for the number of new cases sank in 1866 to 7886 from 9575 in the previous year, whilst the number of attendances remained about the same—namely, about 26,000, showing that each case was seen more frequently, and that, therefore, more attention could be paid to it. In 1864 the number of new cases had risen to 12,403.

The large numbers of out-patients require the work of two Dispensers, the senior of whom is to be a German. The codex followed in prescribing is the London Pharmacopœia, and more recently the British Pharmacopœia. The remedies which are prescribed in the largest quantities are cod-liver oil, quinine, iron, iodide of potassium, and bicarbonate of soda. In cases of secondary syphilis the green iodide of mercury in half or one grain doses with opium once or twice a day is more frequently used than any other preparation, especially by Mr. de Méric; in children the hydr. c. cretâ. In the numbers of out-patients above given there are not included the casualties, which are seen as out-patients without letter, and which amounted to 764 in 1865, and to 630 in 1866, including many severe injuries, as fractures and dislocations on the upper extremities, fractures of the thigh in small children, or other injuries with which the patients could be carried or could walk to be dressed at the Hospital.

In order to give an outline of the work done during the last two years with regard to in-patients, we make a short extract of the numbers as fully given in the reports of the Resident Medical Officers. The number of in-patients treated has been in—

	1865.		1866.
Brought over from the old Hospital	39	From last year	74
Admitted	881		1012
Total	920		1086

Of these were in—

	1865.		1866.
Medical cases	483		618
169 *Surgical*	437	199	468
268 Accidents		269	
Total	920		1086

Of the 268 cases of accidents admitted in 1865, 242 were English and 26 Germans; of the 269 in 1866, 216 were English and 53 Germans.

Of the accidents, the greatest number were fractures, especially of the lower extremity. Thus, in 1865, 11 cases of fracture of the thigh, and 17 cases of fracture of tibia and fibula (6 compound fractures), and 11 and 13 (4 compound) respectively in 1866, had been under treatment. In all cases of simple fracture of the lower extremity, a very extensive use is made in this Hospital of the plaster of Paris bandage, the method after which it is applied being the usual one, with rollers of loose tissue filled with the plaster. They are soaked in water immediately before being applied. A thin sheet of cotton wool is generally put between the limb and the bandage. Owing to the dampness of the atmosphere in this country, it has been found of the greatest importance, in order to get satisfactory results, to have the plaster heated to drive out the moisture shortly before it is being used. Especially in fractures of the thigh this bandage had been found to present great advantages over, and to be less inconvenient to the patient than, the long splint, which is, however, also used sometimes. After five or six weeks a starch bandage is put on in its stead, but even with this the patient is generally not allowed to get up on crutches before eight weeks have elapsed.

In some instances a starch bandage has been applied from the first, and tightened by cutting a small piece out when it became loose. In fractures of the leg plaster of Paris but rarely was put on at once; in most cases not before the first swelling had subsided, and then just as often a starch bandage was employed.

In compound fracture of the leg Heister's apparatus is the one most commonly used at this Hospital. It consists of a back splint eight inches wide and sixteen to eighteen inches long, with a footboard fixed at right angles. Attached by hinges to the former are two sides, which, in order to be as light as possible, consist only of a wooden frame filled out with cane. These sides can be fastened to the footboard by hooks. The leg is simply placed on the back splint on a chaff or hair cushion, and small soft cushions are put between the sides of the apparatus and the leg, so as to press gently and equally on it, and to keep it in its proper place, the foot being fixed by a handkerchief to the footboard. The dressing of the wounds is exceedingly easy with this apparatus, without disturbing the leg in the least. If, for instance, the wound, as it generally happens, is on the side of the leg, only the corresponding side of the apparatus has to be turned down and the cushion to be removed, in order to get free access to the wound. There are also hooks and straps on the apparatus to suspend it in a cradle. None of the other splints for fracture of the leg has seemed to answer so well in cases of compound fracture as this one, which is the one commonly used in Germany.

Ice in india-rubber bags is very frequently employed, especially in traumatic inflammations of joints. If properly managed, which requires considerable attention on the part of the nurses, it causes no inconvenience whatever to the patient, and has been found the most powerful local antiphlogistic, preventing or reducing heat and swelling, and allaying pain. Its great advantages have been experienced in several cases of wounds penetrating into the knee-joint, some of which healed without any untoward symptom arising, and with perfect restoration of the joint.

Passing over in this superficial sketch from the Surgical to the Medical cases, we find that among the acute diseases rheumatism and fevers take the first place. Of the former in 1865 forty-three cases, and in 1866 twenty-seven cases, have been admitted; two of them died from complications, as pericarditis and endocarditis. The treatment generally followed is the alkaline, especially large doses of bicarbonate of soda; and it has been observed in several instances that the pyrexia decreased, and that the other symptoms improved, as soon as, or some time after, the urine had become strongly alkaline. Dr. H. Davis's method has also been employed in several cases, and has been found successful, although it did not appear to shorten the attack so markedly as in some cases related from other Hospitals; in some of them rather strong symptoms of irritation of the urinary organs appeared—albumen or blood in urine and stranguria—which, however, soon passed away without any further ill-effects. The patients did not complain much of the pain from the blisters.

In some cases five- or ten-grain doses of quinine were also given, besides bicarbonate of soda, if the temperature of the body remained high, in spite of the alkaline state of the urine, and a decided effect was seen in some instances—viz. marked abatement of the febrile symptoms.

Of fevers, both typhus and typhoid have been under treatment. Although infectious diseases are excluded by the rules of the Hospital, still with regard to typhus a rather lenient interpretation has always prevailed, the more so as frequently typhus patients are brought in such a state as not to leave any alternative but to take them in. But special care was always taken to place them in beds between two windows, and to enforce a very free ventilation. Although in 1865 sixteen, and in 1866 four, cases of typhus were admitted, no case of infection occurred in the Hospital; of these twenty patients one died. It would appear from the experience of the last three years, during the greatest part of which typhus had been exceedingly rife in London, that, bad as the sanitary condition in some of the parts in the east of London principally inhabited by Germans may be, still typhus did not prevail much among them, owing, perhaps, to the circumstance that there is not so much overcrowding there as in other districts, and that most of them are tolerably well off as long as they have work. It is worth mentioning that during the last six months of 1866 not a single case of typhus applied at the Hospital.

Cases of typhoid fever seem at all periods of the Hospital to have been admitted in any number as long as there was room; in 1865 the number amounted to forty-two, and in 1866 to thirty-seven. Many of the cases were very severe and protracted, but in 1865 only one died, who was already in a state of complete exhaustion when admitted after about three weeks' illness. In 1866 two died, and among them one of the sisters, who evidently took the fever from a little boy under her charge. This was the first instance in the new Hospital of typhoid fever being communicated. The treatment of fevers is nearly entirely dietetic—extreme cleanliness, good nursing generally, plenty of fresh air, nourishment suitable to the case, tepid sponging, or, in cases of great nervous excitement, with high temperature of the body, a tepid bath with cold affusion, being the means principally resorted to. Most of the patients also get a hydrochloric acid mixture, other medicines only on special indications. Profuse diarrhœa in typhoid is mostly combated with opium and tannic acid. Stimulants are given in larger quantities only when called for by the symptoms now pretty generally recognised as indicating their administration.

Of acute diseases of the respiratory organs, pneumonia took a prominent place in the last two years, especially in 1866, in which nineteen cases were admitted, whilst in 1865 only eleven. The treatment followed in pneumonia was either entirely indifferent, and only prominent symptoms were acted upon, or small doses of tartar emetic, generally combined with small doses of opium, were given. Upon the whole, as, in fact, it always should be, the treatment in these cases was more adapted to the individuality of the patient than to the particular disease, and even in some cases far above middle age and very far from a good general condition before the illness, a complete crisis occurred on the fifth or seventh day under a treatment which merely had for its object to keep up the strength of the patient.

Of chronic diseases, tuberculosis in its different aspects takes the lead with 65 cases in each of the two years. Included in this number are cases of tubercular meningitis, as also some cases of pleurisy in which the tubercular origin was not to be mistaken. With regard to tuberculosis this Hospital is in a peculiar position from its national character. Many a case is taken in which, from the beginning, promises very little improvement; but even some of these, quite contrary to all expectation, left the Hospital after some time improved, rest, good nourishment, and good air having repaired what of their bad condition had been due to poverty and exposure more than to actual disease. Still, tuberculosis takes also the lead in the list of the mortality, with 27 out of 73 deaths in 1865, and 31 out of 89 in 1866, for often enough it is impossible to turn away a poor countryman who, perhaps, had been in good circumstances before his illness made him unable to work, and thus reduced him to poverty. What else but the Workhouse—dreaded even by people in a much lower sphere—would remain for him, if this Hospital shut its door against him?

Bright's disease, in its acute as well as in its chronic form, is well represented: in 1865 with 17, in 1866 with 11 cases.

The smallest of the wards, with eight beds, is available for male patients suffering from venereal diseases, and 58 and 61 cases respectively have been treated in this ward during the last two years. Women suffering from syphilis are only in rare and exceptional instances admitted into the Hospital, no particular ward being set apart for them.

A peculiar feature of last year was the cholera epidemic. The first case was brought to the Hospital on July 19, the last on October 11. Altogether 33 cases of cholera—of which 5 died—and 21 of choleraic diarrhœa have been admitted. As, however, a full report of these cases appeared in the *Medical Times and Gazette* at the time of the epidemic, we need not here make any further remarks upon it.

On a recent visit to the Hospital some cases now under treatment were shown to us which seemed to be of sufficient general interest to be here shortly related. Among the Surgical cases the most interesting was one of traumatic pneumothorax, under the care of Dr. Lichtenberg. The patient (bed 43), a strong man, aged 36, fell, on the night of January 31, from a bridge crossing the North London Railway which was being repaired, down on the line, from a height of between twenty and thirty feet. When brought to the Hospital soon afterwards, he was sensible, but in great distress, and, besides severe contusion of the right side of the body and of the lumbar region, he was found to have sustained a fracture of the right collar-bone and of several ribs on the right side. At the morning visit nearly the whole right half of the trunk was much swollen by subcutaneous emphysema, and complete absence of the respiratory murmur on that

side of the chest showed that there was pneumothorax, which had come on gradually, as on admission the Resident Medical Officer, Dr. Burger—to whom we are indebted for the particulars of this report—had distinctly heard the respiratory murmur on the right side as well as over the left. In the first few days this patient was in a very precarious state, apparently less from the pneumothorax than from an attack of delirium tremens, which, however, subsided whilst moderate doses of opium were given. When he was shown to us on February 5, the delirium had quite passed off, and from his appearance one would have hardly guessed that he breathed only with one lung; he was not at all cyanotic. But although the emphysema had quite disappeared, the right side was still more extended than the left one; on percussion everywhere hyper-resonant; the respiratory murmur quite absent. Some dull puffs were heard now and then when the fragments of the ribs grated against each other, in the lower part of the chest; there was besides some very clear metallic tinkling, and, more towards the sternum, pleuritic friction. The apex of the heart beat about one inch to the left of its normal place. It was interesting in this case to follow the variations of the temperature of the body. The day after admission it rose to 100·2° F., which it never exceeded (at least not at the times when the observations were taken). Already, two days afterwards, on February 3, it decreased to 98·8°, and since then it has not only not risen again, but was, on the contrary, from February 3 to February 10 rather abnormally low, on several occasions not exceeding 97°, as carefully ascertained by Dr. Burger, although evidently some inflammatory process was going on in the right pleural cavity. The general state of the patient, however, was during the whole time very satisfactory and far from anything like collapse. One might feel inclined to attribute this lowering of the temperature to the diminution of the quantity of oxygen inspired, the patient breathing with only one lung, and to the impairment of the oxidising process resulting therefrom. Since February 10, temperature and pulse, which had also fallen, began to rise again to 98° and 76 respectively, and at the same time signs of re-expansion of the right lung became apparent. When we last saw the patient, on February 13, there was some distinct respiratory murmur everywhere in front, though much weaker than on the left side; the metallic tinkling had disappeared; the pleuritic friction, but of a more rough character than previously, continued near the sternum; the percussion-note was still hyper-resonant above, tympanitic of rather high pitch below the fifth rib in the axillary region. Callus could now be felt round the fractures of the ribs and the collar-bone. The patient was kept as quiet as possible, and, therefore, no examination of the chest behind was made, in order not to disturb the healing process going on within. Since the opium has been left off, on February 3, he has not taken any medicine. He enjoys a very good appetite, and as his general state is most satisfactory, it is to be hoped that he will soon increase the number of cases of healed traumatic pneumothorax, of which a good many are already on record.

Another case of interest is in Bed 6 in the Accident Ward, also under the care of Dr. Lichtenberg. The patient is a boy, 14 years of age, who, in holding a loaded gun by the barrel in order to strike with the butt-end a bird which had already been shot, but not killed, discharged it, and was wounded by the shot on the abdomen. Most fortunately the shot did not penetrate through the abdominal walls, but, the gun having been held in an oblique direction, it travelled a short distance along under the skin, and then became arrested. On admission soon afterwards (January 16) a round blackened wound was found on the right side of the abdomen, one inch below the navel, and one inch and a half from the median line. About one inch above the right spina anterior superior a hard lump of the size of a walnut could be felt through the skin, which was intact. Dr. Lichtenberg made an incision on this lump, and removed a coherent mass of small shot, partly enveloped by a piece of linen cloth, corresponding to a hole in the boy's shirt where the shot had entered. Only a few shots had separated themselves from the rest, and were easily taken out of the wound made by the incision. On the following days the patient was rather feverish (highest temperature 101·7°, pulse 128), and the abdomen becoming tender and somewhat tympanitic, some fears were entertained of peritonitis supervening, but it soon appeared that these symptoms were due to a phlegmonous inflammation between the two wounds, both of which afterwards had to be enlarged to allow the pus a free issue. At present the wounds are healthy, granulating surfaces, and the only uncertainty that still exists relates to some part of the crista ilei, which appears somewhat thickened just below the wound.

Dr. Weber showed us a very marked case of tremor mercurialis under his care in a patient, 34 years of age (bed 69), who for the last twelve years, without scarcely any interruption, had been working in looking-glass manufactories in different places on the Continent, and for the last twelve months in London. With the exception of some dyspeptic symptoms when working at Liège four years ago, which the patient ascribes to his then rather freely indulging in spirits, and which soon disappeared after giving up alcoholic liquors, he never was ill until six months ago, when he first felt gradually getting weaker, feeling particularly languid, and even faint, when the intervals betwen his meals were rather long, so that he was obliged to take something between them. Occasional headache in the morning was soon followed by trembling coming on after the slightest excitement. After a while the trembling became constant, and he had to leave off working. He then took medicine, and went frequently into the country, but although much improved when he returned to work after six weeks' interruption, he had not lost the tremor, which soon increased again to such a degree that he several times fell down in the streets, and had to give up his work again after four weeks, when he was admitted into the Hospital. He does not look particularly anæmic; at times he appears perfectly quiet for a short interval, but the slightest excitement—as, for instance, the idea of being observed, and much more any attempt to move or even to speak, and more still any effort in doing anything—brings on stammering and violent shaking of the limbs, as well as various distortions of the face. His teeth are in good condition, except being of a yellowish-grey colour; his gums, although a little redder than they ought to be, are otherwise sound, and so is the mucous membrane of the mouth and pharynx. It is very interesting that this man, although for many years constantly in an atmosphere containing mercurial vapour, never suffered from salivation, whilst he is thoroughly affected by the poison as shown by the tremor. This fact, which has also been noticed in several instances by Kussmaul, as mentioned in his exhaustive work on the constitutional effects of mercury,(a) may be accounted for in this case by the patient having always been very carefully attentive to personal cleanliness, especially with regard to his mouth and teeth. He sometimes feels pains in his limbs like rheumatism, shifting from one place to another; at present he is free from headache, his appetite is very good, and the only symptom is the tremor, which also frequently disturbs his sleep. There is sometimes a feeling of numbness along the outer side of his feet, and also occasionally on the ulnar side of his hands. The electric contractility of different muscles examined proved perfect, but the current produces the most violent reflex action all over the body, showing the great irritability of the patient, the same being the case when his skin is even slightly pricked with a needle. The patient has never been syphilitic, or else he might, perhaps, present some of the symptoms which by some anti-mercurialists have been ascribed to the use of mercury. Although there cannot be any doubt of his being thoroughly impregnated with that metal, he would be a very poor specimen indeed for any one to demonstrate on him the alleged syphilis-like effects of mercury. But the case appears further instructive in showing that with proper precautions a healthy man may work for years in this unhealthy trade, and even in the most unhealthy part of it—namely, the distillation of the mercury out of the refuse of the work, which the patient had done for some time on the Continent—without suffering any ill effects, but that neglect in the principal sanitary arrangements may soon bring on the worst features of constitutional poisoning. In the Continental cities (Mannheim, Liège, Brussels, Paris) he had only worked five or six hours a day in localities where a thorough ventilation was enforced; whereas here he had to work above ten hours in a room which, although large and high, and well adapted for ventilation by opposite windows, was still, he informs us, not sufficiently ventilated, as the windows were purposely kept closed in order to keep out the damp air, which would spoil the glasses. The room is also heated by a stove, besides an open fireplace. He is put on a liberal diet, and takes iodide of potassium.

Another case of great interest we saw in the same ward (bed 79), also under Dr. Weber's care. The patient, 34 years

(a) A. Kussmaul, "Untersuchungen über den constitutionellen Mercurialismus," etc. Würzburg. 1861. P. 243.

of age, had been a sailor for twenty years, and had never been ill in his life. About four months ago, he first noticed a weakness and pain in his left leg, and to a smaller degree also in the right one, as well as a difficulty in passing water. Double vision followed, and the symptoms gradually increased. When admitted into the Hospital on December 20, it was found that the double vision was produced by slight paresis of the left oculo-motor nerve, the branches principally affected being that of the levator palpebræ, of the rectus internus and superior, and in a very slight degree of the sphincter pupillæ. On a recent examination, double images were also found, referable to the left abducens, although in the movement of the eye outwards no weakness can be noticed. The vision is perfect in both eyes, and the ophthalmoscope does not reveal any pathological difference in the fundus of either of the eyes. There is also a very slight impairment of the left facial nerve. The tongue does not show any deviation, but the uvula slightly points to the right. The degree of paresis in the different nerves varies somewhat, so that the ptosis, for instance, is more marked one day than on another. There was never any headache or any other brain symptom. An improvement has taken place since the patient has been in the Hospital, especially with regard to the function of the bladder, which in the beginning had to be emptied with the catheter. The pain in his legs, especially the left one, still continues at night. The arms are, and have, according to the statement of the patient, been always, quite unaffected. Very recently the heart's action has been noticed to be rather frequent, without increase of the temperature of the body. He took first the iodide of potassium, and recently Dr. Weber has replaced this by the bichloride of mercury. Dr. Weber is inclined to think that the seat of the lesion in this case is in the left side of the upper part of the spinal cord, just below the medulla oblongata; and in support of this view he related a very similar case which had been under his observation some years ago. That case, in which probably an injury to the spine from a fall was the primary cause, also commenced with paresis of one oculo-motor nerve and of the lower extremity of the same side, together with impotence and paresis of the bladder. In the course of two years the paralytic symptoms gradually extended to the other side and to the arms; complete incontinence of urine followed, and in the period preceding his death the patient had frequent vomiting. The post-mortem examination showed the upper part of the cervical portion of the cord softened, the softening process not extending upwards beyond the end of the calamus scriptorius, no granule cells or other signs of inflammation being found in the medulla oblongata, whilst they were very abundant immediately below in the softened parts.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0

Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.

Post-office Orders and Drafts on Army or Navy Agents, should be made in favour of Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . .	4s. 6d.	A Column	£2 12s. 0d.
Every additional line .	0s. 6d.	A Page	5 0s. 0d.

Medical Times and Gazette.

SATURDAY, MARCH 2, 1867.

PUBLIC DISPENSARIES.

The Metropolitan Poor Bill contains nine sections (37 to 45) embodying provision for the Medical relief of the out-door poor. Clause 37 enables the Poor-law Board to direct the guardians of a union or parish in the metropolis to provide Dispensaries, which are to be constructed and furnished in accordance with the regulations of the Board, power being given to the guardians to borrow any requisite funds, as in the case of building a Workhouse. Clauses 38—40 direct the appointment of Dispensary committees of management to be elected by the guardians from among themselves and from among the ratepayers of the union or parish assessed to the poor-rate on an annual rateable value of not less than £100. Clause 41 enacts that, in addition to Dispensaries, proper places shall be provided as consulting-rooms, where the Medical officers of the union or parish may see such of the sick poor as attend there for advice, and where the meetings of the Dispensary committees may be held. Clause 42 directs the Dispensary committees to appoint proper persons to be dispensers of medicine at the Dispensaries, and such other officers and servants as may be necessary, the number, duties, and salaries of the Dispensary staff to be fixed by the Poor-law Board. Clause 43 directs that proper medicines and Medical and Surgical appliances shall be provided by the guardians; the medicines, etc., to be dispensed to such poor in receipt of relief as require the same, on the prescription or written direction of the District Medical Officer, subject to the regulations of the Poor-law Board. Clause 44 provides for the appointment of District Medical officers, and the continuance of those at present in office. Clause 45 enables the Poor-law Board to modify existing contracts with District Medical Officers, and to vary the limits of districts.

These provisions agree in the main very closely with those of the Irish Dispensaries Act of 1851 (14 and 15 Vict., c. 68), the working of which has been recently reported on by Mr. Lambert, one of the English Poor-law Inspectors, for the information of the President.

In Ireland the persons empowered to order Medical relief are (1) the members of the Dispensary Committee, (2) the relieving officers, and (3) the wardens of the district. The order is given by ticket, and according as a red or black ticket is presented to the Medical Officer the applicant obtains advice at the Dispensary or at his own residence. Every application, and a copy of each prescription, are registered in books kept for that purpose. Applicants are required to provide bottles or other vessels for their medicines, and verbal directions are ordinarily given with the medicines, unless they are poisonous or intended for external application, in which cases proper labels are affixed. The Dispensary staff consists of two or three Medical Officers and a Dispenser (duly certificated as an Apothecary), who, as a rule, resides on the premises. The Medical Officers attend the Dispensary at certain fixed hours every morning, and afterwards visit those of the sick poor who need attendance at their own homes. The Dispensers are required to compound prescriptions brought to them at any hour of the day or night. The Dispensaries are also used as stations for vaccination on certain specified days in every week. The salaries of the Medical officers rarely exceed £100 a year, exclusive of vaccination fees, and no extra fees are allowed for difficult operations. The resident Apothecaries receive from £70 to £100 a year in salary, but to this there is a substantial addition in the value of their living apartments on the premises.

With regard to the operation of the Dispensary Act in Ireland, Mr. Lambert states that the Chief Commissioner and the Irish Poor-law Inspectors are unanimously of opinion that it has proved to be universally beneficial. The only blot in the system is the extreme facility with which the tickets for Medical relief are obtainable from the members of the Dispensary Committee. If these commit or connive at fraud, very great abuses are possible, and some limitation of the power of giving orders becomes necessary. Mr. Lambert warmly recommends the system to the President for application in the metropolitan district, and he points out that it insures Medical aid to the destitute sick, whether confined to their houses or otherwise, affords facilities for vaccination, and provides an organisation always ready and capable of expan-

sion to meet any outbreak of epidemic disease, whilst at the same time it is calculated to prevent disease becoming epidemic by early treatment.

It must be admitted that these are advantages which are worth an attempt to obtain; the wonder is that no statesman has sooner discovered that a system which was working so well in one part of this realm might be equally efficacious in dealing with the congregated poverty and disease under which thousands of our hapless fellow-citizens succumb every year. Mr. Hardy now proposes to make the experiment, and we see no reason why it should not be successful. His Bill does not explicitly define the *modus operandi* of dispensary relief; it is not stated, for instance, whether the Medical Officers are to attend in certain cases the sick poor at their own homes, or whether the applicant must personally attend at the Dispensary—an alternative provision which seems to us very desirable. It may have been intended to leave all details to be dealt with by regulation of the Poor-law Board, but the House of Commons should have an opportunity of expressing an opinion on the general principles involved in giving effect to the clauses of the Bill. Mr. Hardy cannot do better than follow the Irish model as far as practicable, except in the matter of remuneration to the Medical Officers. £100 a year (putting less than that out of the question) is not enough to secure the services of a high-class Medical Practitioner, who is, moreover, expected to perform "difficult operations" without additional fees. The truest economy in every way will be to get the best men possible, and pay them liberally for their work.

Of course the Dispensary system admits of flagrant abuse, as do many other things which are in themselves of inestimable value. We must balance the gain with the loss, and, after allowing for inevitable imposition, we believe there will result to the profit of humanity a sum total of sickness alleviated, disease prevented, and misery comforted, that will gladden the hearts of the celestial beings who are said to mourn over the sorrows of mankind, and will do much to take away from us a national reproach.

INFLUENCE OF MARRIAGE ON HEALTH.

We have lately devoted some space in this journal to an examination of what we hold to be aberrations of the sexual instinct, and we endeavoured to point a moral from the illustrations which our subject afforded, in support of the doctrine that marriage is a condition eminently desirable, from social, moral, and physical considerations; and we venture to hope that our views on this matter will be assented to by all thoughtful and right-minded men. But we should not have been justified in carrying our propositions to the extent of asserting that, as a corollary from our reasoning, marriage of itself had invariably an influence so potently beneficial upon human life as to be unaffected by any other circumstances. We never dreamt of supposing, for instance, that marriage could be regarded as a specific for rejuvenating weak and unhealthy men. Yet it would seem that this notion is entertained by Dr. Stark, the Statistical Reporter for the Registrar-General of Scotland, whose ninth annual report, just issued, contains some inferences about the effect of marriage on the death-rate of the male sex, which (as very ably pointed out by a correspondent in last week's impression) are, as we believe, fallacious. Dr. Stark divides the male population of Scotland, aged 20 years and upwards, into two categories—the married (including widowers), and the unmarried; and, by the aid of the Census Returns of 1861, he estimates their ages in quinquennial groups, as he imagines them to be existing in 1863. Then, applying the ascertained deaths of single and married men at corresponding ages to the estimated numbers living, a rate of mortality is deduced, which shows that between the ages of 20—25 the bachelor death-rate is to that of married men in the ratio of 12 to 6; at 25—30, of 14 to 9; at 30—35, of 15 to 9; at 35—40, of 16 to 11—the excess on the one side diminishing with age, until in advanced life the bachelors have the best of the comparison. "It thus appears," says Dr. Stark, "that the influence of marriage on the mortality of the male sex, instead of being inappreciable, as generally assumed, is of the most potent kind. In fact, it is thus proved *that bachelorhood is more destructive to life* than the most unwholesome trades, or than residence in an unhealthy house or district, where there has never been the most distant attempt at sanitary improvements of any kind." This thesis is so startling and so uncompromising that we are led to ask, in all seriousness, if Dr. Stark has any facts to support it beyond those he has adduced? He censures those who have compared the mortality of soldiers with that of the civil male population at corresponding ages, because the conditions of the comparison are, he says, inequitable. Has Dr. Stark really undertaken the great labour of so classifying the Scottish population as that he has the means of comparing the mortality of bachelors and married men in different trades and localities under strictly similar conditions? If he has not—and we confess to being sceptical on the point—his assertion carries no weight whatever, and adds another to the already abundant crop of "fallacies of the faculty"—of statisticians. The sequel to Dr. Stark's comparison of the death-rate of the two classes is, that married men live longer than bachelors; thus (speaking to the text), supposing equal numbers to be living at the age of 25, the married section would, on an average, live 12 years longer than the single. As our correspondent of last week pointed out, the legitimate deduction conveyed—positively by Dr. Stark's own words, and inferentially from the premises, as we understand them—is, that as married men are found to live longer than bachelors, *ergo*, marriage lengthens the life of the male. But is this so? We much fear that plenty of instances could be brought forward to qualify such a doctrine. The suppression of a physiological function is, no doubt, generally prejudicial to health, but, on the other hand, its free action may, and does in some cases, facilitate the development of constitutional infirmity. In a very excellent paper read before the Social Science Association, in 1858, by Dr. Farr, on the "Influence of Marriage on the Mortality of the French People," mention is made of Deparcieux, who, in the middle of the last century, investigated the relative mortality of monks and nuns in France, and of the Tontine annuitants (consisting partly of married and partly of unmarried persons). Between the ages 20—40 the mortality of the monks and nuns was lower than that of the annuitants; after the age of 40 the annuitants had the lowest death-rate. Dr. Farr's tables show that the mortality of husbands and wives under 20 was excessive, that bachelors died faster than husbands, that after 25 the spinsters died faster than the wives, and that the widowed died more rapidly than either of the other classes; the conclusion, therefore, was, that, on the whole, "Marriage is a healthy estate, and the single individual is more likely to be wrecked on his voyage than the lives joined together in matrimony." But then, the considerations necessary to guard against erroneous assumptions are very properly stated. Thus, Dr. Farr points out that the element of *selection* reduces to some extent the mortality of the married; that is to say, the better specimens of the human race, as a rule, contract marriage, leaving the lowest, most unhealthy (either in mind or body), and most degraded in celibacy, whose natural death-rate is consequently augmented by vice to an unknown extent. Again, the unmarried include the greater number of the men of the army and navy, amongst whom syphilis and its attendant evils entail great waste of life.

We can have no safe guide wherewith to estimate the precise effect of marriage in its physiological influence on human life until a comparison can be instituted between the wedded and celibate states under such conditions of equality as certainly

have never yet been compassed. Any attempt to measure by a scale the relative potency of an influence with so many unknown factors in the problem as exist at present, must of necessity end in failure; the results are complicated with dissimilar elements, which put anything but the roughest approximation—or, more correctly, guess-work—out of the question. For this reason, we think that Dr. Stark has assumed much more than he was warranted in doing from the limited facts before him, and we would counsel him that official reports should be as free from mere speculation as possible, if they are to preserve the high authority with which they ought always to speak.

We believe in marriage as a divinely-appointed instrument for purifying and regenerating mankind, but we, like our correspondent, do not believe that marriage will convert "the scrofulous, phthisical, etiolated, stunted young men of our manufacturing towns into robust and viable men;" and we hope that Dr. Stark does not really believe so either. At any rate, if he has read a leading article upon his marriage statistics which appeared in the *Daily Telegraph* of Tuesday last, we cannot but think he will see that he has ridden his hobby a little harder than was prudent.

THE NAVAL MEDICAL SERVICE.

The public is anticipating so many and such important political and social changes that it gives little heed to small measures. What with Reform, the amendment of the Poor-law administration, the reorganisation of the Army, and so on, the state of our naval and military Medical services comes to be regarded as a very insignificant affair. It is anything but insignificant, however, to those whose interests are directly concerned, and we much fear that the maintenance of an efficient naval Medical service may prove in the end anything but an insignificant difficulty for the Admiralty to overcome.

Sir John Pakington and General Peel had, on other occasions, proved themselves so friendly to the interests of our Profession that we looked forward to their accession to office as the time when things would be adjusted and put on a satisfactory footing.

We wish we could add that the Board of Admiralty had attained these happy ends by the publication of its late Circular. Our readers have doubtless read for themselves the copy of that document we published in our last number. It was accompanied by no comments, because we desired to avoid the appearance of precipitancy in forming an unfavourable judgment. We are not actuated by a captious, fault-finding spirit. We really desire to see the end of all the present dissatisfaction, and a large—in the place of the present ludicrously small—number of Medical candidates for the Navy, and it is because we desire this that we urge the authorities to make the concessions that are needed. It is in this way, and this way only, that the country can maintain the efficiency of an important branch of our public service. It is patent that no such scheme as subsidising needy students will do it. There is now a golden opportunity before the Admiralty. It is not much, after all, that is required; certainly not more than the nation would willingly concede in order to secure a really good class of Medical men for our sailors.

The Circular of 1867 is an amended copy of that issued in July last, which it is intended to supersede. The alterations and improvements are very few, as any one may readily perceive on comparing them. We will now venture on a few brief comments.

Imprimis, the question occurs—What can have been the motive for dismissing all reference to "honorary distinctions?" The Circular of 1859 contained a clause recognising the right of the naval Medical officer to all the honours and distinctions granted to his Professional brother in the army. We know that it is almost impossible to make these matters the subject of regulation. Those army Medical officers who secured such distinctions did so entirely on the strength of the recommendations and despatches of combatant officers, through the channel of the Horse Guards, and they have no cause of complaint on this ground. It is, of course, quite open to the executive officers in the navy to act in the same fair and generous spirit. Still, as the subject of honorary distinctions was specially noted in the Circular of 1859, and omitted in those of 1866 and 1867, there may now be some special intention in the opposite way! A man of great professional talent and ambition cannot expect to make such an income in the public service as he would do out of it, if his success were equal to his ability. But we want a good sprinkling of such men in those services, and to obtain them the authorities must hold out these temptations.

The increase of allowances is undoubtedly a step in the right direction; but we are told these allowances still fall far below those granted to other officers of relative rank. Compare the commuted allowance of a Rear-Admiral-Superintendent with that of the Medical head of the largest naval Hospital in Britain, and the contrast is indeed a striking one. Of course it may be said that the former has a great official position to maintain, and he has to entertain largely, etc. We regard, however, the retirement clauses as the main, the most grievous defect of the Circular. We think that retirement at twenty years on the ordinary rate of half-pay might be conceded; but, conceded or not, retirement at twenty-five years ought to be made optional, as has hitherto been the case. Unless the half-pay scale be adopted, men in bad health must suffer.

After twenty-six years' service, two shillings is added to the pay of a Staff-Surgeon. This also is in the right direction, but why make it 2s. instead of 3s. per diem, as in the previous four years? If a man's services are worth having at all after twenty-five years' service, they are surely worth the 30s.

There remain a few other matters; let it suffice, however, that the Circular, in its present form, does not meet the requirements of the naval Medical service, and we think that time will prove to the authorities the truth of what we say.

THE WEEK.

H.R.H. THE PRINCESS OF WALES.

We are glad to state that her Royal Highness is steadily, though slowly, proceeding towards recovery. There was some distension of the right knee-joint on Monday, in consequence of which Professor Paget's opinion was obtained. Otherwise the illustrious patient is going on well, and if she so continue no more bulletins will be issued.

Marlborough House, February 26, 11 a.m.

The general condition of her Royal Highness the Princess of Wales continues to improve daily. The local pain has diminished during the last two or three days.

The infant Princess is well.

Another bulletin will be issued in the afternoon, on Thursday, the 28th inst.

Arthur Farre, M.D.
James Paget.
William Jenner, M.D.
E. H. Sieveking, M.D.

METROPOLITAN POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

It is a singular political paradox that whilst politicians are contending for the privilege of giving to the uneducated masses such a reform, so called, as shall enable them to control the government of the British empire, the same men vie with each other in the effort to take from the resident guardians of parishes the management of their own poor. "Thank God we have a chance of being no longer at the mercy of the guardians!" Such is the unanimous aspiration of all Poor-law Medical Officers; hence it will be believed that they hail Mr. Hardy's Metropolitan Poor Bill as the greatest possible boon. It was suggested that in addition to small-pox, fever, imbecility, and childhood, two other sets of patients

might well have been provided for by asylums, apart from the workhouses. The syphilitic are one, the casual and vagrant the other. Both are the greatest possible tax and incubus on workhouses; both require a special administration; and both are not so much parochial or local as metropolitan in their character.

MEDICAL COUNCIL.

At a meeting of the Executive Committee, held on the 15th inst., it was resolved to take steps, in conjunction with Mr. Walpole, to get the Medical Act Amendment Bill introduced into the House of Lords by some member of the Government having a seat in that House.

THE ARMY ESTIMATES.

A glance at the army estimates for 1867-68 enables us to state that the Government has included, under the head of Hospital establishment, services, and supplies, an estimate for an increase of pay to the members of the Army Medical Department. The increase has been mainly in the direction recommended by the late Committee at the Admiralty, and is, indeed, a slight improvement on those recommendations.

APPLICANTS FOR GREENWICH HOSPITAL.

A strong effort is being made to secure some of the wards of this noble institution, left vacant by the recent exodus, for the sick seamen of the mercantile marine and the workmen living in the vicinity of Greenwich, a large proportion of whom are occupied in one or other of the departments of shipbuilding. The *Kentish Mercury* contains a strong appeal for these, and we cannot do less than reiterate the claim. It is surely a suicidal policy to allow our seamen and skilled workmen, the backbone of our Navy, to perish for lack of what would cost the country nothing, and would be not only an ineffable boon to suffering humanity, to take it in the abstract, but which would be of immense importance to our position as a naval power. In such a case as this, with the wards untenanted and sick men without a place of refuge, we cannot think that Government would hesitate for a moment in doing its utmost to forward a measure which is quite as much for the good of the nation at large as for those more immediately concerned in its success. The *Dreadnought* has done good service in her day, but now, when there is an opportunity of enlarging the space for the accommodation of sick seamen, we can only hope that it will be taken advantage of as soon as the necessary arrangements can be effected. Further, as a school for naval diseases, the *Dreadnought* has long been unrivalled. We have seen what has been done at Netley; why should not the Admiralty take advantage of the opportunity offered them for instituting a similar place of training for Naval Medical officers at Greenwich, in which a far more extended experience could be gained than in the sister institution?

FEMALE CANDIDATES AT APOTHECARIES' HALL.

We are glad to state that the Court of Examiners of the Apothecaries' Society have announced their intention to insist upon the public delivery, before the general classes of recognised Medical Schools, of all lectures required by their curriculum. This is necessary, as we showed last week, on the broad principle that, whilst the State by its enactments protects a Profession and admits to the practice of that Profession through the medium of specially chartered and privileged licensing bodies, the latter are bound to demand every possible guarantee that the education of candidates shall come up to a certain standard. The most important guarantee that can be given is the utmost publicity in the conduct of Medical education, and on this broad ground we are glad to see the principle insisted on by a resolution of the Court. How far this resolution will exclude female candidates for the licence from forcing themselves into the examination room we cannot say, but any lady that does find herself admitted must have brought certificates of having attended entire courses of anatomical lectures and dissections delivered before the general class of a recognised Medical School. We hope for the sake of their reputations that our enthusiastic countrywomen, who are so much enamoured with the idea of invading this special department of man's work, will pause before they attempt to force their way through this barrier. At least we do not think that the female possessor of such a certificate would be approved by the most lax of our sex, and certainly she would not be countenanced by her own.

SUCCESSFUL CANDIDATES FOR THE INDIAN MEDICAL SERVICE.

The Military Secretary, India Office, presents his compliments to the editor of the *Medical Times and Gazette*, and begs to enclose a list of the candidates for her Majesty's Indian Medical service who were successful at the competitive examination at Chelsea in August, 1866, and who have undergone a course of instruction at the Army Medical School, together with the total number of marks obtained at the examinations at Chelsea and at Netley.

India Office, February 26.

Indian Medical Service—Maximum 6900.

Name.	Studied at	Total number of marks.
E. F. Brockman	London	5420
W. D. Stewart	Edinburgh	5028
O. C. Dutt	Do.	4420
W. G. May	Do.	4172
H. D. Compigné	Do.	4113
F. Metcalfe	London	4080
J. F. Sargent	Do.	3962
T. F. Mullen	Ireland	3922
J. B. Gaffney	Do.	3718
R. H. Curran	Do.	3695
H. Hyde	Do.	3505
C. J. M'Kenna	Edinburgh	3488
J. W. Strong	Do.	3293
W. Nolan	Dublin	3236
J. J. Wood	Edinburgh	3153
W. Finden	Do.	3048
A. M'M. Paterson	Do.	3000
A. R. Cowell	Ireland	2798
M. Heffernan	Edinburgh	2670
J. Simpson	Aberdeen	2543
S. O'B. Banks	Ireland	2395

CHARGE AGAINST A POOR-LAW SURGEON.

The Guildford Board of Guardians have just suspended Dr. Tofts, the Medical Officer of the Woking District, in order that an inquiry into his conduct in a recent case may be instituted by the Poor-law Board. In reading the evidence on which the Guardians arrived at this conclusion, we feel convinced that their decision has been unnecessarily harsh. The simple facts are, that on Friday, January 25, at six o'clock in the evening, Dr. Tofts received an order from the relieving officer to visit a man named Collyer, living two miles off. The order was not marked "urgent," and there was no note on it of the nature of the case. Dr. Tofts therefore determined to visit the patient on the following morning. At eight o'clock on the same evening Collyer's daughter called on Dr. Tofts, and stated that her father had received a severe injury by falling from the shaft of a cart. Dr. Tofts immediately sent by the girl such medicines and appliances as he thought necessary, and himself followed the messenger and saw the patient at nine o'clock. On the fourth day from the accident Collyer died from rupture of the bladder. Now we really do not see that at any point of the history Dr. Tofts acted otherwise than as a zealous and conscientious Medical officer. If the case of illness require the immediate attendance of the Poor-law Surgeon, it is the duty of the relieving

officer to mark the order; and, if there be any blame due in the case, it is due to the relieving officer. Immediately Dr. Tofts was informed of the true nature of the illness, he attended at once. Had the relieving officer done his duty as well as Dr. Tofts, it is evident that the short delay for which the Guardians have suspended the latter would not have occurred.

THE PORTSEA ISLAND BOARD OF GUARDIANS AND THEIR MEDICAL OFFICERS.

After a considerable discussion, the Portsea Island Board of Guardians have tardily and ungraciously fulfilled their promise by voting £150 to be divided amongst the six Medical officers of their union, for extra service during the cholera epidemic. It will be remembered that the first resolution of the Board on the subject was to break faith with the Medical officers, and to refuse them the reward which had been distinctly promised to them. On this outrageous decision being published, Mr. Goold and Mr. Allnutt resigned. Mr. Allnutt has since withdrawn his resignation, and, we believe, is reinstated, but we regret to see that two Medical men offered themselves for the vacant posts, and that one of them has been elected in Mr. Goold's place. We should have thought that *esprit de corps* would have prevented any of our Profession from offering to replace the Medical officers who had been thus used. Proper treatment for Poor-law Medical officers will be as far distant as ever whilst Boards of Guardians find that it matters not how they treat the Poor-law Surgeon, as, when his patience and long-suffering are exhausted, they can easily get another.

FROM ABROAD.—HOMŒOPATHISTS *v.* HOMŒOPATHY—REPORT OF THE SURGEON-GENERAL OF THE UNITED STATES ARMY—VACCINAL SYPHILIS.

From a recent discussion which took place at the Société Médicale Homéopathique de France, it would seem that some of the leading homœopathists are abandoning not only the practice of infinitesimal doses (which, indeed, they have pretty generally done long since), but even their theoretical defence. M. Curie, son to the well-known homœopathist of that name, having made the declaration in the Society that for his part he did not believe in the action of infinitesimal doses—or, at the very least, had his doubts respecting them—M. Léon Simon asked in some dismay, "What, then, is to become of homœopathic tradition? Are we to burn the books of our predecessors, and close our pharmacies? Are we to admit that we have been hitherto either charlatans or dupes? This is no question of mere doctrine, but one of fact, for we cannot have been following an erroneous course for sixty years without exhibiting complicity or stupidity." "Not so," replies M. Curie, "I can very well imagine the properties which may be developed in medicinal agents by infinitesimising their division, but practically I have not met with them, and I attribute the good which results from their employment to the prevention of the perturbating action of allopathic procedures and leaving nature to her unimpeded action. What proof have you that your doses have effected cures, in the utter absence there is of all means of exact clinical comparison in the cases under your treatment?" M. Cretin observed that M. Curie did not deny the virtue of these infinitesimal doses, but remained under the influence of scientific doubt, ready to give way to conviction on the production of exact facts. For his own part, if, while accepting the law of *similia similibus*, he is to be expected to embrace all the contradictory opinions of Hahnemann and his followers, he must decline continuing to be a member of the Society. M. Jousset observed that, in fact, homœopathy has entered on a new phase, the phase of friendly criticism. "In fact, if we look at our Materia Medica, we find a diffused heap of numberless symptoms, which are frequently, contradictory or puerile, while the clinical facts that have been published in numerous instances are utterly destitute of the basis derived from diagnosis, and exhibit the grossest ignorance. The comparison of the symptoms derived from the Materia Medica and from poisonous substances is sufficient, however, to convince us that Hahnemann's observations are based on truth; while many clinical observations are due to skilful and honourable men. Then, again, our own daily practice convinces us, however difficult it may be to convey that conviction to others, that the success following the employment of infinitesimal doses cannot be explained as mere coincidences." M. Cretin commented on the disreputable character of much of homœopathic literature, and on the impossibility of getting the curative agencies so abundantly boasted of in books demonstrated in practice.

From the report of the Surgeon-General of the United States army for the year ending July, 1866, which has just been published, we may extract a few facts:—The amount disbursed during the year for artificial limbs amounted to 198,199 dols. So numerous were the inventors and manufacturers of these that it became necessary, for the protection of both the Government and the soldier, to convene Medical boards of experienced officers to examine and test the efficacy of the various inventions. The models of twenty-three manufacturers were selected; but it required all the vigilance of the authorities to see that what had been contracted for had really been supplied, and to secure well-fitting limbs. During the years 1862-66 there have been supplied to maimed soldiers 3981 legs, 2240 arms, 9 feet, 55 hands, and 125 Surgical apparatus; and it is estimated that not more than 1000 limbs remain to be supplied. The average mean strength of white troops during the year was 100,133, and the proportion of deaths to cases treated was 1 to 52. The strength of the black troops was 53,541, with a mortality of 1 to 29 cases treated. There were in the Hospitals at the beginning of the year, or subsequently admitted, 64,438 patients, of whom only 97 remain under treatment. An immense amount of material in the shape of Hospital registers, mortuary returns, etc., has been amassed for future utilisation. The total number of Surgical cases classified and recorded is, "wounds, etc.," 133,952, and "operations" 28,438. The compilation of the Medical and Surgical history of the war is being actively pursued, and the first volume is in a state of forwardness. That admirable creation of Surgeon-General Hammond, the Army Medical Museum, is largely increasing, and is about to be transferred to a fire-proof building. In the Medical staff the following deaths have occurred from the commencement of the war to the present time—viz., killed in battle 29, and by accident 12; died of wounds, 10; in rebel prisons, 4; of yellow fever, 7; of cholera, 3; of other diseases, 271; making a total of 336. During the war 35 Medical officers were also wounded in battle. Of the gigantic character of the Medical supplies, some idea may be gained by the enumeration of the following articles:—Acid. sulph., 657,896 oz.; spir. æther. nit., 1,688,943 oz.; æther fortior, 987,687 oz.; chloroform, 1,588,066 oz.; copaiba, 1,292,129 oz.; tinct. ferri chlor., 690,682 oz.; morphiæ sulph., 29,828 oz.; opii pulv., 448,804 oz.; opii tinct., 901,467 oz.; pil. opii, 442,926 doz.; potass. iod., 514,064 oz.; pil. quin. sulph., 178,050 doz.; quin. sulph., 723,521 oz.; whisky, 2,430,785 thirty ounce bottles. Among the books supplied to the Medical Department and Army Surgeons there were—Gray's Anatomy, 3442 copies; Power's Arteries, 3895; Fownes's Chemistry, 1640; Wood and Bache's Dispensatory, 4850; Dalton's Physiology, 1412; Watson's Practice of Medicine, 3254; Bennett's Practice, 1542; Hartshorne's Principles of Medicine, 1237; Erichsen's Surgery, 5370; Smith's Surgery, 3251; Macleod's Surgical Notes, 905; Guthrie's Commentaries, 781; Stillé's Therapeutics, 1026; Longmore's Gun-shot Wounds, 1178; Toynbee's Diseases of the Ear, 575; Wilson's Diseases of the Skin, 476; Bumstead on Venereal Diseases, 7317; Woodward's Hospital Steward's Manual, 3239.

Some time since (*Medical Times and Gazette*, November 24), we adverted to the remarkable report made by MM. Depaul and Roger to the French Government on the outbreak of an epidemic of vaccinal syphilis among 62 infants, originating in some cases of vaccination performed by a midwife. At the last meeting of the Academy of Medicine, M. Briquet, believing that the statements made had not been sufficiently examined, reverted to the subject, casting some doubts upon the syphilitic character of the appearances observed. M. Depaul in reply, however, stated that there could be no doubt as to the reality of the occurrence, and that although he and M. Roger did not repair to the locality until three weeks after the accidents had arisen, these had been well observed by very competent Medical Practitioners; and that the appearances which they themselves witnessed were sufficiently characteristic.

PARLIAMENTARY. — METROPOLITAN POOR BILL — CRIMINAL LUNATICS BILL— THE SURGICAL, ANATOMICAL, BOTANICAL, AND CHEMICAL PROFESSORSHIPS IN THE UNIVERSITY OF DUBLIN.

On Thursday, February 21, on the order for the second reading of the Metropolitan Poor Bill,

Lord Enfield asked for further information as to the distinction to be drawn between those lunatics who would be removed to county asylums and those who would be removed to the contemplated asylums; and he also asked whether it was contemplated to utilise the present workhouses or to erect new buildings. With respect to the supply of medicines, there were, if he remembered rightly, only five unions at present which provided drugs at their own expense. If that practice were adopted more generally, it would, he had no doubt, have the most beneficial effect, both as regarded the poor and the Medical officers themselves. In conclusion, he earnestly trusted that a measure of this paramount importance would be pressed forward, not with undue haste, but with all possible despatch. The question was too important to brook delay. There might be other triumphs which might be won in the House, but the triumph of the right hon. gentleman, if he carried this Bill, over poverty, disease, misery, and affliction, would be one well worthy of the previous reputation he had won, and so far as his humble support was concerned he promised that he would give it most sincerely and cordially to the right hon. gentleman.

Various details of the Bill were criticised by Mr. Locke, Mr. Alderman Lawrence, Mr. Chambers, Mr. H. Lewis, Mr. Scourfield, Mr. Hibbert, and Mr. Alderman Salomons, in a spirit of general approval.

Mr. Villiers welcomed the Bill as an opportune advance towards a fairer system of rating and more efficient management of the poor. In vindicating his own administration of the Poor-law Board, he showed that rules and regulations had long since been laid down which, if attended to by the guardians, would have prevented those cases of neglect and abuse which had recently aroused public indignation. He argued in favour of an extension of the area of rating, showing how unfairly the present charge bore on certain classes of property, but was of opinion that the principle was hardly carried far enough in this Bill. He asked Mr. Hardy to explain why the scarlet-fever, small-pox, and lunatic patients only were to be placed on the general fund, while the other sick were retained on the local funds; and, while approving the establishment of Dispensaries as a substantial benefit, he thought it a capricious arrangement to place them on the general fund. He advocated strongly the enlargement of the powers of the Poor-law Board, and that it should be made completely responsible for the proper treatment of the poor.

Mr. Hardy promised to take into consideration the suggestions made, and, in replying in detail to various criticisms, he allowed that the Consolidated Orders of the Board constituted a valuable code for the management of the poor; but pointed out that the Board needed greater power to enforce them, not so much that guardians openly resisted them, but too many were in the habit of defeating them by dilatory and shuffling evasions. In answer to Mr. Villiers's objection that the principle of enlarging the area of rating was not carried far enough, he said he had been actuated by practical considerations alone, with a full foreknowledge that if he had proposed to equalise the rates throughout the whole metropolis, the Bill would have been met by a strenuous opposition, which would have been fatal to it. He intimated that he had in preparation a Bill for the more equitable assessment of the metropolis, which he would introduce if Mr. Hunt's general Bill for that purpose met with a favourable reception.

The Bill was then read a second time.

On Monday, Mr. Walpole, in moving the second reading of the Criminal Lunatics Bill, said its object was very important. There was at present no power to discharge from confinement the class of persons to whom it applied, when reported to be quite recovered, unless they were set completely free. But this measure proposed that, instead of simply discharging them out of prison without any conditions, the Crown should be enabled to impose conditions, so that they might or might not be subject to supervision as might be necessary.

The Bill was read a second time.

On Wednesday the Dublin University Professorships Bill, which throws open the Professorships of Anatomy and Surgery, Chemistry and Botany, in Trinity College, was read a second time.

THE BRITISH PHARMACOPŒIA, 1867.

Resuming our survey of the proposed Pharmacopœia of 1867, we notice among the Liniments that, for the former Linimentum Crotonis, a far more elegant preparation has been substituted, consisting of croton oil, cajeput oil, and rectified spirit; but for real efficacy still commend us to the old compound of croton oil with oil of turpentine. The Linimentum Iodi is also very properly changed; its strength is diminished by one-half; and to assimilate it to other liniments camphor is added. We find a useful alterative and deobstruent liniment has been added to the list, termed the Iodide of Potassium with Soap Liniment; it contains glycerine, and is flavoured with oil of lemon. Another newcomer is the Linimentum Sinapis Compositum, consisting of the volatile oil of mustard, ethereal extract of mezereon (also new), camphor, castor oil, and spirit; it will act as a stimulant or counter-irritant. Among all these preparations there are no indications of the quantity to be used; should, therefore, the Liniments of Aconite, Iodine, Soap, and Mustard be applied in like quantity? We cannot help thinking that the introduction of doses into the Pharmacopœia is a mistake, seeing that they involve therapeutical knowledge which it is no part of the duty of the Committee to impart. The difficulties in following out this plan are almost insuperable; and it is questionable whether the Committee would not do better by throwing the scheme overboard entirely than by retaining it, which they can only do at the cost of consistency. One thing it certainly shows—the great anxiety which has all along been manifested on the part of this Committee to satisfy the Profession at large. We have no doubt besides that giving the doses of these new preparations or compounds would do more to favour their introduction than half a dozen Acts of Parliament. It is therefore for the Committee to decide which considerations are paramount.

Turning to the Liquors, we find the old weak Solution of Acetate of Ammonia restored; and the preparation of 1864, which is also retained, is now termed Liquor Ammoniæ Acetatis Fortior; a Solution of Citrate of Ammonia is also introduced. It is used by fashionable Practitioners; but we are not aware of its possessing any special advantage over compounds of ammonia with other vegetable acids; they are all eliminated in the same state of combination. The Solution of Terchloride of Antimony is now termed Liquor Antimonii Chloridi, the prefix *ter* having been dropped. We also find a Liquor Arsenici Hydrochloricus—an imitation of De Valingen's—of the same strength as Fowler's Solution, being about three times the strength of the old Liq. Arsenici Chloridi. By the bye, speaking of Fowler's Solution reminds us of a very convenient feature in the present volume, to which we have not previously referred. In any case where a medicine goes by more than one name, these are given under the head of

Synonyms, so that mistakes are far less likely to happen. Another new preparation, and one possessing considerable merit, is a Solution of Bismuth with Citrate of Ammonia.

The next change we notice is one we must strongly condemn, viz., a substitution of the term Liquor for Linimentum Cantharidis. The preparation is not intended for internal use, and its exhibition in that way would certainly be attended with dangerous consequences; but the risk of employing it for the Tincture, which was reduced to a minimum by calling it a Liniment, is very greatly increased by changing its name to Liquor.

A new and welcome preparation is a simple solution of Perchloride of Iron of the same strength as the Tincture, the Liquor of 1864 being now distinguished by the affix Fortior. A solution of the Sulphate is introduced, but only for preparing some of the other compounds of iron; its tendency to precipitate the oxide or a mixture of that with the sulphate renders it inapplicable for the general purposes of prescribing. We find directions for making Lithia, Potash, and Soda Waters, these preparations differing from those usually sold in containing a greater proportion of alkali. A valuable preparation, long ago introduced into practice, now first becomes officinal—we mean Fluid Magnesia, or, as it is called, Liquor Magnesiæ Carbonatis. The Liquor Morphiæ Acetatis of 1851 is restored to its place, but, as with the solution of the Hydrochlorate of 1864, is shorn of half its strength, reducing it to about the same potency as laudanum. A solution of Chloride of Zinc is also introduced, which, considering the difficulty of keeping the solid substance dry, will probably be found very convenient.

The proportions used in preparing the compound iron mixture are slightly altered from those of 1864, but we do not notice among its synonyms two it very frequently goes by—the Green, or Griffith's Mixture.

The new Mistura Gentianæ Composita is the Compound Infusion of 1864, and not the old London preparation, which, if we mistake not, was regretfully, because vainly, looked for in the last edition of the Pharmacopœia. A very useful addition in the present volume is a prescription for a black draught (Mistura Sennæ Composita). Formerly every one's bowels were at the mercy of the chemist's boy, who supplied him with the article which went in their establishment by that name. Brandy mixture is restored to its place. With regard to its composition, we have heard great complaints of the cinnamon water used; why not substitute spirit of nutmeg, which is usually more grateful to the sick palate? and again, why not give rather more nourishment along with the large quantity of brandy? We should also prefer ordering the whole egg, well beaten, to the yolk alone. Acetate of Morphia is back again, we cannot say why. Nobody denies that it is a very bad preparation, of extremely variable strength, and very liable to spoil by keeping. If another was wanted along with the Hydrochlorate, would not the Sulphate so much used in America—and a capital salt it is—have been better than the uncertain Acetate? In turning over the leaves of the Pharmacopœia, a slight, but valuable alteration is noticeable. In the edition of 1864 no figures were used in denoting quantity; in the present they are, and certainly the facility of reference in the latter case is greater than would readily be imagined, except one sit down to compare the two page by page.

Among the Oils we now find the so-called Adeps Myristicæ, known by the name of Oleum Myristicæ *expressum*. We also observe that useful substance, Cacao Butter (Oleum Theobromæ), introduced.

Among Pills we find a good one of Aloes with Sulphate of Iron (an old Edin. preparation); we fear, however, that the sulphate is apt to change. Compound Conium Pill (Lond.) is restored, as is that of Ipecacuan with Squills, and under the old name of Compound Soap Pill we find the Pilula Opii of 1864. Iodide of Lead is restored to its place. We observe a substance termed in the Pharmacopœia the Yellow Prussiate of Potash, which among chemists is usually known as Ferrocyanide of Potassium, and was so known in the edition of 1864. We cannot say that the present alteration of nomenclature is an improvement.

The old Aromatic Powder, now Compound Cinnamon Powder, is simplified: it now consists of cinnamon, cardamoms, and ginger, but the Aromatic Powder of Chalk is unchanged. Dover's Powder is again termed Pulvis Ipecacuanhæ Compositus, and we find a preparation called Compound Powder of Opium, which contains ingredients very similar to the dry ones of the old Confectio Opii. Pyrethrum is restored, but we cannot speak highly of its merits. Rhamni Succus is also reinstated in its place. Rochelle Salts in the new volume go by the name of Tartarated Soda, which is certainly shorter than its former appellation. We also observe a preparation similar to the so-called Citrate of Magnesia, the Effervescent Citro-Tartrate of Soda; it will be found very useful as a vehicle for more potent remedies.

RÉSUMÉ OF THE GULSTONIAN LECTURES.

By REGINALD SOUTHEY, M.D. Oxon., F.R.C.P.,
late Radcliffe Travelling Fellow.

Dr. Southey first pointed out that the original meaning of the word tubercle was simply a swelling, but that the term had gradually come to be applied to one particular kind of swelling, and thence to the substance producing it, though this substance did not in all cases produce intumescence. This substance, although ordinarily reckoned to be of one kind, was not so in reality; for what was now called tubercle was by no means identical in all cases. With regard to its origin, some supposed it was an exudation; others a metamorphosis of pre-existing tissue; others still, of the Berlin school, supposed it was a direct growth, entirely a new formation; while a fourth school held that the substance was a precipitate of lymph. Dr. Southey said that the three different kinds of tubercle ordinarily recognised had far better be separated, seeing that their common name implied that they were of the same kind, which is very far from being the case. Carswell saw this difficulty, yet declared that neither colour nor form was useful in classifying the different kinds of tubercle.

Inquiring into why dissimilar forms ever came to be associated together, Dr. Southey referred first of all to the views of Rokitansky, who held that a dyscrasic condition of the fibrin of the blood was at the root of the formation of tubercle in all cases, and that this furnished the connecting link between the three kinds recognised by him. Lebert, again, held that all kinds of tubercle were characterised by one common feature—a peculiar kind of cell; to which, however, no such specific value can fairly be attached, since it is a product of late formation in the degenerative stage, and quite undistinguishable from an ordinary compound granular corpuscle. Virchow held that tubercle was a new growth, allied to connective tissue, whence it was derived and in which it was always found; and that it was characterised by no single element, but rather by the whole assemblage of these and the method of their association. According to this observer, there are two forms, the *cellular* and the *fibrous*, the latter of these differing from the former chiefly through the accident of its position. The cellular variety is best seen on free surfaces, where it is more or less oviform; the fibrous in dense structures. Abnormal growths continue longest in their stages of growth and decadence, normal in the stage of maturity. Tubercle can be affirmed to attain permanence in both the first and last of these states—the fibrous form in the embryonal, the cellular in the necrobiotic. Tubercle in its typical or cellular form is seen to greatest advantage in the fat cells of the omentum. It is heterologous by descent, proceeding by endogenous proliferation out of the connective, or rather some embryo connective-tissue cell, and altogether heterotopic. It is organised, but not highly; and as to its characters, these must not be read from the stage of detritus, in which they are altogether obliterated. The typical form of tubercle can usually be best seen

in tubercle of the meninges, where it seldom exceeds the size of a pin's head. As to form and shape, these would vary with situation, but it might be said that the fibrous form of Virchow corresponded with the infiltrated tubercle of the older writers. As to its origin the shedding of cells into the fluid bathing the new tumour had given rise to the idea that they originally existed there, and were subsequently deposited in the tissues. The tendency of tubercle, Dr. Southey said, was to fatty degeneration, but this differed from that usually seen affecting the organs of the body, the cells diminish in size, and the oil does not run into globules inside them. Moisture was deficient; hence the tendency was to produce a cheesy, friable mass.

With regard to the progress of tubercle, when superficial, as in the larynx, it was very rapid; after this came the bladder; and, strange to say, as moisture was the great thing necessary for the disintegration of tubercle, bone was third in the list. Dr. Southey then described in a most perspicuous manner the progress of tubercle in other organs of the body, as in the brain, the kidney, and the liver, and in its mixed form with ordinary hyperplastic fibrous tissue in the mesentery; he further showed how it never implicated cartilage except by secondary interference with its supply of nutrition. He finally insisted on the importance of not confounding phthisis with tuberculosis, which was too frequently done, and urged that the former disease was often due to other causes, as chronic pneumonia, scrofulous ulceration, and simple abscess only in a particular tissue. The whole lecture might be looked upon as an amplification of the views originally brought forward by Virchow, and will, we doubt not, tend to bring these into more general favour.

THE MEDICAL PROVIDENT SOCIETY.

The Medical Provident Society has been dissolved. The announcement will be received by the Profession with regret, but not with surprise. It has been pretty obvious for nearly two years past that the Society, though thoughtfully devised and sustained with great liberality and energy, was not in harmony with the wishes and wants of the Medical fraternity. At the final general meeting of the Society held on Tuesday week last (February 19) this fact was fully admitted by the members present, and their resolutions for closing the Society were carried unanimously.

At the meeting named the chairman, Dr. Richardson, in reviewing what he and his colleagues had done to secure success, stated his conviction that everything tending to lead to success had been faithfully carried out. The board of directors had consisted of the best and most active men in town and country; the rules of the Society, by the able hands of Mr. Clay, of Birmingham, had been drawn up with scrupulous care; the services of the Government Actuary, Mr. Finlaison, had been obtained in calculating the tables of payments and rates of claim by sick members; the Society had been legally protected by enrolment under the Friendly Societies Act; the working part had been entrusted to a most conscientious and industrious Secretary, Dr. Henry; the Institution had been freely advertised in the various journals and by circulars; the project had been so generously supported by donations from wealthy members of the Profession, that there was in hand a large sum to be redistributed; and, lastly, the working expenses had been kept down to the lowest possible amount, the labours of the directors having been purely honorary, and the expense, even of an office, having been avoided. The facts thus simply detailed, without a word of comment, confirm the inference that everything has indeed been tried to place the Society on a sound basis; and as it was further shown that thirty members—we mean, of course, subscribing members—was the largest number that had joined the Society, we feel the directors had no alternative but to dissolve. At great labour they have tested the wishes of the Profession, and although their results have been negative, the thanks of their brethren are not less deserving of hearty expression.

A testimonial is to be presented to Dr. Randall, Medical Officer of the St. Marylebone Workhouse, as well as to Mr. Fuller and to Mr. and Mrs. Douglas, the master and matron, in recognition of their services on the occasion of the late appalling accident in the Regent's-park. The presentation takes place on the evening of Friday, March 1, at the St. Marylebone Court House at 6 p.m., and Thomas Chambers, Esq., Q.C., M.P., will preside.

REVIEWS.

Lectures on Diseases of the Eye. Part I. Referring principally to those Affections requiring the Aid of the Ophthalmoscope for their Diagnosis. By N. C. Macnamara, Surgeon to the Calcutta Ophthalmic Hospital, Professor of Ophthalmic Medicine and Surgery, Medical College, Calcutta.

These are excellent lectures, which may be read with profit not only by students, but even by those who have already acquired considerable experience in Ophthalmic Medicine and Surgery. The latter, it is true, may not find much that is novel, but they will find much that is suggestive in the clearly expressed and thoughtful observations of a well-educated and observant Surgeon such as Professor Macnamara has proved himself to be. As the doctrines here taught are those which, in the main, are unanimously accepted in all the principal European schools, there is but little to criticise or remark upon. There are one or two points, however, which may be interesting to the general reader, and which should be impressed upon students who have the prospect of practising in tropical countries. The colour of the interior of the eye in the natives of India is quite different from that of Europeans. The crimson-orange hue reflected from the choroid of the latter is replaced in the former by a brownish-grey colour, which depends on the amount of pigment in the hexagonal and choroidal cells, and to a certain extent varies in intensity according to the depth of colour of the skin; the optic disc, also, is of a more decided pink than in the European eye. These peculiarities ought to be remembered, as opportunities of observing them in this country are comparatively rare.

Inherited syphilis occurs among the natives of India, and produces the same results on them as on Europeans. The notched teeth, interstitial keratitis, iritis, opacity of the lens, of the vitreous, etc., etc., so ably described by Mr. Hutchinson, have all been observed by Professor Macnamara.

The lecture devoted to cataract, a subject which has attracted so much attention of late years in this country and in Germany, will probably be considered by many as the most interesting of the series. Hitherto we have always been told by Indian Surgeons that the operation of extraction was not applicable to native patients, and reclination in the case of hard cataract has been generally resorted to. But this opinion is totally at variance with Professor Macnamara's experience; he has operated extensively by extraction, and claims the credit of having shown that it is not only a feasible proceeding, but that its results are much more favourable than those of reclination. The past failures he attributes in great measure to the unfavourable conditions under which the operation has been performed, which in some instances seem to have been such as to preclude all possibility of success, and partly also to the nature of the operation selected, which has always been the ordinary flap operation. An insidious form of cyclitis and diffuse suppuration of the cornea were of such frequent occurrence that this method of treatment was totally abandoned in favour of reclination. Professor Macnamara attributes his success, which, from the statistics he gives, appears to have been very remarkable, to his having adopted the operation of "linear extraction." By this he means the so-called Schuft's operation, with several very important modifications of his own, which are fully but, to our mind, not very clearly described. The mode, for instance, in which the iris is to be made to prolapse through the corneal section unwounded by dragging it with the point of the knife does not appear very obvious. When the second volume of these lectures appears, we trust Professor Macnamara will more fully explain this and several other details of the operation, and will also acquaint us with the results of his more extended experience of it, together with the apparent causes of failure in his unsuccessful cases.

Our space will not permit us to do more than to conclude as we began, by cordially recommending these lectures to the attention of our readers.

The Poor-law Medical Officers and Mr. Hardy's Bill.—A meeting of the Metropolitan Poor-law Medical Officers was held on Wednesday, at the Freemasons' Tavern, to consider the provisions of the Metropolitan Poor-law Bill. Dr. Rogers, of the Strand Union, presided. The meeting expressed its general approval of the Bill, with the exception of some points which might be considered in Committee. It was also resolved that an attempt should be made to secure Medical appointments for life, and not at the guardians' pleasure.

PROVINCIAL CORRESPONDENCE.

BIRMINGHAM.

February.

There is a scheme on foot for the introduction of the "free system" at the Queen's Hospital, but it is likely to meet with considerable opposition before being carried. It has been tried at the Children's Hospital here, and has succeeded admirably, and has more than satisfied the expectations of its warmest advocates.

The members of our Midland Medical Society met on the 30th of last month, at which Dr. Hill read an ably written paper on "Well Waters." He stated that he often detected in them large quantities of organic matters, common salt, and nitrates. This occurred more particularly in well waters of large towns. In one instance he found iron, the presence of which he attributed to the introduction of "acid pickle," a waste product of neighbouring iron manufactories. He traced the causation of diarrhœa to the consumption of these impure waters, which he also regarded as a cause of the generation and propagation of cholera and other kindred diseases. To show that this was not based on theory, but founded on fact, he instanced the cases of cholera which had originated from the drinking of the waters of the notorious Broad-street pump. A lively discussion took place, in which several members joined. Professor Anderson, of Queen's College, who was a visitor, being invited to give his opinions, remarked that the organic particles of well waters were not the sole efficient causes of cholera or diarrhœa. Something more was necessary for the production of these diseases, as was proved by the vast quantities of such waters constantly drunk by the inhabitants of Birmingham, who, as a rule, were free from intestinal affections. He also stated, in reference to the Broad-street pump, that its water must have differed materially in the character of its organic constituents from that which Dr. Hill had noticed. In reply to a question, Professor Anderson said that the presence of the nitrates and nitrites is to be ascribed to the existence of sewers and cesspools, or to collections of fæcal and urinous matters generally found in the vicinity of such wells.

The Medical Officer of Health of Oldbury was present, and contributed to the interest of the meeting by reading a paper on the important duties of a sanitary officer. On the whole, Dr. Hill's paper was highly suggestive, and contained much valuable information on this important branch of hygiene.

This town is infested with an obnoxious human parasite, of most ignoble ancestry, which preys upon the vitals of a too-enduring public, more especially upon the poorer classes. It belongs to the order Medical, species not satisfactorily known, but supposed to be very degraded. It may be at once recognised by its insufferable effrontery, and by its habitation being designated *Surgery*. (These fellows put "Surgery" because the law will not allow them to put "Surgeon." When these creatures attach themselves to an unsophisticated individual, especially one weak in intellect, they instantly shoot out their tentacles and pounce upon their prey, which they hold in a firm clutch until they have bled him, for bleeding is the sheet-anchor of their treatment. Apart from facetiousness, I speak of a class of men which is rapidly increasing, who practise medicine without a shadow of qualification, unless it is that of the knowledge they may have picked up during a short and discreditable stay at a Hospital or College, or they may have been Medical students who forfeited their claim to a degree by reckless conduct, dissipation, or sloth. Many members of the Profession, especially the juniors, animadvert with justice upon this serious evil—an evil which not only affects themselves individually, but which is ruinous to the health and pocket of the community at large; and they ask, can nothing be done to uproot it, and protect themselves from a palpable injustice and the poor from so gross and dangerous an imposture?

A new wing has lately been added to the General Hospital, which is now one of the finest institutions of the town. It confers incalculable benefit upon the working classes, and by them is held in high estimation. If it were in a less confined locality, and had spacious grounds, it would be the very *beau idéal* of a Hospital.

Some of your readers may be gratified to learn that our parish authorities are going to increase the number of their Medical staff by the addition of two more officers, at a salary of £150 a year each. This step they prefer to increasing the pay of the present Surgeons, who, I am informed, do not complain of being overworked, but rather of being underpaid. Is it not extraordinary that guardians proverbially object to pay their officers a handsome stipend? Can it be because they become, from the nature of their functions, so thoroughly imbued with the principles of pauperism that they are indifferent to its being extended?

Who is a Surgeon? This may seem a simple question, yet it would appear, from what has occurred in connexion with an obstetric appointment at the Lying-in Hospital, that it is not so easily answered as one might imagine.

An erroneous notion of what really constitutes a Surgeon has led one of the candidates for a vacant post at that institution into an expensive dilemma, and has occasioned his retirement from the contest. The laws of the Hospital expressly state that its officers shall not hold simultaneously certain appointments at certain Hospitals, which are duly named. Now, the candidate in question held one of these proscribed offices, but it was of an obstetric character, with the title of Surgeon-Accoucheur. He argued that "if, as my objectors say, I am Surgeon to the Hospital because I am Surgeon-Accoucheur to that institution, it then follows that the Surgeon-Dentist is equally with me in the same position—a position which I confute." But he forgets there is a wide difference between the two cases. In the former case the candidate must be furnished with the diploma of the College of Surgeons, which is not required to be held by the candidate for the latter post. The end of it all is that the candidate of whom I speak has, to his dismay and chagrin, learned that he has been labouring under a misconception of the law, which has, as he expresses it, *forced* him to resign. This gentleman would have held three appointments had he gained this one, and in connexion with this I would ask should such a monopoly of the "high places" of the Profession exist? And should *all* the laurels of it be held by one man, however worthy and capable he may be of wearing them?

A special general meeting of the governors and subscribers of the Lying-in Hospital was held on the 18th inst. for the purpose of electing an honorary Surgeon to a vacant appointment. There were originally three candidates competing for it—Dr. Earle, Dr. Neal, and Mr. Marshall. Dr. Earle retired from the contest a short time before the day of election. Both gentlemen were duly proposed and seconded, and on a show of hands being taken there appeared for Dr. Neal 49, and for Mr. Marshall 19. The chairman remarked that the proxies could not count that day, as the election was by show of hands, and unless some one demanded a poll Dr. Neal must be declared elected. There was no poll demanded for Mr. Marshall. It was stated that Mr. Marshall had 43 proxies, and that Dr. Neal had upwards of 166. A few remarks concerning the use of proxies may not be out of place here. I am told that on one occasion a successful candidate had proxy-papers signed, and in his possession, nearly three years before the day of election, and that the knowledge of this scared away other candidates, and left him the sole occupant of the field. Voting by proxy papers is, therefore, open to considerable objection on the score of unfairness. I would suggest that when they are resorted to, they should be in the hands of the secretary, that he should send them to the subscribers for signature three or four days before the day of election, and that they should be opened and read by the chairman at the special meeting. The manner in which these elections should be conducted ought to be, like Cæsar's wife, above suspicion. Would it not, also, be well if the subscribers were to refuse to sign proxy papers until a vacancy absolutely existed?

IRELAND.

Dublin, February 19.

On Sunday, the 17th inst., the Rev. Professor Haughton, M.D., F.R.S., preached in St. Mary's Church, Donnybrook, in presence of a crowded congregation, on behalf of the funds of Sir Patrick Dun's Hospital, taking as the subject of his eloquent and impressive discourse the words of our Lord, as recorded in the 7th and 8th verses of the 10th chapter of the Gospel according to St. Matthew, "Heal the sick, cleanse the lepers, &c.; freely ye have received, freely give." Having pointed out that the establishment of Hospitals for the sick poor was essentially the result of Christian civilisation, the

learned preacher spoke at considerable length of the great services rendered by the valuable institution for which he pleaded during the recent epidemic of cholera, showing that it might be fairly deduced, from the statistics of that disease, that the opening of the Hospital doors to those afflicted with it had been the means of saving the lives of at least 20 per cent. of those so received within the walls of the institution. But the endeavours made by the governors of the Hospital to aid in stemming the ravages of the epidemic had necessarily been attended with increased expenditure, and to meet the deficiency so created, as well as to provide the means of in future relieving the sick with increased efficiency, was the object of the present appeal. The reverend preacher paid a well-merited tribute to the heroic and self-sacrificing manner in which the Physicians, Medical students, and female attendants of the Hospital had discharged their duties among a large number of patients labouring under cholera, and quoted the answer of one of the nurses to a remark as to the danger to which she was exposed—"Sir," she replied, "the Lord is as near me in the wards of a cholera Hospital as He would be in a palace." Dr. Haughton referred also to the eminent services rendered during the same trying period by the other Dublin Hospitals which had opened their doors to those afflicted with the epidemic—namely, the Meath, the Hardwicke, and the Mater Misericordiæ.

On the following day a large and influential meeting, presided over by his Eminence Cardinal Cullen, was held in the last-named institution for the purpose of raising the sum of £10,000, required to complete the Hospital, on which magnificent structure £27,000 had already been expended. Among those present were the Right Hon. the Lord Mayor, the Right Hon. Judge O'Hagan, Sir James Power, Bart., M.P., Sir John Bradstreet, Bart., Dr. Stokes (President of the College of Physicians), Jonathan Pim, Esq., M.P., etc., etc. The first annual report of the Council was read, containing a quotation from Dr. Bristowe's report to Government on the Hospitals of the United Kingdom, in which the following opinion was expressed:—

"This Hospital promises, in our opinion, to be, when complete, one of the finest Hospitals in Europe. It is built on the corridor plan; but the distribution of corridors, and wards, and beds, is such as entirely to neutralise any ill effects that could possibly flow from the adoption of this plan, while all the advantages that spacious, cheerful, well-ventilated corridors afford are thoroughly secured."

After eloquent speeches by the proposers and seconders of resolutions, among whom were the Lord Mayor, Judge O'Hagan, Dr. Stokes, Mr. Pim, etc., Sir James Power moved that "his Eminence the Cardinal Archbishop do leave the chair, and that the Right Honourable the Lord Mayor be called thereto," which having been carried out a vote of thanks was passed to the Cardinal for his kindness in presiding. In acknowledging the vote, his Eminence, after some prefatory remarks, said: "I recollect that when it was proposed to commence this Hospital there was a difference of opinion about the merits of the plan according to which it is now partially erected. Some said that the proposed building would be too expensive, that it would be too grand for the poor, and that it would be better to erect an humble and less ornamental structure, which would be more in harmony with the miserable normal condition of our poor. Having been consulted on the question, I declared in favour of the present plan. We have palaces for guilt—we have palaces for force—we have palaces for legalised want, in which what is called pauperism is dealt with according to the principles of an unfeeling political economy. (Hear, hear.) Why, then, should we not have at least one palace for the poor in which poverty would be relieved in a true spirit of charity and according to the dictates of the Gospel? (Applause.) Such palaces are met with under the name of Alberghi or Ospizi dei Poveri, in Naples and Genoa, Rome and Paris. Why should not Dublin show its respect for true poverty by imitating the good example given by other cities? The Sisters of Mercy, acting according to the spirit of their institute, determined to adopt the plan best calculated to elevate and ennoble poverty, and they have been most successful in erecting an Hospital which does credit to their good taste, and is a great ornament to the city. What is still better, this Hospital is admirably suited for all the purposes of such an institution, as you have just heard on the very best Medical authority, and its interior arrangements are adapted to afford the greatest comfort and relief to the poor and the destitute who, in the time of sickness, seek shelter within its walls. The praises which have been lavished with so much eloquence on the Sisters of Mercy are not at all exaggerated. They deserve everything that has been said of them, and even more. During the time of the late severe visitation of cholera they displayed most heroic courage and devotedness, and they were ever ready to expose themselves to the greatest danger in relieving afflicted humanity. I recollect that when the epidemic broke out in Arklow, and its ravages had occasioned the greatest consternation, at the request of the worthy parish priest, who was acting in concert with several Protestant and Catholic gentlemen, I requested the Sisters of Mercy to send some members of their congregation to assist the cholera patients in that town. There was not the slightest hesitation about undertaking so perilous a mission, and in a few hours six sisters were in the small Hospital of Arklow, and in a short time their energy, their devotedness, and their charity in attending the sick, restored confidence to the inhabitants, and contributed very much to alleviate the evils of a very severe visitation." (Applause.)

But I was more particularly struck with the Cardinal's narration of a conversation which he had some time ago with a distinguished English Physician who had been travelling through Ireland:—

"This gentleman stated that when visiting one of our public Hospitals he asked a young Doctor who was conducting him through the wards, what was the character of the nurses, and received for reply that some of them were not very attentive, but that there was one of extraordinary activity ready to provide for the wants of the poor at every hour by night and by day. 'However,' added the young Doctor, 'she appears to be under a delusion, for she is persuaded that in relieving the sick she is ministering to our Redeemer himself.' Now it is under this supposed delusion that the Sisters of Mercy are accustomed to act, for their rules prescribe to them to look on the sick, and to relieve them, as they would look on Christ himself, and assist Him. (Applause.) Happily, however, for the Sisters, what the young Doctor considered to be an hallucination is a gospel truth, for we know that even a cup of cold water given to a disciple in His name shall hereafter elicit the gracious declaration—'Inasmuch as ye have done it unto one of the least of these my brethren, ye have done it unto me.'"

At the close of the proceedings about £900 was subscribed in the room.

At a meeting of the Royal College of Surgeons held on the same day, William A. Elliott, Esq., was elected a Member of Council in the room of Dr. Mapother, resigned. On Friday next, the 21st inst., the Council of the College will proceed to elect a Professor of Anatomy and Physiology, in the room of Dr. Jacob, resigned. It now wants but two years of half a century since Dr. Jacob acquired a world-wide reputation by the discovery of the membrane in the eye which has received his name; it is therefore time that he should seek repose from the duties of the chair he has so ably and so honourably filled.

GENERAL CORRESPONDENCE.

EPIDEMIC PHLEGMONS, CARBUNCLES, AND BOILS.

LETTER FROM PROFESSOR LAYCOCK.

[To the Editor of the Medical Times and Gazette.]

SIR,—A few weeks ago I read in your journal a paper communicated to the Metropolitan Association of the Officers of Health by Dr. Letheby, in which an opinion was maintained to the effect that the greater prevalence of phlegmon and carbuncle of late years was due to the use for food of the flesh of cattle that had died of pleuro-pneumonia. This opinion was attributed to the Registrar-General for Scotland, and (it was alleged) was founded on certain statistics. In November, 1856, I published in the *Edinburgh Medical Journal* an essay "On the Pathology and Treatment of the Contagious Furunculoid," in continuation of a clinical lecture which appeared in the London *Medical Gazette* for March 7, 1851, "On Epidemic Boils." In this essay I give two pages of statistics of the deaths from carbuncle and phlegmon in England and Wales (exclusive of London) during the seven years 1848-54, which had been most kindly supplied to me by Dr. Farr. I presume these are the statistics referred to by Dr. Letheby, although he seems to have got them at secondhand. In my systematic course of lectures I have always called attention to the coincidence of both the epidemic development of boils and the greater mortality from carbuncle and phlegmon,

with the commencement of free trade; and I state that in such facts as those recorded by Dr. Livingstone there are grounds for the hypothesis that the use of diseased meat is the cause. My object, however, in this note is to point out to our Health Officers another and more indubitable source of the disease than this—viz., imported hair and hides. In the essay referred to above, I remark, "When we consider the active commerce of the United Kingdom in hair and hides with those countries which are the seat of the disease (malignant pustule), it does not seem improbable that the *materies morbi* has been imported. And this surmise acquires the more probability from the facts mentioned as to this point by French writers. M. Trousseau states that in two factories at Paris, where hair from Buenos Ayres is used, twenty persons have died in about ten years from carbuncle, although only six or eight were employed daily. Rayer saw several cases of the disease while attached to the Hôpital St. Antoine, all of which came from the same factory, where hair from Russia was worked up."

Dr. Letheby will see in these facts something more tangible than the hypothesis as to pleuro-pneumonic meat. I by no means affirm that there are no grounds whatever for the hypothesis—rather the contrary; but as yet there are no proofs. It is well known that the diseased meat in question has been eaten experimentally in this country by various persons without manifest results; and an African traveller has lately informed us that in South Africa, where inoculation is practised extensively as a prophylactic, the flesh of the animals that die under the operation is greedily devoured by the natives without bad effects. These negative facts only go so far, however, as to prove that the individuals eating were not capable of being affected, and this view applies equally to the *animalcula*, or whatever the organisms are, of which Dr. Cobbold had partaken so freely, and which are found in the flesh of cattle. His powers of digestion might be quite equal to their destruction and assimilation when another's might not. An old Medical friend of mine has always been a most energetic anti-contagionist as to cholera, because in the first epidemic he was the Resident Surgeon of a cholera Hospital, and, when utterly worn out, actually fell asleep on the body of a deceased patient, and yet never suffered from the disease. To my mind, however, his exemption was only a proof that his intestinal glands and mucous membrane were in excellent order.

To understand more thoroughly the nature and origin of these destructive inflammations, it is necessary to generalise more. With this view I have endeavoured to show in the essay referred to that there is a group of affections having the same pathological characters and the same generic causes. Thus phlegmon is allied to whitlow, carbuncle to boil, and both the latter to malignant pustule. In all, also, there is a communicable *materies morbi*. The change the tissue affected undergoes is one of devitalisation generically; what it shall be specifically depends upon various factors. One of these must be the then intensity of tendency to devitalisation in the tissues generally. Thus what would be only a boil in a healthy person may be a carbuncle in one affected with diabetes or Bright's disease. Another factor is the kind of tissue affected, thus determining whether the disease shall be phlegmon, whitlow, furuncle, carbuncle, or noma. Another is the nature and source of the *materies morbi*, which vary greatly.

I am, &c. T. Laycock.

February 18.

GRATUITOUS MEDICAL SERVICE.

Letter from Dr. Septimus Gibbon.

[To the Editor of the Medical Times and Gazette.]

Sir,—In reference to the circular I sent you last week, although it was written on paper embossed with the royal arms and Privy Council Office, and enclosed in an official envelope, I doubted whether it had any official sanction, especially when I found that some Medical Officers of Health were let off with fewer and shorter questions. I therefore addressed an inquiry to the Lord President to know whether or not it was official, and had his sanction. It is due to him and his department that you should publish his reply, which I enclose. The Duke of Buckingham and Chandos was notably considerate of Professional interests in the matter of the penalties and certificates imposed upon Medical Practitioners by the Vaccination Amendment Bill of last Session. I confess, therefore, that I should have been surprised had he called upon hard-worked Medical Officers of Health to contribute gratuitously, as it were "mud and straw" for others to make "bricks" to order for which they were handsomely remunerated.

I am, &c.

Septimus Gibbon, M.B. Cantab.

13, Finsbury-square, E.C., February 27.

"Privy Council Office, February 26, 1867.

"Sir,—I am desired by the Lord President to acknowledge the receipt of your letter dated February 16, 1867, and of a circular, enclosed therewith, addressed to you by Dr. Radcliffe. That gentleman has been entrusted with the preparation of a report on the recent outbreak of cholera, and appears to have found it desirable to obtain information which he thought was in your possession as Medical Officer of Health.

"The communication was addressed to you *unofficially* by Dr. Radcliffe, although from the date it appears to have been written at Mr. Simon's office.

"I remain, Sir, your obedient servant,

"H. J. Bryant.

"Dr. S. Gibbon."

A FINAL PROTEST.

Letter from Dr. George Johnson.

[To the Editor of the Medical Times and Gazette.]

Sir,—Dr. Moxon charitably suggests that I am not aware of the real meaning and significance of my own language. Surely he needs to have the same charitable consideration extended to him when he endeavours to justify the misrepresentations which I have pointed out.

I complained of Dr. Moxon's statement that I had entirely omitted to examine the effect of astringents, and of his suggestion that this was an unfair omission arising from my conviction that the results of such an examination would be adverse to my opinions. I showed that even in sect. iii. reference is made to the action of astringents, and I quoted a part of my remarks on that subject. Then I showed that in another section of my book the action of astringents is fully discussed. What does Dr. Moxon say in defence of his statement that this part of the inquiry has been wholly omitted? He says his criticism is limited to sect. iii. Even if this were so, his statement that this part of the inquiry is "left wholly out of account" is untrue. But in introducing his remarks on sect. iii. he says, "In sect. iii. Dr. Johnson continues what he terms the sweeping away of what he calls orthodoxy." I have shown that in order to make up this sentence he takes two words out of my preface, and appends to them one from near the end of the book. So that, when his object was to manufacture an expression which was calculated to excite prejudice, he could bring distant parts of my book together, but he could not make a fair comparison of one part with another—nay, he could not even read the whole of the section under discussion, but only the headings in italics—before asserting that I have omitted, and with a conscious unfairness omitted, to examine the action of astringents. Every one who knows the history of my work in connexion with this subject is aware that a conviction of the mischievous effects of astringents, and especially of opiates—a conviction forced upon me by the unhappy results of experience—was the starting-point of my inquiry into the pathology of cholera. When I found that my patients were killed by opium, I thought it time to inquire whether the theory which suggested the use of opium is true. I found that the theory is not true, and this theory it is which, in the interest of truth and humanity, and in spite of Dr. Moxon, it is my fixed resolve to "sweep away."

Dr. Moxon declares it "an unwarrantable thing to describe an entire agreement as to the anæmia of the lung among all competent authors on cholera." I wrote of "an entire agreement amongst those authors *who have most accurately described the post-mortem appearances*." I presume that Dr. Moxon sees no difference between the two statements. I see an essential difference between them, and I protest against this fresh misrepresentation. Yet Dr. Moxon, with characteristic boldness, asserts that I concede the truth of his statement, this being, apparently, his version of my assertion that "he is entirely mistaken;" and he goes on to say that I "discard Briquet and Mignot as not quite accurate upon the very point they were cited to support." Any one

who will take the trouble to refer to my last letter will see that the only part of Briquet and Mignot's statement which I speak of as not quite accurate is that in which they contrast the anæmia of the lung with the hyperæmia of the other viscera, the fact being that some of the other viscera are also in a degree anæmic. But this partial inaccuracy as to the state of other viscera does not of course affect the statement of those authors as to the anæmia of the lung, which was the main point under discussion, and that in support of which their authority is cited. The statement that I "discard" Briquet and Mignot, and that now Dr. Parkes alone agrees with me as to the anæmia of the lungs, would be simply ludicrous if it were not so manifestly inaccurate and unfair. Dr. Moxon is evidently under a delusion that it is I who have "distorted Dr. Parkes's description of the pulmonary veins"—the fact being that in my last letter I pointed out that, Dr. Parkes not having mentioned the pulmonary veins, Dr. Moxon makes him assert that "blood comes in quantity from the pulmonary veins," and that "*both sets* of pulmonary vessels are very full of blood." The *comparative* emptiness of the pulmonary veins, as represented in my diagram, is an obvious and necessary result of that state of the circulation in which "the left side of the heart had received little or no blood, but had continued to contract upon the last drop of blood which had entered it."(a) I have yet to learn that the pulmonary veins are ever full when the left side of the heart is empty and its structure normal.

Does Dr. Moxon really believe that the cause of truth and science can be advanced, or that the credit of himself and the great school of Guy's Hospital can be promoted, by such misrepresentations as it has been my painful duty to expose? Whatever may be his opinion upon this question, I am resolved to have no further discussion with him.

I am, &c.

Savile-row, February 25. GEORGE JOHNSON.

THE MEDICO-CHIRURGICAL SOCIETY'S MEETING.

LETTER FROM DR. W. H. DICKINSON.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the report of the discussion which followed the reading of my paper on the "Amyloid" disease, at the Medico-Chirurgical Society, which is given in your last number, I find myself represented as having made a statement which is directly contrary to what I should wish to say. In answer to an expression of opinion by Dr. Pavy that the new material is not contractile, it is said that I "referred to the condition of the liver and kidneys in a recent case, for in the more chronic cases they become enlarged."

What I said, or intended to say, was, that affected organs, the liver in particular, could often be distinctly ascertained to get smaller as time went on—a change very evident in the liver, because it is easy to mark the position of the lower edge and watch its gradual rise. I also referred to the extreme contraction of the kidney sometimes found in cases of very long standing, while early in the disease the kidneys are always enlarged. My object was to show that so long as the new material is deposited the organ increases in size, while on the deposition ceasing the effused matter contracts, and the organ shrinks. I am, &c. W. H. DICKINSON.

11, Chesterfield-street, Mayfair, February 26.

SUCCESSFUL OPERATOR IN A CASE OF SUBCLAVIAN ANEURISM.

LETTER FROM DR. WM. SMYTH.

[To the Editor of the Medical Times and Gazette.]

SIR,—In an introductory lecture by Sir William Fergusson at the Royal College of Surgeons, Session 1864-65, in speaking of the progress of Surgery, he mentioned a successful operation in a case of subclavian aneurism, attributing it to a Dr. Rogers, of New York. Shortly afterwards my friend, Dr. Motherell, of Castlederry, Ireland, forwarded to Sir William a report of the case by my brother, Dr. A. W. Smyth, of New Orleans, who really performed the operation. Now, although a considerable time has elapsed, and Sir William Fergusson has been repeatedly called on to correct the error he made as to whom the credit of the operation is due, he has never done so, and I have, therefore, adopted the present course for the purpose of bringing it before the Profession. I am, &c.

London, February 20. WM. SMYTH.

(a) "Parkes on Cholera," p. 23.

THE NAVAL MEDICAL WARRANT.

[To the Editor of the Medical Times and Gazette.]

SIR,—Your last number contained a copy of the amended Admiralty circular referring to Medical officers. I wish that I could express our entire satisfaction with this document, and say that at last Naval Medical Officers are left without a reasonable cause of complaint. Unfortunately, this is not yet the case. The amended is but little better than the original circular. In regard to pay, it fails to recognise the four yearly periods for increase to Assistant-Surgeons until they reach their fourteenth year of servitude. Surgeons remain as they were; Staff-Surgeons, after twenty-six years, have an increase, but it is pared down to 2s. That of Deputy-Inspector-General and Inspector-General stands as in the last circular. The allowances to officers serving in Hospitals are somewhat increased, but these do not yet pretend to approach those of other officers of equal ranks. For instance, an Inspector-General serving at home has £85 a year in lieu of provisions, servants, etc.; but a Rear-Admiral Superintendent, under similar circumstances (with whom he is said to rank), has from £940 to £950 in lieu of the same. And, with a remarkably one-sided line of reasoning for even the Admiralty to follow out, the Inspector-General has five years cut off his official existence to make the term of his retirement coincide with that of a Rear-Admiral. The subject of retiring allowances is not touched on. Whether a retirement on half-pay after twenty years' service was conceded or not (and by a great majority of service men this would have been considered the greatest of all boons), surely leave to retire absolutely on £1 after twenty-five years' service might have been given, and 2s. 6d. ought to have been added whenever compulsory retirement was enforced after this term. The retirement of Staff-Surgeons is bad, but what is to be said of that of the higher branches? There is for them no retirement at all. Neither sickness, service, nor anything else, except attaining 65 years of age, is allowed to have any influence. At that age they will be placed on half-pay. A rear admiral or a captain is placed on permanent half-pay at a given age, but they rise in rank, and consequently in pay, with their elevation. Not so the Medical officer; as he fell, so must he be.

In the circular of May, 1859, honorary distinctions in accordance with relative rank were distinctly held out; these, in the late circulars, are passed over in silence.

It may be that a reprint of the general instructions of the Navy may strike at the causes of that class feeling which you, Sir, have referred to as being on the increase; but, judging from what we see, we confess we expect but little more from this source than from any other. On the whole, therefore, we are with much regret compelled to say that we consider this circular but little better than its predecessor.

I am, &c.

February. A NAVAL MEDICAL OFFICER.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

MONDAY, FEBRUARY 11.

Dr. HARE, President, in the Chair.

MR. SPENCER WATSON showed a case of dislocation of the knee-joint which had been very much improved by appropriate mechanism; also a polypus, which he had extracted from the outer ear by introducing a pin, and strangling it by a twist, after one of the plans adopted in acupressure.

Dr. TILBURY FOX asked if it was in the experience of any one present that herpes zoster was produced by the exhibition of arsenic, as Mr. Hutchinson was of opinion that it was. Mr. Marshall had seen erysipelas produced by tincture of arnica applied in large quantities. In this he was confirmed by others. Dr. T. Fox said that some were also of opinion that long-continued use of bromide of potassium produced ecthyma, or something like it; whilst Dr. Hare had seen iodine produce a peculiar eruption.

Dr. Cockle then read a most excellent paper on

THE INFLUENCE OF DISCHARGES AND NERVOUS SHOCK ON COLLAPSE IN CHOLERA.

Referring to the discharge, he considered whether this was consequent on a specific poison applied to the alimentary canal, or an attempt to get rid of the disease. He pointed out that the post-mortem results varied in different epidemics, but that the evidence for a congested state of the lungs was overwhelming; the condition of the coronary arteries, however, had generally been overlooked. He insisted that in this disease morbid anatomy was not enough to give a correct pathology. He then proceeded to discuss whether there was a cholera poison. This doctrine, he thought, was opposed by the sudden appearance of the disease, whilst the discharge might be due to some peculiar condition of the mucous tract. Certainly the poison was not exhaled, as was seen by the health of those around the sick. Blood, it was known, could not transmit it by inoculation. The mother did not affect the sucking child; and even recent excretions were without influence on the human system. Elimination was of two kinds—simple and critical; the former seen in the case of certain poisons, the latter in certain diseases where it was followed by direct and speedy relief; but this was not the case in cholera. If anything really is inhaled, the author hinted that something introduced into the system might combine with something in the body, and so produce a poison of an emeto-cathartic nature, thus producing the disease. In cholera there might be prodromata, or there might not, but diarrhœa usually preceded them; and as all admit that the checking of this pretty well puts an end to the chance of cholera, the fact is strongly opposed to the elimination theory. Shock and discharge were admitted to be powerful depressants, and these always occurred in cholera; even although nothing was passed, the bowel was found distended almost to bursting with the fluid which had transuded from such an extent of surface. This alone was capable of causing collapse, to say nothing of the effects of circulating blood altered in character by the effusion of so much fluid. The discharge of fluid from the vessels was followed by exosmose from the red corpuscles, which were thus rendered incapable of fulfilling their proper functions. The tendency of this change was to paralyse the heart, and there was no very marked "besoin de respirer" in many cases of cholera. The great secret was the cause of the change which permitted the enormous escape of fluid. This might be paralysis of the abdominal sympathetic; but to arrive at any correct conclusion a good history of each epidemic was much wanted.

Dr. Hare said that the experience of the last epidemic was against the elimination theory.

Dr. Symes Thompson mentioned that at Copenhagen and St. Petersburg, as the character of the cases improved, each Physician imagined that he had at last found a remedy, though this was far from being the same in each case. Experience there was against the eliminant treatment.

Dr. Camps said the common voice was against elimination, and that he had heard of good results from the use of quinine as a prophylactic.

Dr. Althaus said that Dr. Beale's researches were too little thought of; that they were confirmed by Virchow; that the poison was swallowed, not inhaled; that eliminative treatment failed; and that he looked upon the mineral acids as the best remedy.

Dr. Head asked, if cholera was produced by swallowing something, why it broke out in ships only in a particular latitude, though the crew had been drinking the same water all the voyage.

Dr. T. Fox said that an epidemic of diarrhœa in the United States Army had been clearly traced to germs in food, causing fermentation inwardly.

Dr. Day recounted his experience of cholera in the Crimea.

Monday, February 18.

Dr. Symes Thompson read a paper on

MILK DIET.

In fevers and acute diseases the effect of milk diet was favourably compared with the stimulant plan, and with the starvation treatment still followed on the Continent. In the management of chronic disorders, in which the digestive power was either primarily or secondarily affected—in the dyspepsia of phthisis especially—the value of milk was forcibly shown. The suitability of cream, butter, curd, whey, skimmed milk, and sour milk to various diseased conditions was defined. The value of asses' milk, Turkish yourat, and Russian khourmese was stated, and the paper, which was illustrated throughout with typical cases, concluded with a favourable notice of Liebig's food for infants.

Dr. A. E. Sansom read a paper on the

COMPARATIVE ACTION OF VOLATILE NARCOTICS.

The author commenced by criticising the doctrine that narcotics exert a peculiar action upon the nerves and nerve-centres. Narcotics directly applied to nerve-centres do not produce their specific results—asphyxia and agents which produce it induce narcotism, and in this case none can suspect a primary poisoning of the nervous system. He detailed a number of experiments, adducing collateral evidence to prove that narcotism is due to the imperfect supply to the system of a deficiently vitalised blood. He showed that all narcotics act upon the vaso-motor nerves, at first stimulating them. *Pari passu* with this action is a change in the quality of the blood—a change which is different with each narcotic. Some agents exert a more pronounced stimulant effect on the vaso-motor nerves—such are alcohol, ether, and bichloride of carbon; others more particularly impair the blood—*e.g.*, carbonic oxide. Chloroform has, after a primary stimulus, a power of inducing a rapid paralysis of the sympathetic nerves, and that in direct proportion to the concentration of its vapour. Diluted chloroform vapour is comparatively innocuous, and was regarded by the author as the type of a practical vapour narcotic.

Dr. Sansom urged that Practitioners should use means to dilute their chloroform vapour, so as to give an uniform percentage of a safe proportion. He showed that by ordinary means often employed, such as lint, etc., an atmosphere of thirteen per cent., and very much higher, might be, and is, easily given. He concluded by urging that some means of diluting chloroform should be adopted. He considered that the best diluent of chloroform was absolute alcohol, and recommended practical men to use a dilution of one part chloroform to two of absolute alcohol.

Both authors were highly complimented on their papers.

THE PATHOLOGICAL SOCIETY.

Tuesday, February 19, 1867.

John Simon, Esq., President, in the Chair.

Dr. Thudichum, Dr. Whipham, and Mr. Wyatt were elected Fellows of the Society.

Dr. Cayley read reports on two preparations submitted to him and Mr. Hulke for examination. One, a case of Dr. Gibbs's of extensive disease of the larynx, was found to be epithelioma; another, of extensive mesenteric disease, reported by Dr. Ballard, was found to be due to tubercle.

Dr. Dickenson exhibited certain specimens of

ULCERATION OF THE SIGMOID FLEXURE OF THE COLON,

which he thought were not uncommon. Constipation of an obstinate character was first observed. This generally ended in circumscribed abscess, which opening into the peritoneum produced peritonitis and death. On examination, transverse ridges of a dark colour, sometimes with spots of extravasated blood, and running parallel to each other, were observed. On the summits of these were little ulcers, narrow without thickening of the edges, and implicating the mucous membrane to a greater extent than the serous. In one woman six of these were observed, in a second two were seen, and in a third three, all presenting similar characters.

Dr. Whipham showed a recent specimen of the same affection. In this instance there were observed constipation, a hard, unyielding tumour in the left iliac fossa, which gradually increased, rigors, pyæmia, and death. There were scrofulous abscesses in other parts of the body connected with diseased bone, but there was no such bone in the situation alluded to. The sigmoid flexure of the colon was found to be perforated by a round ulcer, but above and below it were seen the raised lines formerly alluded to. One or two similar specimens were to be seen in the museum of Guy's Hospital.

Dr. Moxon had seen a curious case of two ulcers in the jejunum without any enlarged glands, which he considered of the same nature as the punched-out ulcer usually found in the stomach, but which he had no reason to believe was confined to that viscus.

Dr. Murchison thought such cases not so very uncommon;

that some produced abscess, some peritonitis; and that the general symptoms were not unlike typhoid fever.

Dr. Bastian spoke of a case of perforation of the ileum, which during life had presented very obscure symptoms and had been taken for typhoid. A patch of ulceration was found a foot and a half above the cæcum. Another of the same kind had been seen some time ago.

Dr. Murchison doubted, from Dr. Bastian's description, if this was not a real case of typhoid.

Mr. Holmes had described to the Medico-Chirurgical Society an adhesion of the sigmoid flexure of the colon to the bladder, with a communication formed between them. Colotomy was performed, but the patient died a year after. It was then found that the cæcum had adhered in a similar manner to the bladder, and that a communication had also been formed between the two. He suspected that in a good many instances the constipation was the result, not the cause, of the ulceration.

Dr. Wiltshire suggested that Dr. Jenner had established the diagnosis of typhoid from ordinary ulceration of the bowels, as the former formed in the long, the latter in the transverse, axis of the gut.

Dr. Moxon remarked that the distinction only held good in the early stage of typhoid.

Mr. W. M. Baker showed a specimen of Double Stomach, taken, in the dissecting-room at St. Bartholomew's Hospital, from the body of a woman, aged 63. There was no history attached to the case, and Mr. Baker supposed the condition congenital.

Mr. Brodhurst exhibited what was supposed to be a

LOOSE SEMILUNAR CARTILAGE

which had been removed from the knee-joint. The subject, a gentleman, was playing at football, when he fell, and on rising found he could not kick the ball. Much swelling ensued, which, however, subsided, but left him lame. He came to town, when an operation for the removal of what was now ascertained to be a loose cartilage, by the subcutaneous method was attempted, but failed, owing to its being partially adherent. It was therefore cut down on and removed, no synovia escaping during the operation, and the patient was walking in a fortnight. The cartilage removed was smooth and soft, probably the anterior part of the internal semilunar cartilage.

Mr. Bryant asked if it had been examined microscopically.

Mr. Pick had done so, and thought Mr. Brodhurst's opinion as to its origin correct.

Dr. Whetman exhibited a specimen of Diseased Aortic Valves, taken from a young child apparently healthy, but which one day was found dead. It was doubtful whether the disease was congenital or acquired.

Dr. Moxon showed an

ANEURISM OF THE PULMONARY ARTERY OCCURRING IN PHTHISIS.

He had met with this condition three times; this one was the size of a chestnut, and projected into a vomica. Only one side of the vessel was dilated. All his specimens occurred in the lower lobes of the lungs. The same gentleman exhibited a specimen of

PRIMARY CANCER OF THE GALL-BLADDER.

Before admission the patient had a somewhat uncertain history, as far as the disease went; but he had suffered from the effects of a blow some six months before. The patient was jaundiced, exhibited the cancerous cachexia, and presented a tumour in the middle of the abdomen, which, by the aid of a case in the clinical wards of Guy's not very long ago, was diagnosed to be cancer of the gall-bladder.

Dr. Dickenson asked if there were any gall-stones, as a case of somewhat similar character had occurred to Dr. Pitman some time ago in which several gall-stones were found.

Dr. Moxon said he had often seen gall-stones with secondary cancer. Specimen referred to Dr. Dickenson and Mr. Hulke.

Mr. Henry Smith showed a cast of a limb which had been the subject of

INTRA-UTERINE FRACTURE

and had never healed, the child walking on the front part of the foot and the extremity of the limb. The ends of the bones were resected, and a false joint was found to exist. The limb was straightened, and is doing well, though perfect union is not yet attained. There is but little shortening. It was questioned whether this injury was puerperal or uterine.

Mr. Barber thought the well-developed foot tended to show that the injury was puerperal or *post partum*.

Mr. Brodhurst said that the tendons were always contracted in intra-uterine fractures.

Mr. Barber produced a specimen of

TRUE CHELOID NOT AFFECTING A SCAR.

It began eleven years ago on the shoulder of a woman, and two years since began to enlarge and grow painful by the pressure of her dress; it was therefore removed. Several others had recently formed on other parts of the body.

Mr. Weeden Cooke said that such tumours generally return in the same spot whence they have been removed; he therefore prefers covering them with a leathern plaster, and thinks they thus diminish.

Mr. H. Smith related a case of

EXCISION OF THE KNEE-JOINT,

and exhibited the portions removed. The patient, a girl, had long complained of intense pain of the knee-joint, which, however, presented but slight signs of morbid action. On account of the pain, amputation was determined on. When the patient was brought on the table, the bones were found to be anchylosed, and on excising the joint it was found that two or three abscesses existed in the end of the femur. The patient died of pyæmia. Another case of disease of this joint had recently been excised for the second time. The patient after the first operation did not recover well, and dead bone after a time was found to exist in the cavity. He was again operated on, and on examining the bone removed the remains of a ligature were found to stretch across its diseased surface, having inadvertently been left behind in the wound on the occasion of the former operation.

Mr. John Foster showed a specimen of Villous Tumour of the Bladder, which had occurred in the practice of Mr. Henry Thompson. The disease had lasted many years, gradually getting worse and worse, the urine more and more bloody, with greater and greater difficulty in passing it. During the last year the urine had usually been removed by catheter. The swelling was found behind the prostate. Specimen referred to Mr. Wood and Mr. Moore.

Mr. Pick exhibited a curious specimen of a Venous Cyst, removed from the inner side of the leg of an old woman, who had suffered from varicose enlargement of the internal saphena all her life. The tumour was painful, and when removed was found to contain coagulated blood and fibrine in partially lamellated layers. The vein above and below was occluded. Gay supposes such injuries to be traumatic, but this is not altogether certain. In one specimen the valves of the vein were found in the interior of the tumour. He also showed a Ganglion at the Wrist-joint, lying below the radial artery, which, as announced by Chassaignac, actually communicates with the interior of the joint. Another in the same specimen, but in a different situation, had no such communication.

LEGAL INTELLIGENCE.

REGINA *v.* THOMAS.

Northern Circuit, Feb. 26—(Before Mr. Justice Shee).

A deplorable case has just been tried at Newcastle. It was a charge against a herbalist for the manslaughter of a young woman named Walker, who died from unavoidable hæmorrhage in the sixth or seventh month of her pregnancy. It appeared that the deceased, a young woman of 24 years of age, had suffered from hæmorrhage, and had been treated by the accused with raspberry-leaf tea and cayenne pepper. As she did not get better after three days, he advised that an experienced midwife should be sent for. A woman named Wrightson was called in, who said it was a bad case, and sent for Mr. Hood, a Surgeon, of Newcastle, who attended and examined deceased. He found considerable hæmorrhage going on, and sent for another Practitioner, Mr. May, to whom he left the case. Mr. May attended in about half an hour. Mr. Hood had applied local means to stop the hæmorrhage, but before Mr. May came these had been rendered nugatory by the patient, and Mr. May found her gasping for breath, cold, and almost bloodless. He gave her some stimulant and ergot of rye, and proceeded at once to deliver her. She was labouring under placenta prævia. For the prosecution it was contended that the prisoner's practice had been wrong, that giving her raspberry-leaf tea was equivalent to giving her nothing, that the young woman had been allowed too long to remain in a state of hæmorrhage, and that she ought sooner to have been delivered, and that if she had been she would, in all probability, have lived.

For the prisoner it was attempted to be shown that the proper course of practice had been pursued, and that the practice pursued by the regular Medical men called in was condemned. Her treatment by Mr. Hood was said to be dangerous and wrong. He had left her for half an hour, and when Mr. May came he at once proceeded to deliver the woman while in a state of exhaustion, without "toning her up" to bear it by proper stimulants, and then left her, together with the nurse, who had to go to another case almost immediately, without seeing administered to her the beef-tea and stimulants ordered, and she died twenty minutes after she was delivered from exhaustion, no one but her mother being with her.

The prosecution said this was owing to her great previous exhaustion from hæmorrhage, which was owing to the malpractice of the prisoner, who had done that which was equivalent to nothing for her.

The prisoner's counsel, by the cross-examination of the witnesses, suggested that it was owing to the dangerous peculiarity of her condition, which killed one in every three of such cases, no matter what the skill applied, and that in the cases which the Medical men called for the prosecution had had of this peculiarity, which was very rare, they had at least lost one in three of their patients.

It appeared also that the prisoner had attended the deceased on ten visits in three days, and as soon as he found her attacked with the pains of labour he had wished a competent midwife to be called in, and on her report of the case had immediately assented to the propriety of calling in a Medical Practitioner.

At the close of the case for the prosecution,

His Lordship stopped the case, and said he thought that the evidence did not show that there had been that amount of gross negligence and ignorance which would warrant a jury in coming to a conclusion that the prisoner was guilty of manslaughter. The case was a most peculiar and dangerous one, and the prisoner seemed to have acted with reasonable propriety for an ordinary case, and when he found there was danger at once to have wished for proper skilled attendance on the deceased. The case was not, therefore, one in which the jury could legally convict, although it was a very proper one to be thoroughly sifted and inquired into before them.

The jury, therefore, under his Lordship's directions, found a verdict of "Not guilty."

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, February 21, 1867:—

Henry Knowles, 2, Barking-road, Canning's-town, E.; Richard Francis Hay, Bridport.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

FURNIVALL, C. H., L.S.A.L., has been appointed Resident House-Physician to the Westminster Hospital.

HARDIN, WALTER, L.K.Q.C.P. Ire., L.M., M.R.C.S. Eng., has been appointed to the Portsmouth District of the Portsea Island Union.

MACDONALD, A., M.D., M.R.C.S.E., has been appointed Lecturer on Materia Medica and Therapeutics at the Medical School, Surgeons' Hall, Edinburgh.

NEAL, Dr. J., has been elected Honorary Surgeon to the Birmingham Lying-in Hospital.

THOMASON, R., M.R.C.S.E., has been appointed Visiting Surgeon to the Hereford General Infirmary.

TUCKWELL, H. M., M.D., has been appointed Consulting Physician to the Warneford Asylum, Oxford, *vice* G. W. Child, M.D., resigned.

BIRTHS.

BENNETT.—On February 8, at Worksop, Notts, the wife of E. Bennett, M.R.C.S., L.S.A., of a son.

BURCHELL.—On February 21, at Kingsland-road, the wife of Dr. Burchell, of a daughter.

FERGUSSON.—On February 17, at Ailsa Cottage, Girvan, Ayrshire, the wife of A. Fergusson, L.R.C.P. Ed., of a son.

SPEEDY.—On January 25, at Poonah, Bombay, the wife of Dr. Speedy, Surgeon, 45th Regiment, of a daughter.

WISE.—On February 21, at Gothic-villa, Burrage-road, Plumstead, the wife of W. C. Wise, M.D., of a daughter.

MARRIAGES.

ADLEY—BURNEY.—On January 19, at Barrackpore, Calcutta, W. H. Adley, Surgeon, 17th Bengal Cavalry, to Evelina Ross, younger daughter of Major-General G. Burney, Bengal Army.

ARMSTRONG—PRATER.—On February 19, at the parish church, Woolwich, J. C. Armstrong, M.R.C.S.E., of Gravesend, to Annie, second daughter of A. Prater, M.D., of Barrington-villas, Shooter's-hill.

HEAD—CLEAVE.—On February 20, at St. Breock, R. L. B. Head, Surgeon, R.N., to Lizzie, daughter of T. Cleave, Esq., Trevanion, Cornwall. No cards.

JONES—EIDSFORTH.—On February 19, at the parish church, Wyresdale, Dr. Jones, of New Malton, Yorkshire, to Mary, fourth daughter of the late A. Eidsforth, Esq., Poulton Hall, Lancaster. No cards.

OAKES—KELLETT.—On February 20, at Ballyconnell, County Cavan, F. A. Oakes, Staff Surgeon, to Anna Selina, eldest daughter of the Rev. O. S. Kellett, Esq., Rector of Tomregan, Cavan.

THURSFIELD—WILLIAMS.—On February 14, at Llandudno, T. G. Thursfield, M.D., Broseley, Salop, to Anne Catharine, eldest daughter of John Williams, Esq., of Bodofon.

WOTHERSPOON—PRIMROSE.—On February 27, at 24, Royal-crescent, by the Rev. Dr. M'Ewen, assisted by the Rev. John Moodie, William Wotherspoon, L.F.P. & S. Glasgow, to Jessie M'Farlane, only daughter of Peter Primrose, Esq.

DEATHS.

BARLOW, J., M.D., at Shakespeare-street, Chorlton-on-Medlock, Manchester, on February 20, aged 47.

GILCHRIST, W., M.D. Edin., at Lake House, Torquay, on February 12.

JONES, E. P., L.R.C.P., at Stone House, Wellington, Salop, on February 20, aged 28.

MEGGY, F., M.R.C.S.E., L.S.A., at Uitenhage, Port Elizabeth, South Africa (formerly of Stockwell), on January 6, aged 26.

MORRIS, W., M.R.C.S.E., of Tudor-road, Upper Norwood, on February 21, in his 60th year.

NOLAN, J. M., L.S.A., at 32, Penton-place, Walworth, on February 25, aged 60.

OWEN, J. L., M.D., at 5, Fitzroy-square (late of Brooklyn, New York, and of Carnarvon), on February 15, aged 50.

VACANCIES.

CHESHIRE LUNATIC ASYLUM.—Assistant Medical Officer.

ISLINGTON DISPENSARY.—Resident Medical Officer.

LAMBETH WORKHOUSE.—Resident Assistant Medical Officer.

ST. GILES'S, BLOOMSBURY.—Assistant Medical Officer.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Fylde Union.—Dr. Robert H. Bowness has resigned the Poulton District; area 15,627; population 4268; salary £35 per annum.

Medway Union.—Mr. Henry Weeks has resigned the Gillingham District; salary £40 per annum.

Totness Union.—The Townstal District is vacant; area 4900; popula 2102; salary £17 17s. per annum.

Toxteth Park Township.—Mr. William Rayner (Resident Assistant Medical Officer at Workhouse) has resigned; salary £100 per annum, rations, and apartments.

Wigan Union.—The Ince District is vacant; area 2221; population 8266; salary £45 per annum.

APPOINTMENTS.

Fulham Union.—Thomas Godrich, L.R.C.P., M.R.C.S.E., L.S.A., to the Second District.

Luton Union.—James Benson, L.R.C.P. Edin., L.R.C.S. Edin., L.A.C. Ire., L.M., to the Barton District.

Merthyr Tydfil Union.—Thomas Griffiths, M.R.C.S.E., L.S.A., to the Garth and Vaynor District.

Tenbury Union.—John L. Sweet, M.R.C.S.E., L.S.A., to the Tenbury District and the Workhouse; William B. Murray, M.D. Edin., M.R.C.S.E., to the Bockleton District.

Westbury and Whorwellsdown Union.—Isaac Tucker, M.R.C.S.E., L.S.A., to the First Division of the Second District.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the College held on Thursday, the 21st ult., Dr. E. D. Mapother was unanimously elected Professor of Anatomy and Physiology, in the room of Dr. Jacob, resigned.

DR. HORACE GREEN.—This well-known American Surgeon died at his residence at Sing Sing, on the Hudson, on November 29, aged 64. Establishing himself first in Philadelphia, he afterwards repaired to New York, where he continued to reside. After a visit to Europe in 1838, he commenced that remarkable series of investigations into the pathology and treatment of diseases of the air-passages which has since made his name famous on both sides the Atlantic. Besides a large number of papers contributed to his own (the *American Medical Monthly*) and other journals bearing on this subject, he published treatises on the Diseases of the Air-passages, on the Pathology and Treatment of Croup, and on the Treatment of Polypi of the Larynx, all of which have acquired

celebrity. His views, which were at first regarded by many as rash and unfounded, have received ample justification by means of the laryngoscopic investigations which have now become so common.

PROSECUTION BY THE LUNACY COMMISSIONERS.—John Hedges Harris was tried at the Central Criminal Court on Wednesday last for wrongfully receiving and taking charge of an alleged lunatic without the requisite certificates and the concurrence of the Commissioners. The alleged lunatic was Albinia Martina Dendy. Dr. Tuke gave evidence as to her condition of mind, which seems to have been one of imbecility. The jury acquitted the prisoner, apparently on the ground that he had not knowingly and wilfully contravened the law. He was an old servant of the family, and the imbecile had lived in his house *with her sister* for some years. The sister died in 1866, and the imbecile simply remained under the same conditions as before; and it was fairly argued for the prisoner that he had not *received* her as a lunatic, or alleged lunatic.

CATTLE PLAGUE INQUIRY.—During the week ending February 16 two attacks of cattle plague are reported, being an increase of one on the return for the previous week. This fresh outbreak of the disease occurred on a farm containing fifteen cattle at Midgley, in the petty sessional division of West Morley (County of York, West Riding); the animals, a cow (attacked February 6) and a bull (attacked February 10), were killed by order of the Inspector. In the week ending February 23 one attack of cattle plague has been reported. This is a fresh outbreak of the disease, and it occurred on a farm containing 18 cattle at Barlaston, in the petty sessional division of Stone (County of Stafford); the animal, a cow (attacked February 16), was killed by order of the Inspector. The number of cattle reported attacked in Great Britain since the commencement is 253,864, and 52,641 animals in the aggregate have been slaughtered healthy to prevent the spread of the disease.

GEOLOGICAL SOCIETY OF LONDON.—At a meeting on February 20 (Warington W. Smyth, Esq., M.A., F.R.S., President, in the chair), the following communication was read:—"On the British Fossil Oxen"—Part II. *Bos longifrons*, Owen—by W. Boyd Dawkins, Esq., M.A. Oxon., F.G.S. The author analysed the characteristics usually assigned to *Bos longifrons*, and concluded that there were none of specific value to separate it from the smaller varieties of *Bos Taurus*. The large series of skulls in the Dublin and Oxford Museums show that *Bos frontosus* of Nilsson is a mere variation from the more usual type. Professor Owen, on the faith of its occurrence on the Essex shore, along with the remains of extinct animals also washed up by the waves, ascribes to this species a Pleistocene age. This inference, on a rigid examination of the premises, turns out to be faulty, and there is no evidence anywhere in Europe that it coexisted with any of the extinct mammals, the Irish elk being excepted. It is very commonly associated with the remains of man, of a date anterior to the Saxon invasion. It was kept in great herds during the Roman occupation, and supplied the Legionaries with beef. On the Continent, as in Britain, it is found around the dwellings and in the tombs of the Bronze and Stone folk. Nowhere is there evidence of its having a higher antiquity than the Neolithic age of Sir John Lubbock. It disappeared along with its Keltic masters before the Saxon invaders from the more fertile portions of Britain, and took refuge in the Highlands of Scotland and Wales, where it still survives in the smaller domestic races. In no case has it been found in association with Saxon remains. The inferences to be drawn about it are, first, that it has not yet been proved to have existed before the prehistoric age; and, second, that it is the ancestor of the small Highland and Welsh breeds. It is essentially the animal with which the archæologists have to deal, and its only claim for insertion in geological catalogues is the fact of its occurrence in the most modern of all the stratified deposits. The following specimens were exhibited:—Horn-cores of Oxen (*Bos trochoceros*, *B. primigenius*, and *B. frontosus*) from a Kjökenmödding at London-wall, found by Colonel Lane Fox, F.S.A.; exhibited by C. Carter Blake, Esq., F.G.S.

WESTERN MEDICAL AND SURGICAL SOCIETY.—At a meeting held on Friday, December 7 (Dr. Fuller, President, in the chair), Mr. C. Hunter again brought forward the case of the little boy with periodical neuralgia of the spine, who had been shown to the Society on February 2. The neuralgia resembled epilepsy in its character, there having been, when the boy was first treated, two kinds of pain, the severe and the slight. Atropine had been used with great success in the treatment. Eleven atropine injections of about the $\frac{1}{60}$th to $\frac{1}{40}$th of a grain have kept the patient free from attacks for ten months. Three neuralgic attacks were allowed to pass untreated, as they consisted of only two or three pains. When first put under this treatment, the neuralgic attacks used to last day and night for from three to seven days, notwithstanding the boy had been under cod-liver oil, iron, galvanism, etc., for several years. The slight or minor paroxysms seem now to have left altogether for months, and the major pains, even if untreated, bear no comparison, as regards their severity, with those which occurred previous to the first employment of the atropine. Mr. Hunter then exhibited a man, aged 52, with hemiplegia of the left side of about six years' duration. The case was shown as a marked instance of the different effects of strychnia when injected into the cellular tissue from its effects by stomachic administration. Dr. Graily Hewitt then related the particulars of a case of pelvic cellulitis, lately under his care in University College Hospital. The attack had come on very shortly after delivery, and the patient was now, only after the lapse of upwards of eight months, convalescent. The particulars of the case illustrated the bad effects of motion shortly after delivery, and the injurious influence of a low diet during the same period. The drawings of the case (exhibited) depicted very well the position and relations of the very considerable tumour sometimes met with in such cases. Dr. Graily Hewitt stated that, in addition to good feeding, tonics, and rest, he had employed in this and some other cases a peculiar method of keeping the parts within the pelvis at rest—viz., elevation of the knee on a double inclined plane. The psoas and iliacus muscles were thus kept quiescent, and the restoration to the natural condition greatly favoured and accelerated.

CONIFERINE, a sugary compound analogous to salicine, discovered in the sap of the fir, larch, and other *Conifera*, by M. Hartwig, is chemically described by M. Kubel in *Erdmann's Journal*, t. xcvii., p. 243. The cambium was obtained by grating the surface of wood recently deprived of its bark, and pressing the mass thus obtained. The thick juice was then boiled in order to coagulate the albuminoid matters in it, whereby the cellules and starchy substances were removed. The filtered liquid was clear, with a sweetish bitter taste; and by evaporating it to a fifth of its volume a large quantity of coniferine was obtained in the form of acicular crystals. The syrupy liquid which accompanied them had a very sweet taste, and contained a sugar very much resembling cane sugar. The crystals of coniferine were then redissolved in water, deodorised by animal charcoal, and finally crystallised in weak alcohol. Coniferine melts at 185° Cent.; at a higher temperature it becomes brown, and finally carbonised, giving off the odour of caramel. It presents a characteristic reaction when treated with concentrated sulphuric acid; it assumes a deep violet colour, while salicine becomes red. Sulphuric acid is thus a good reagent for the detection of coniferine, and it reveals its presence even when applied to a cut in any tree of the *Conifera* family.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Thurnam's letter shall appear next week.

Dr. Blake's request shall be complied with immediately.

Latest Intelligence!—Military and Naval Medical Services!!—Alarming Scarcity of Candidates!!!—Triumphant Solution of the Difficulty!!!!—(From our veracious Correspondent).—We have just heard, as we are going to press, that H.R.H. the Commander-in-Chief and the noble and right honourable Lords of the Admiralty have determined on a new method of solving the present distressing difficulty which exists in procuring candidates for the office of Assistant-Surgeon in the Army and Navy. Candidates are scarce—true: and not over good at all times—that is to say, *male* candidates. Why not, then, try women? According to advanced modern notions, woman is equal to man, and better. A woman has passed Apothecaries' Hall. Man is dear and scarce; women cheap and plentiful. If women desire to enter the Medical Profession, and assert themselves equal to the task, why should they not be admitted? and what field so large and so glorious as that of ministering to our gallant defenders by sea and land, when sick and wounded? Who so well could soothe the fevered brow and reanimate the flagging

heart? The late venerable Guthrie was wont to say, that when soldiers were slow in recovering from wounds, and lay prostrate with debility, nothing fetched them round so surely as having them rubbed by young women. The authorities at the Horse Guards and Admiralty may be congratulated on having discovered the true missing link. Employment will be found for the unemployed: females who now go as governesses at £20 or £30 a year will certainly not stand out on questions of pay. The country's precious money will be saved, and all the present perverse set of Surgeons and Assistant-Surgeons may go on half-pay, or go to the colonies, and be well served out for their contumacy.

Government Legislation and the Gas Nuisance in Towns.

(From a Correspondent.)

It is an admitted fact, proved by the disaster at the London Gas Company's Works in 1865, and by other examples beyond number in this and other countries, that every one who dwells in the neighbourhood of gas works lies in hourly imminent peril of sudden destruction. It is admitted that they are most noxious to health, and I need not say how utterly subversive they are of cleanliness and comfort. They are, in brief, about the most deadly, foul, and pernicious of all nuisances; and it is at the same time well known that nothing is more practicable than to remove them entirely away from London and its ever-spreading outskirts, as a considerable distance between the points of manufacture and consumption makes no difference in the facility of supplying gas. Yet here we have Sir Stafford Northcote, on the part of Government, bringing in a Bill "to amend the Metropolitan Gas Act of 1860," in which this most important of all the points involved in the gas controversy is ignobly shelved. There is *quantum suff.* about distribution, administration, quality, price, etc.; but Ministers seem to overlook the incumbent duty of taking this favourable and appropriate opportunity for beginning practical action towards the great and indispensable object of relieving London and London neighbourhoods from a fearful and unnecessary—because removable—evil, which, if vigorous steps are not taken, must become huger and more destructive every year.

Of course the objectionable nature of gas works, and the immense size and large number of these factories, were not dreamed of in the infancy of the system—else they would not have been permitted to be erected in any spot which the outflow of population was likely to reach—but neither was the enormous increase in the size of London itself. The nuisance grew stealthily, step by step, until it overshadows us, oppresses us, sickens us, threatens us. Now is the fit juncture to set about rectifying it, and putting an end to a very barbarous and disgraceful state of things. I trust that Government will, while there is yet time, take the matter up. Should they have the good fortune of initiating useful movement upon this subject, they will have made a substantial addition to whatever other acts or proposals they would desire to be remembered by.

Pyroxylic Spirit.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In the *Medical Times and Gazette* of February 9, article on the British Pharmacopœia, you pronounce pyroxylic spirit to be "one of the best remedies for the sickness of uterine diseases or of pregnancy." Will you kindly say in what doses it is to be administered?

I am, &c. S. D.

*** Five to ten drops; but more may be given.

The British Pharmacopœia.—A Good Suggestion.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Would it not be well in the Pharmacopœia Committee, now that they have got the Pharmacopœia advanced to the stage of "proof," not to hurry on too fast with the printing it off, but allow a little breathing-time to consider the changes made? We cannot go on republishing a Pharmacopœia every two or three years, and what we are to have now should last us at least a dozen.

Let the Medical journals give us full lists of the additions made to the present edition, as well as the omissions from the last one. Let them also give, even at the expense of a little space, which their readers will readily forgive, the changes that have been made in the Galenical preparations and compounds, and, if possible, in the chemical also; or, better perhaps, let copies of the "proof" be sent to the reading-rooms of the various Medical corporations and Universities, that they may be seen by such as may feel interested. Then let the Profession, not in the bitterly critical way they received the former edition, but quietly, and in the wish to make this one as perfect as may be, offer such suggestions as they may see fit. It is evident that the Committee, from the restorations of old formulæ, and the addition of new medicines they have made to the present edition, are wishful to give satisfaction to the Profession, and let us meet them in the same spirit. At any rate, by a little delay, suggestions can be offered at a stage when they can be adopted if suitable, and all cause for grumbling hereafter will be removed. I am, &c. Medicus.

Food for the People.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In reading your leading article on "Food for the People," I was led to think that you don't paddle your own canoe in such muddy waters as we poor provincials are compelled to do. The working classes like to patronise something that is very dear, if only it will cook itself—viz., beef steaks and mutton chops. Broths, stews, sheep-heads, fries, and fish—this class of articles require some time and care, to the great annoyance of the housewife, who wishes to spin her yarn of talk to within five minutes of her husband's return to dinner. Some might say this is very harsh language. I have seen it thousands of times, and in my neighbourhood I have seen sheep's-fry, heads, etc., laid out in such a clean tasty manner on the Friday morning that I could have enjoyed a dinner from any one of the dishes properly cooked. And what is the consequence? They don't sell. For why? Because a very large proportion of the working classes who get their wages on Friday make very short work both of their cooking and their money. They have beef steaks or chops at tea or supper on Friday night; the same at breakfast on Saturday morning; likewise at tea again on Saturday night. Then a warm joint at their Sunday's dinner. Then this finishes the consumption of meat for the week. Then they go to the pawnshop to eke out—what the excavators call—subsist. Others, who wish to be considered more economical, after their extravagant living at the beginning of the week, have tea and coffee, *alias* boiled water, three times a day. This is no exaggerated statement of what I have seen times without number. The same subject of cooking has occupied the pen of the leading London paper without any beneficial results, and will continue to do so until time is no more. I am, &c.

Leeds, February 20. Thomas Foster Sagar.

A Plea for Country Poor-law Medical Officers.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I do not envy the metropolitan Poor-law Medical officers any advantage they may get, but do not let us in the country be quite forgotten. Surely legislation is wanted our way. How and to what extent some one with more time to spare than I have will, perhaps, be good enough to say; but if we were to have one horse, one groom, and one trap free from assessed taxes, and at all times travel toll free in our own districts, would be some little advantages. We ought to be so situated that being a Poor-law Medical officer should be a credit, and not a half slur as it is at present. You must see what you can do for us, and we must help ourselves too.

In the same number of your periodical (last Saturday's) that you speak of the Medical Poor-law matters, you continue your observations on the British Pharmacopœia. In speaking of aqua camphoræ, the plan you advocate for making it is tedious. A better way is to add about ten minims of the spirit of camphor of the London Pharmacopœia to a pint of water, shake instantly, and keep shaking till the camphor is dissolved, which is in a very few minutes, and a limpid solution is obtained.

I am, &c.

Sussex, February 20. A Country P. L. M. O.

Dr. Macloughlin's Theory of Cholera.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—As the *Medical Gazette* for 1853 contains the result of the first scientific researches into the pathology of cholera undertaken in any country, it is due to your journal that it should contain the proofs that these researches have now happily terminated in being acknowledged to be the most scientific and the most correct that have been carried out by all scientific Medical Practitioners in all countries.

You are aware that in 1817, when cholera first attracted attention in India, the Indian Government appointed Medical Committees to study the pathology, the etiology, and the Medical treatment of this disease, and to report; that these Committees reported that cholera was a disease of sudden invasion, attacking persons in perfect health suddenly with vomiting, severe purging, spasms, etc., and destroying life in a few hours; that it was a contagious disease; and that this disease was to be cured by the eliminating plan of treatment. These opinions were accepted as correct by the whole Medical public in the whole world.

On my return to this country in 1848, I found that here the Medical Profession had made no attempt to go to the bedside, and there ascertain what, if any, is the first deviation from perfect health which invariably precedes an attack of vomiting, severe purging, spasms, etc.

In 1849 cholera, as an epidemic, broke out in England. I accepted the appointment of a Medical Inspector to the General Board of Health; I had charge of, at one time, nine Unions; I had about one hundred Medical officers acting with me; I directed these gentlemen to inquire, when they met with a case of cholera, what was the first symptom which marked the first deviation from perfect health, and which invariably preceded the first attack of vomiting, etc., etc. 3902 cases of cholera occurred in these nine Unions. Every one was preceded by a diarrhœa for a few hours, or for a few days, or for a few weeks, and where this premonitory diarrhœa was promptly cured the developed stage was prevented, and life was safe. And it was further ascertained that it was dangerous to administer a half, a third, or a quarter of the usual dose of a purgative medicine, lest diarrhœa be induced, followed too often by fatal cholera.

These researches, although publicly carried out, met with very little attention.

On cholera breaking out here in 1853, with the valuable information afforded me by the Registrar-General, Major Graham, and the gentlemen of his department, I demonstrated publicly before the whole Medical Profession of London that every one who had died of cholera in 1853 in London had had a premonitory diarrhœa for a few hours, or for a few days, or for a few weeks, and that where eliminating medicines were administered they too often brought on diarrhœa and fatal cholera.

When I had published the results of these researches, not a week elapsed before the French Minister of the Interior sent the late Dr. Mélier to London to see me, to examine my pathological facts, and to report. The above researches were again carried out in 1854 by the Registrar-General (see his weekly reports of births, deaths, etc., etc., for 1854), and with the same results.

When cholera broke out as an epidemic in France in 1865, without any solicitation on my part, the French Minister for the Interior ordered inquiry at the bedside into the results of my researches. Finding these correct, and the most scientific that had been carried out in any country, he adopted them, published them *verbatim* in the *Moniteur* of October 18, 1865, and strongly recommended them as trustworthy to the public.

You, no doubt, have remarked that in the Hospitals here last year, when cholera prevailed, those Hospitals which did not attend to the premonitory diarrhœa, and which treated their patients according to the eliminating plan, lost more patients than those Hospitals where attention was paid to the premonitory diarrhœa, and that this plan of Medical treatment was eclectic.

Therefore it results from the above researches that cholera is invariably preceded by a diarrhœa for a few hours, or for a few days, or for a few weeks; and that if this diarrhœa is promptly cured the developed stage is prevented, and life is safe; and that the eliminating plan of treatment assists the disease to destroy life. I am, &c.

David Macloughlin, M.D., Member of the Legion of Honour.

36, Bruton-street, Berkeley-square, London, W., Feb. 26.

Cape Climate.

Extracts from Letter in the Cape Town Mail.

December, January, and February are the Cape summer; March, April, and May are the Cape autumn; June, July, and August are the winter; September, October, and November are the spring.

From November up to April south-east winds off the pure, cool waters of the Southern Ocean prevail generally, and are, on the southern side of Table Mountain, at the suburb villages of Mowbray, Rondlash, Claremont, Wynberg, Plumstead, and Deepriver, fresh, enjoyable, and exhilarating.

Then the mean temperature is 70° indoors, with windows, etc., all open to the breeze.

In April there is some light rain; in May and June it is heavier. The temperature then is 62° indoors generally, but never less than 50° F.

Mr. Bunbury, when here with Sir George Napier, after great experience of fine climates and sunny lands, wrote of the Cape:—"The scenery near Cape Town has much in it of the Italian character, but it is set off by a climate very far superior to that of Italy."

In spring it is very rarely warmer than 74°, and not cooler than 54° at any time. Cape Town in 34° south latitude has the same mean annual temperature as Naples in 41° north latitude.

The Cape mean maximum temperature is 78° F., and the mean minimum temperature is 48°, so that the annual range is but 30° F., while the difference of the means in the hottest and coldest months is but 15°.

The annual rainfall on the southern face of Table Mountain is about thirty inches.

The climate of the environs of Cape Town, and of many other parts of the colony, is quite as well adapted for invalids with lung disease from Northern Europe as it proved itself to be for the numerous invalids dying of tropical diseases that used to be here from India up to 1850.

For many years the British soldiers that died from lung disease did so in—

1. Windward and Leeward Islands .. .. 10·40 in 1000 men.
2. Bermuda .. .. 8·70 ,, ,,
3. Jamaica .. .. 7·50 ,, ,,
4. Nova Scotia .. .. 7· ,, ,,
5. Canada .. .. 6·70 ,, ,,
6. Malta .. .. 6· ,, ,,
7. Gibraltar .. .. 5·30 ,, ,,
8. Ionian Islands .. .. 4·80 ,, ,,
9. The Cape Colony .. .. 3·90 ,, ,,

No case of Asiatic cholera has ever been known in Southern Africa. There is no marsh miasm, and very little diarrhœa or dysentery. Diseases of the liver, spleen, and kidney are very rare in the colony.

A Physician from India, after years' experience, has written in the fourth volume of the *Calcutta Review*, p. 290:—"The Cape climate is, perhaps, the finest in the world, equally pleasant and salubrious; it is neither hot, nor cold, nor damp. Nowhere could there be found a better climate for invalids from England or India."

English lads with delicate lungs, when sent out to school here, should arrive by their twelfth year, and should stay till they are twenty. They then will be able to venture anywhere in after-life. Of course, even the Cape climate will not cure cases of phthisis too far advanced.

COMMUNICATIONS have been received from—

Mr. Evans; S. D.; Dr. Purefoy; Dr. Thurnam; Dr. Duckworth; Dr. Johnson; Dr. Crawford; Mr. Little; Dr. Dickinson; Dr. Blake; Medicus; Dr. Hearne; Mr. Leigh; Dr. Bree; Dr. Gibbon; Dr. Ree; Dr. Laycock; Dr. B. W. Richardson; Dr. Moore; Mr. J. H. James; Dr. Clifford Allbutt; Mr. R. Ellis.

BOOKS RECEIVED—

Dublin Quarterly Journal of Medical Science, No. 85—Jones's Lectures on Pathology and Therapeutics—Collis's Contributions to Operative Surgery—Moses's Popular History of London—Massy on Brighton as a Watering-place—Struthers' Sketch of the Edinburgh Anatomical School—Beraud's Atlas of Anatomy, Parts II. to IX.—Calendar of the University of London—Report of the Savernake Cottage Hospital—Transactions of the Ethnological Society, Vol. V.—Quain's Anatomy, two vols.

NEWSPAPERS RECEIVED—

L'Union Médicale—Court Circular—Gazette Médicale de Paris—Gazette des Hôpitaux—Sunday Gazette—Portsmouth Times—Kentish Mercury—The Press—West Surrey Times—Medical Press and Circular.

VITAL STATISTICS OF LONDON.

Week ending Saturday, February 23, 1867.

BIRTHS.

Births of Boys, 1178; Girls, 1164; Total, 2342.
Average of 10 corresponding weeks, 1857-66, 1993·9.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	678	659	1337
Average of the ten years 1857-66	722·0	701·7	1423·7
Average corrected to increased population..	..	..	1566
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,388	3	1	2	..	11	7	1	..
North ..	618,210	14	..	2	3	19	5	2	..
Central	378,058	[illegible]	..	2	..	9	6	..	..
East ..	571,158	5	3	3	..	20	8	3	..
South ..	773,175	8	3	11	1	17	8	3	..
Total ..	2,803,989	33	7	20	4	76	34	9	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·237 in.
Mean temperature	46·5
Highest point of thermometer	56·9
Lowest point of thermometer	39·0
Mean dew-point temperature	42·9
General direction of wind	S.W.
Whole amount of rain in the week	0·23

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, February 23, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending Feb. 23.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending Feb. 23.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	2342	1421	1337	56·9	39·0	46·5	0·23	23
Bristol (City) .	165572	35·3	120	74	‡71	54·6	39·4	47·1	0·16	16
Birmingham (Boro')	343948	43·9	249	167	142	55·7	39·2	45·9	0·11	11
Liverpool (Borough)	492439	96·4	416	285	267	55·3	41·2	46·8	0·10	10
Manchester (City) .	362823	80·9	275	205	‡202	57·2	39·8	47·7	0·08	8
Salford (Borough) .	115013	22·2	70	58	60	57·6	38·1	46·1	0·10	10
Sheffield (Borough).	225199	9·9	209	119	107	54·3	38·5	45·3	0 04	4
Leeds (Borough) .	232428	10·8	171	118	116	55·0	38 5	45·9	0·02	2
Hull (Borough) .	106740	39·0	72	49	47	..	..	..	..	..
Nwcstl-on-Tyne, do.	124960	23·4	89	66	102	53·0	40·0	46·5	0·03	3
Edinburgh (City) .	176081	39·8	129	85	75	52·7	38·0	46·1	0·10	10
Glasgow (City) .	440979	87·1	387	257	250	51·9	38·0	44·8	0·25	25
Dublin (City and some suburbs) .	319210	32·8	178	†157	211	58·1	37·5	48·2	0·20	20
Total of 13 large Towns . . .	6187764	34·8	4707	3061	2987	58·1	37·5	46·4	0·12	12
					Week ending Feb. 16.	Week ending Feb. 16.				
Vienna (City) . .	(1863) 560000	..	..	..	383	..	..	§ 40·1	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·237 in. The barometrical reading increased from 29·69 in. at the beginning of the week to 30·39 in. on Wednesday.

The general direction of the wind was S.W.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 46·7°.

APPOINTMENTS FOR THE WEEK.

March 2. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

Royal Institution, 3 p.m. G. A. Macfarren, Esq., "On Harmony."

4. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

Medical Society of London, 8 p.m. T. C. Weedon Cooke, "On the Relation of Cancer and Phthisis."

Odontological Society, 8 p.m. Meeting.

Royal College of Surgeons, 4 p.m. A Lecture, by Professor Huxley.

Royal Institution, 2 p.m. General Monthly Meeting.

5. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

Anthropological Society of London, 8 p.m. Meeting.

Pathological Society, 8 p.m. Meeting.

Royal Institution, 3 p.m. Professor Henslow, "On the Practical Study of Botany."

6. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 2 p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

Obstetrical Society of London, 8 p.m. Dr. Braxton Hicks, "On a Rare Case of Extra-uterine Fœtation." Dr. Playfair, "On the Treatment of Labour complicated by Ovarian Tumour." Dr. Woodman, "On a Case of Cholera during Pregnancy." And other Papers.

Royal College of Surgeons, 4 p.m. A Lecture, by Professor Huxley.

7. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

Harveian Society of London, 8 p.m. Dr. Tilbury Fox, "On Parasitic Diseases of the Skin, and on a Case of Fibroid Molluscum associated with Kelis."

Royal Institution, 3 p.m. Professor Frankland, "On Coal Gas."

8. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.

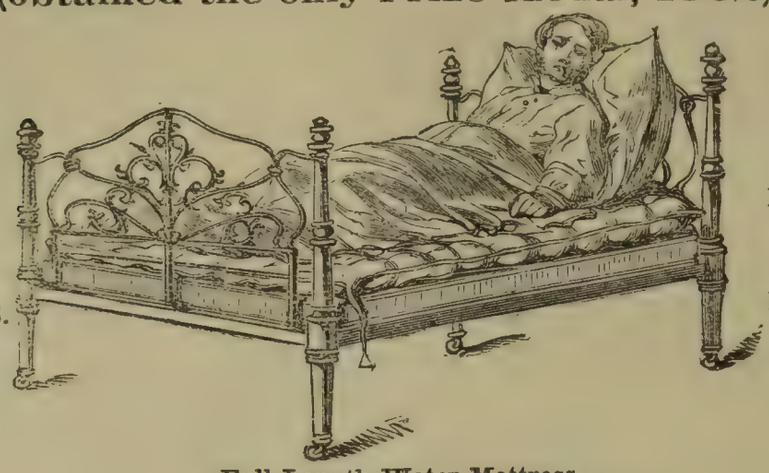
Royal College of Surgeons, 4 p.m. A Lecture, by Professor Huxley.

Royal Institution, 8 p.m. Rev. W. Greenwell, "On the Yorkshire Wold Tumuli."

HOOPER'S
WATER BEDS AND CUSHIONS,

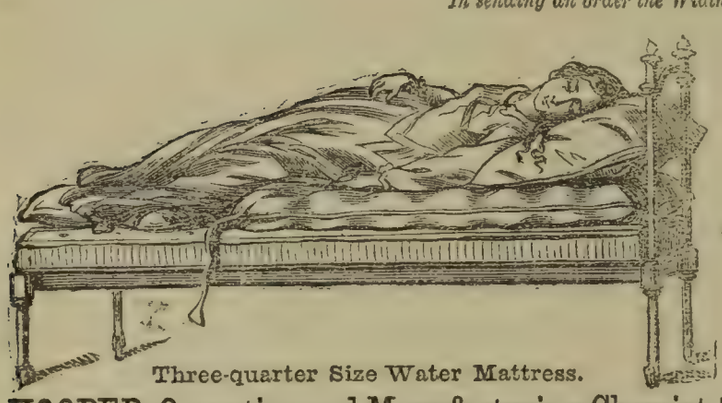
(obtained the only Prize Medal, 1862).

USED BY
THE ROYAL FAMILY
AND ALL
CLASSES OF INVALIDS.



ALSO IN
H.M. ARMY AND NAVY,
AND THE
INDIAN PRESIDENCIES.

Full Length Water Mattress.
In sending an order the Width of the Bedstead should be stated.



Three-quarter Size Water Mattress.

Half Size Water Mattress.

HOOPER, Operative and Manufacturing Chemist, 7, Pall-mall East, and 55, Grosvenor-street, London.

PANCREATIC EMULSION.—THE NEW REMEDY.

PALATABLE AND MORE PERMANENT IN ITS EFFECTS THAN COD-LIVER OIL.

Originated by Dr. DOBELL,

PHYSICIAN TO THE ROYAL INFIRMARY FOR DISEASES OF THE CHEST.

Reports of "Cases of Consumption treated with Pancreatic Emulsion," in "The Lancet," Nov. 11 and 18, 1865, and Nov. 17, 1866.

Prepared only by SAVORY & MOORE.

Sold by them and Chemists generally in Bottles (retail), 2s. 6d., 4s. 6d., and 8s.

THE FOOD FOR INFANTS AND INVALIDS.

Ready for Use without BOILING or STRAINING.

Specially Prepared by SAVORY & MOORE,

Chemists to the Queen, H.R.H. the Prince of Wales, the Emperor Napoleon III.

PRIZE MEDAL—EXHIBITION 1862.

A REAL IMPROVEMENT ("Lancet") on the ordinary kinds of Liebig's Food.

This Food contains an extra proportion of the Wheat Phosphates, so essential to the healthy growth of Infants and the restoration of Invalids. Tins, 1s., 2s., 5s., and 10s.

JEREMIE'S SOLUTION OF OPIUM.

This preparation has long enjoyed a high repute as a narcotic and anodyne, allaying pain and producing sleep, without causing the excitement and cerebral disturbance which often follow the use of opiates. Bottles, 2s. 9d., 4s. 6d., and 11s.

SAVORY & MOORE, 143, NEW BOND-STREET.

ORIGINAL LECTURES.

LECTURES ON CHRONIC DISEASES AND THE DISEASES OF OLD AGE.

Delivered at the Salpétrière,

By Dr. CHARCOT,

Assistant-Professor at the Paris Faculty of Medicine, etc.

On the Causes of Gout.

I. *History and Geography of the Disease.*

Gentlemen,—We propose to investigate the laws of the production of gout, and, before doing so, to lay down the rules which we intend to observe in the course of our inquiries.

We shall begin by a rigid examination of the facts which clinical observation sets before us, without allowing any theoretical notions to interfere with our judgment: and having once established these fundamental data, we shall endeavour to interpret their significations according to the views of modern physiology—to follow, step by step, the successive modifications which take place in the system under the influence of causes, which experience has taught us to connect with gout. We shall then have to inquire in what manner the various symptoms of the disorder are produced by the changes which take place in the economy—in short, we shall attempt to form an idea of its *morbid physiology*. Such is, in fact, the ultimate object of all pathological investigations.

But a radical and systematic separation of the positive notions derived from facts, and the hypothetical views which arise from a mere process of induction, is absolutely indispensable in the study of this subject; for on no other point has the inconsiderate and presumptuous intrusion of chemistry and physiology, in the interpretation of morbid phenomena, so deeply discredited their application to Medicine.

"The most praiseworthy enterprise which could possibly tempt a Physician," says Boerhaave, "would be to reconcile the pathology of the ancients with the physiology of modern authors."(a) But *modern* physiology, in the days of Boerhaave, was somewhat different from the science which we now consider as entitled to that name: and at some future period our own physiology may, perhaps, be out of fashion in its turn. We must, therefore, tread cautiously along this path, and scrupulously avoid all premature conclusions; for our predecessors were fully alive to the importance of physiology in Medical science, but sadly deficient in correct and comprehensive notions on the difficult problems which they occasionally attempted to solve, without having measured their depth.

It must, besides, be acknowledged that, notwithstanding the progress we have accomplished in the study of the nutritive functions, we are but imperfectly acquainted with the process through which excrementitious substances are generated; and the history of uric acid is no exception to the general rule. We know little of the conditions which regulate its production in health, and increase it in disease. The pathogeny of the uric diathesis is still therefore in a rudimentary state, and no complete theory of gout can at present be brought forward. We must be contented with setting up some few landmarks, which may, perhaps, direct the steps of future observers.

A rapid review of the *history* and *geography* of gout is, in our opinion, the most suitable introduction to the subject; for as we have to deal in this case with an eminently constitutional disorder—a disorder inseparably connected with the general state of the patient—it is clearly indispensable, in order to appreciate its principal characteristics, to ascertain the physical and social conditions which appear to promote its development in man. Viewed in this light, the etiology of disease assumes at once a broader scope.

I. History of Gout.

To retrace the fluctuations which diseases have undergone in the lapse of ages, and to seek in history the origin of these successive changes, is the chief object of historical pathology. Inquiries of this nature enable us not only to perceive the influence of external agents, but also to discern the causes of sickness which lie within ourselves.

But this method of investigation can only be applied to those complaints towards which the attention of our predecessors has long been directed; we cannot otherwise expect to meet with a sufficient amount of historical documents. Now, these desiderata exist only in the case of those epidemic disorders which formerly produced such frightful devastations, or of those chronic complaints which have attracted notice at all times. Allow me to adduce a few illustrations. The plague made its appearance for the last time in France during the year 1721; since then it has been gradually disappearing, even in those countries which were formerly considered as the hotbeds of pestilence. We are therefore fully entitled to inquire into the causes of so singular and beneficial a change, and to ask what the conditions were, which favoured its propagation in former times and exist no longer in our own. Leprosy was still to be met with in Martignes towards the close of the last century; it has since then disappeared from this country; it grows daily scarcer in Europe, and seems to have retreated to Norway, while gout tends to confine its action to the British islands. The Medical philosopher contemplates with curiosity the few remaining vestiges of an affection which, after playing so conspicuous a part, and holding a place in the legislation of so many different nations, seems on the point of being totally extinguished.(b)

Among the diseases which occupy a prominent place in history, gout evidently stands foremost. That the higher classes of society in former days were almost universally its tributaries is a fact which cannot be doubted; but its reign is nearly over now. It is rapidly disappearing from the continent of Europe; yet, wherever it exists, we find it the same, in all essential particulars, as when the Physicians of antiquity first drew its picture.

Let us, therefore, briefly exhibit the principal data which history furnishes on this point.

From the most remote antiquity gout has existed in Europe; we find it already described in the writings of Hippocrates. But its general prevalence appears to have attained its highest degree under the reign of the first Cæsars. On this point we possess an overwhelming mass of evidence. Physicians and poets, moralists and historians, unanimously bear witness to its universal diffusion at that period.

The state of the Roman world in the first century of the Christian era is fully known to us in this respect, through the writings of Aretæus and Celsus on the one hand, Ovid and Seneca on the other. In the second century Galen (130 A.D.) and the amusing Dialogues of Lucian(c) amply provide us with interesting particulars on the same point. In the third century we find the Emperor Diocletian issuing an edict which dispenses gouty subjects from all public offices when their joints are so deformed as to render them impotent. From this circumstance we may infer that in the third century gout was one of the most ordinary complaints which afflicted mankind, and that its principal characteristics were precisely the same as at the present day.

No material alteration seems to have taken place in this state of things during the next three centuries, if we may trust Oribasius, Alexander Tralliensis, Aëtius, Paulus Æginetà, and other Medical writers. During the dark period of the middle ages, the Arabs, following up the Medical tradition of antiquity, inform us that gout had lost no ground in their time. The authors of the Lower Empire, Actuarius, Demetrius Pepagomenes, bring us down to the thirteenth century. At last the light of modern science dawns upon us, and the concurring testimony of a host of competent observers establishes the universal diffusion of gout in Europe.

You therefore perceive, gentlemen, that an unbroken chain of historical proofs enables us to assert with confidence that, during more than two thousand years, this disease has maintained its sway over the regions which we inhabit. But you need only look round to ascertain its decline. We think it necessary to enter into some particulars on this point.

The retrogression of gout seems to coincide with the commencement of the present century. From documents collected by Dr. Corradi, of Bologna, it appears that, even in England, the frequency of this disease has greatly diminished, according to Owen and Fuller; that it is rapidly decreasing in Holland

(a) "Nec in medicum plus laudis redundare posset, quam ex eo labore, quo veterum pathologiam redigeret ad neotericorum physiologiam."—*Boerhaave, Med. Stud. Medic., pars ix. Pathologia*, p. 573,

(b) The rigid seclusion which cut off lepers from all communication with society was strictly enforced during the middle ages, and contributed, no doubt, to the gradual extinction of the disease. Some Medical men prefer appealing to a *spontaneous* process of extinction; we accept their explanation, provided it is only understood to express a desideratum in the state of our present knowledge.

(c) *Tragodopodagra: Ocypus*, the light-footed. Some critics question the authenticity of this latter dialogue.

and Belgium, according to Coley, and in Switzerland, according to Professor Lebert. In places where it formerly prevailed in the highest degree it has almost entirely disappeared. It is seldom met with, for instance, at Rome and Constantinople. The state of things in this respect is therefore materially altered. For this reason, no doubt, the works published on this subject during the last sixty years are so few in number; (d) for, except in England, the materials for new observations have grown scarce.

But, notwithstanding its gradual decline, gout has undergone no change whatever in its symptoms, as we shall now proceed to show.

The descriptions which the ancients have left behind them entirely coincide with those we find in modern authors; and all impartial critics must acknowledge that, as far as clinical symptoms are concerned, gout still retains its primitive features. The *light-footed Ocypus* fully resembles the patients whose cases are recorded by Van Swieten at a distance of sixteen centuries.

With regard to etiology, the same conditions still prevail. Suetonius calls gout *morbus dominorum*; Sydenham expresses the same idea in somewhat different terms. As to convivial excesses, their influence on the production of this disorder has always been proverbial.

It must also be remarked that the Greek and Roman Physicians, who bequeathed to posterity so graphical a delineation of gout, seem hardly to have noticed the existence of rheumatism — a contradiction which has led some authors to suppose that the latter disease is comparatively of recent origin, and was almost entirely unknown to the ancients. Such was at least the opinion of Sydenham; his views have been latterly upheld by Hecker and Leupoldt. However this may be, it is clear that since the time of the Romans no essential change has occurred in the general features of gout.

What inferences can we draw from these facts? Are we to suppose, with Dr. Corradi, that the refinement of modern manners, and the improvements introduced into our mode of living, have brought about the gradual disappearance of gout? It is certain that a considerable change has taken place in our habits, as far as diet is concerned. The suppers of Lucullus are past and gone. We no longer enjoy the heroic appetite of our chivalrous ancestors, and, unlike the bold barons of feudal times, we seldom treat our guests to an ox roasted whole. We are infinitely less partial to animal food; our meals are shorter, our potations less deep; in this latter respect especially, the customs of society, even in England, have undergone a great and beneficial change.

II. Geography of Gout.

The study of Medical geography, like that of historical pathology, is one of the most powerful means of obtaining an insight into the etiology of disease. It teaches us to know the various regions of the globe in which certain disorders prevail, and enables us to examine, on the most extensive scale, the cosmic, telluric, and anthropological conditions which favour their progress or arrest it.

With respect to gout, geography informs us that, as a prevalent disease, it exists at present in England only. But we speak exclusively of the southern portion of the United Kingdom; for neither Scotland nor Ireland have any share in this privilege. Besides, London is the point on which the predominance of gout is the most strongly marked; it reigns in the British metropolis not only among the higher classes, but among the people, and it is found in the homes of the poorest artisans. In our next lecture we will endeavour to explain the cause of this singular preference.(e) For the present we shall only observe that gout exists, in a much lower degree, on some other points of the globe. It is found in some parts of France, principally in Lorraine and Normandy, provinces at all times renowned for their convivial habits. It also exists in Germany, and in most countries where beer is the ordinary drink of the people.

It is certain, at all events, that this complaint is confined to the temperate regions of the world. Under the equator, and within the tropics, it is almost entirely unknown. In India the English occasionally suffer from it, although less frequently than in their own country; but the sober Hindoo never feels a twinge. In Egypt its only victims are Europeans and rich Turks who infringe the prescriptions of the Prophet; but the fellah enjoys, in this case at least, an absolute exemption from tribute.

In Brazil, notwithstanding the constant use of animal food, gout is almost entirely unknown, according to Dundas. (We borrow most of these facts from Dr. Hirsch, of Berlin, who has published an interesting paper on the subject.) In these instances the influence of climate is evident; and the differences between the various races of man have no connexion with it, for the blacks in the British service, when they adopt the habits of the whites, are equally subject to gout, according to Quarrier, who has observed some cases of this disease among them.

Rheumatism widely differs from gout in this respect; it exists in India, both in the acute and in the chronic form, and appears to prevail in all climates. It is, according to the expression of Mühry, *a ubiquitous disease*. We find in this instance a striking difference between two parallel and closely related disorders, to which we are desirous to call your attention.

In the next lecture we will examine analytically the principal causes of gout.

(d) Dr. Charcot alludes here to Continental, not to English, Medical literature.

(e) Dr. Charcot principally alludes to the effects of *porter*.

ORIGINAL COMMUNICATIONS.

ON CHLOROFORM AND ETHER IN MIXTURE.

By ROBERT ELLIS, Esq.,
Obstetric Surgeon to the Chelsea and Belgrave Dispensary, etc.

In a recent number of this journal (a) appears the account of a death occurring during the inhalation of the vapour of a fluid mixture of chloroform and ether. This mixture, consisting of one part of chloroform and two of ether, corresponds with the mixture "C" of the Chloroform Committee. It has hitherto been considered a perfectly safe anæsthetic agent, and I am not aware of any case of death happening during its administration until that just alluded to. It has been thought that the stimulant properties of the ether would counteract the depressant effect of the chloroform over the action of the heart, and there can be no doubt that the mixture is really a safer and a better agent for anæsthetic use than pure chloroform. But too much reliance has been placed upon the formula of its constitution, while too little regard has been had to the behaviour of this fluid mixture in evaporation. Hence, while, in theory, a mixture of ether and chloroform constitutes a most safe agency for our employ, when practically used such a mixture by no means yields up its constituents in the manner in which we should expect, and the security is thus destroyed. My attention having long been given to this subject in its application to my own purposes as an Accoucheur, I some time ago took considerable pains to investigate the behaviour, in evaporation, of this and of the other anæsthetic fluid mixtures, and in my work on this subject I have fully discussed the question.(b) The conclusions to which I was led after a long series of experiments, I venture here to recapitulate.

1. That the ingredients of fluid anæsthetic mixtures evaporate in a great degree, independently of each other, and in extremely differing quantities.

2. That though alcohol exerts, *in vacuo*, a powerful influence in restraining and equalising their vaporisation, this influence is in a great measure annulled in evaporation into free air, as in an inhaler.

3. That the only method of obtaining a true anæsthetic mixture is by consideration of the respective volatility of its ingredients, and so adjusting their proportions as to provide that all should evaporate simultaneously.

4. But as this can only be done by a very great reduction of the quantities employed, both of alcohol and chloroform, then the object of the mixture is entirely frustrated, and it is reduced in its properties to one similar to ether only—the most volatile of the ingredients always taking precedence of the rest.

5. That if impure alcohol and ether are used, these defects of unequal volatilisation become still more exaggerated, and the result vitiated by the water left behind after evaporation.

The behaviour of the mixture "C" which proved fatal in the case at Bristol was most carefully examined by me. I found that it was most unreliable, parting with its ether rapidly and with its chloroform slowly.

(a) No. 849, October 6, p. 378.

(b) "Safe Abolition of Pain in Labour." Hardwicke.

Half a drachm of this mixture was poured over a definite evaporating surface. At the expiration of from ninety to one hundred seconds, nearly all the ether had evaporated. From this to the end of three minutes, the evaporation of chloroform proceeded, and at the close of four minutes all had evaporated, a faint smell of alcohol being left behind for a few seconds—a result of some slight impurities in either ether or chloroform, or in both. Sixty minims were then used, and it was found that before the expiration of from two and a half to three minutes, all the ether had disappeared, and that from six to seven minutes elapsed before all the chloroform had evaporated.

This same mixture of ether and chloroform was subjected to gentle distillation at a temperature not exceeding 120°. The specific gravity of the mixture before distillation was 990. The distillate taken at the end of half an hour yielded a sample of specific gravity 910. The specific gravity of the liquid left in the retort was then taken, and it amounted to 1120—thus in the clearest way showing the rapid volatilisation of the ether and the slower evaporation of the chloroform.

In these and various other ways it came out that the mixture was not to be depended upon, and might in fact (as it has unhappily done) so mislead the operator as to be productive of serious consequences. For it is obvious that, if the ether of such a mixture is evaporated long before its chloroform, the pretended security of the compound is really fallacious. And worse—the ether, representing as it does the element of safety, is really dissipated in the earlier stages of inhalation when it is least required as a stimulant, and is absent in the later period when its presence is most necessary. Deaths during anæsthesia are always more or less mysterious, and I am by no means prepared to say that the fatal result in question can be explained on the supposition here suggested—namely, that the chloroform destroyed life because its depressing influence over the heart was not sufficiently counterpoised by the associated ether of the mixture. What I desire to effect is the disturbance of the very general reliance which has been placed in the safety of the fluid anæsthetic mixtures—a reliance which a most close examination of the subject has proved to be to a great degree fallacious.

For a considerable time past I have endeavoured to impress this fact on the notice of my Professional brethren, and to show that there is a more excellent anæsthetic method by which perfect security can be obtained, and definite and known quantities of the anæsthetic agents administered. This is the method of separate evaporation of these fluids, and administration of the "mixed vapours." By this system, and with the apparatus(c) which I have devised for its practical application, the patient can be made to inhale either the vapour of alcohol, of ether, or of chloroform, separately or in combination, at the will of the operator; the proportion of either vapour may be varied in any degree desired, and the known limit of a safe dose can in no way be exceeded.

Judging from a considerable experience of this method in my own obstetric practice, I can speak in high terms of its value, and of its vast superiority to ordinary chloroformisation. But as my anæsthetic experience has been chiefly confined to my own special department, I must leave it to others to decide as to its value for general use. And I would take permission to refer those who may feel interested in it to the little book already named, and to a small account of my method issued by Messrs. Savory and Moore.

Sloane-street.

A SCIENTIFIC INQUIRY INTO SOME OF THE CAUSES ALLEGED TO PRODUCE ASIATIC CHOLERA.

By the Rev. SAMUEL HAUGHTON, M.D., F.R.S.,
Fellow of Trinity College, Dublin, and of the College of Physicians Ireland.

(Continued from page 164.)

Meteorological Causes of Asiatic Cholera.

On August 5, 1866, Mr. James Glaisher published a letter in the *Times* newspaper, in which he announced the discovery of a "blue mist" that satisfactorily explained the spread, if not the existence, of cholera in the British islands. This phenomenon, according to Mr. Glaisher, had not been seen in Britain since the last outbreak of cholera in 1854.

The "blue mist" extends to the tops of the trees, and is apparent on all sides, more especially when viewed from under a tree by a spectator looking under other trees. Everything seen through this remarkable mist is coloured blue, and it resembles thin smoke from a wood fire.

Mr. Glaisher adds his opinion, from a careful study of the "blue mist" and its attendant circumstances, that the visitation of cholera in 1866 would not extend nor be of long continuance.

The "cholera mist," thus fairly started on August 5, 1866, by Mr. Glaisher, in Greenwich-park, seems to have travelled slowly westward, and was noted by Irish observers near Dublin on September 28, by which time it had acquired a sort of vermicular motion, and extended to a height of twelve feet from the ground, oscillating in a gentle manner, similar to the elevation and depression of the sea after a storm; the extent of this oscillation not exceeding one foot.

In the same letter to the *Times*, in which Mr. Glaisher propounds his theory of the "blue mist" as the cause of cholera, he also favours the public with his views as to the cause of scarlet fever, which is ascribed by him to the presence of a "yellow mist," unaccompanied by any remarkable humidity of the air.

It is agreed by all Physicians that scarlet fever is a contagious disease, if any disease be so; and it is doubted by many Physicians whether Asiatic cholera be contagious at all.

Let them all bow submissively to the *dictum* of the meteorologists. The propagation of epidemic disease depends, not upon contact, but upon the colour of the autumnal fog that settles on the undrained banks of the river that flows nearest to the place of observation.

When Galen ascribed epidemic diseases to the constitution of the air that surrounds us, he little knew the brilliant discovery that was to be made in later times, or how simple was the interpretation of the atmospherical phenomena. They are like the conjuror's tricks shown to schoolboys by a bottle, the contents of which are, in succession, red, blue, green, by the addition of some drops of *liquor mirabilis*.

Let Physicians and Sanitarians beware!
The blue fog brings cholera morbus!
The yellow fog brings scarlet fever!
The green fog is the sure precursor of black death!

Dismissing the cholera mist to the oblivion it so richly deserves, I shall now inquire into the ozone theory of cholera, which was urged with much earnestness in 1854 by French and Belgian theorists as a solution of the unknown atmospherical conditions that favour the spread of cholera. It was asserted, and with some show of facts in favour of the assertion, that during the prevalence of the epidemic, in several towns, its increase and diminution were *inversely* proportional to the quantity of ozone present in the atmosphere. From the observations made in 1854 and subsequently, it was confidently affirmed by several meteorologists that the long-sought *pestilential constitution* of the air imagined by Galen had been traced out, and its exact cause discovered. The increase of ozone in the air brought health, and its diminution implied the spread of disease and the existence of the dreaded *pestilential constitution*.

It was noted, however, by several intelligent observers, that ozone seemed to increase with the force of the wind, and to diminish as the air became calm; and it had been previously well ascertained that nothing tended to diminish a prevailing pestilence so effectually as the occurrence of a strong gale of wind—a phenomenon readily explained on the contact theory of pestilence by its tendency to dilute the poison and so prevent its spread from one sufferer to another.

It was reserved, however, for Mr. John Smyth, of Banbridge, to demonstrate the important fact that the quantity of ozone, like that of carbonic acid or oxygen, in the air, is almost absolutely constant; and that the indications of the ozone paper are, in a scientific point of view, to be regarded simply as the records of a very sensitive and delicate anemometer, that registers the number of particles of air that have come in contact with it during a given time, or, in other words, that records the velocity of the wind.

Mr. Smyth's proof of this important fact is twofold, one proof being direct and the other proof being indirect.

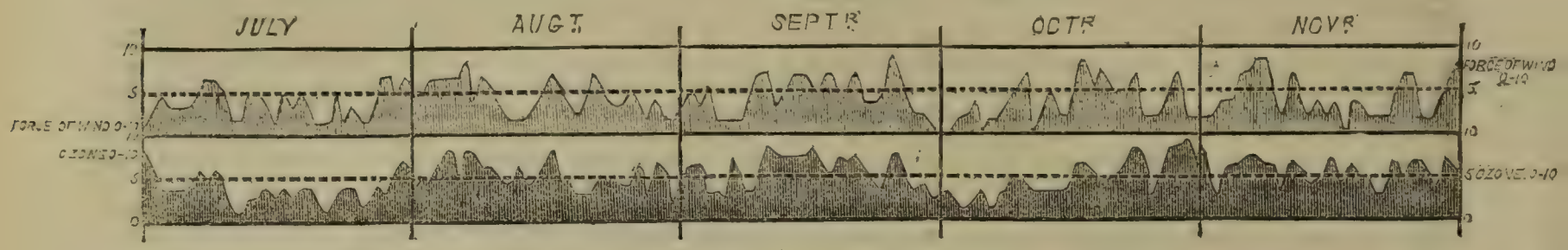
The direct proof consisted in the following experiment:—An aspirator or gasometer was provided, through which a known quantity of air was drawn in a given and known time, and in the efflux-tube of the aspirator the ozone paper was

(c) Messrs. Savory and Moore and Messrs. Savigny are makers of this apparatus, and will give full instructions as to its use.

placed, the indications of which remained nearly constant from day to day, while the freely exposed ozone paper showed the greatest variations. The conclusion drawn by Mr. Smyth from these experiments is, that the quantity of ozone in the atmosphere is almost constant, as proved by the ozone paper exposed in the tube of the aspirator; while the greater or less coloration of the freely exposed ozone paper is to be accounted for by the greater or less number of the particles of air brought into contact with it in consequence of the greater or less velocity of the wind on the day of observation.

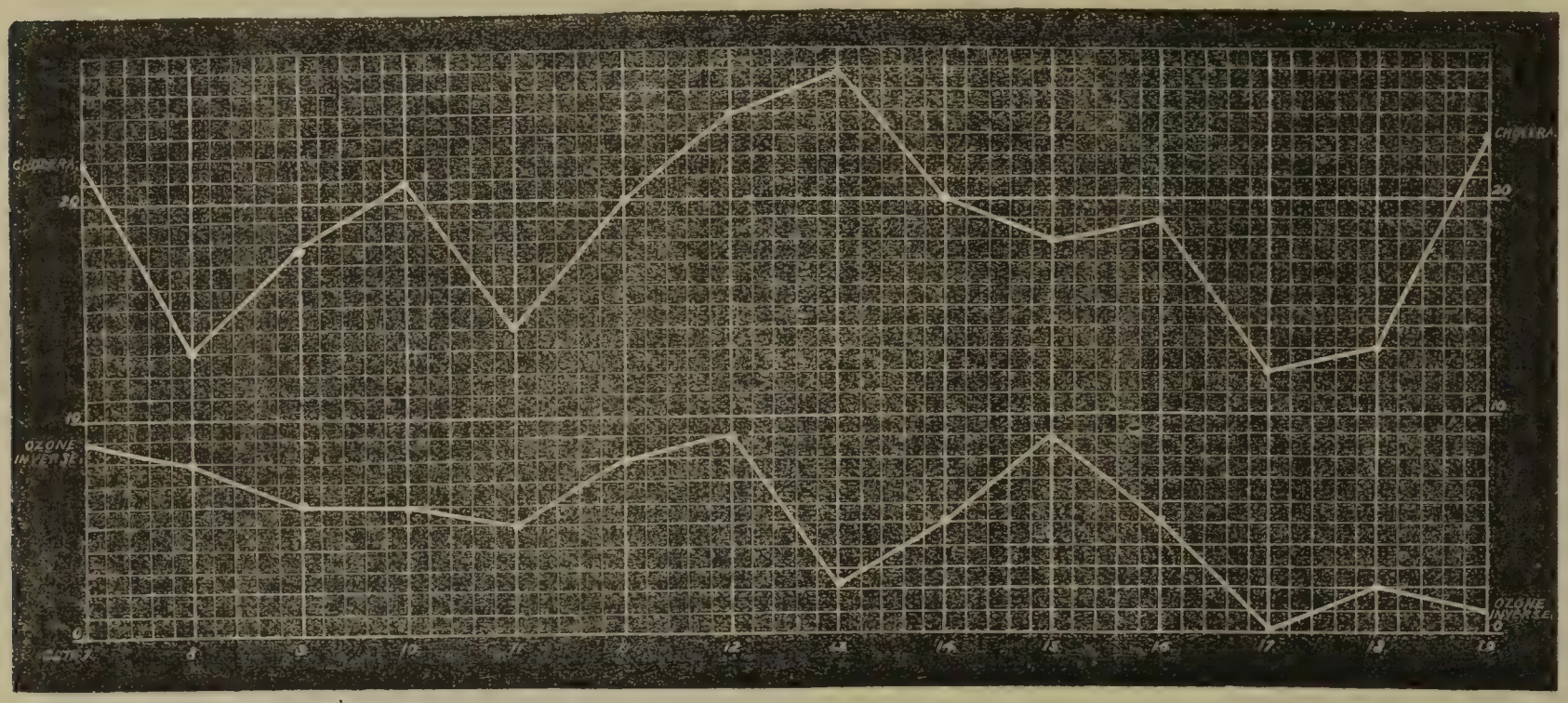
The indirect proof of the constancy of ozone in the atmosphere consisted in the comparison of the curve of ozone with the curve of the velocity of the wind, as shown by the anemometer. These curves are found always to follow the same law of rise and fall, proving thus that the ozonometer is also an anemometer.

In the accompanying woodcut I have shown from Mr. Smyth's observations near Banbridge the corresponding curves of ozone and wind during the months in which cholera reached its maximum in Liverpool and Dublin.



The examination and comparison of the two curves seem to me to disprove completely any possibility of a connexion between the absence of ozone and the prevalence of epidemic influence.

I have constructed the following comparative curves from results furnished to me by Dr. Burke, the Medical Registrar for Ireland, for the fortnight commencing October 7, in which the want of correspondence between the curves of death from



cholera and the inverse curve of ozone is apparent. The curve of cholera shows the number of deaths in Dublin each day, and the inverse curve of ozone shows the indication of the ozonometer, subtracted from 10 each day.

If the absence of ozone had any striking relation to the virulence of the cholera epidemic, the two curves ought to show a tendency to follow the same laws, but such a tendency nowhere exists; on the contrary, it is found that the day of greatest ozone (October 13) is the day of greatest mortality.

CASE OF GALLSTONE CAUSING DEATH IN SIXTEEN HOURS.

By P. LEIGH, M.R.C.S.

Mrs. B., aged 33, light complexion, delicate constitution, subject to severe attacks of neuralgia in different parts of the body and extremities, mother of four children, was confined of her last child on March 29 last; had an excellent recovery, and on April 18 took an hour's drive in the afternoon. On the 20th she enjoyed her dinner very much, and ate heartily of some sole. About three-quarters of an hour afterwards (*i.e.* about half-past 2 p.m.), as she was going upstairs to her room, she was suddenly seized with great pain in the stomach and faintness, and great difficulty of breathing. On reaching her room she fainted. The nurse gave her some brandy and water, and applied a hot bran poultice to the epigastrium, after which she vomited, without producing any remission of the pain or the dyspnœa. She thought her dinner had disagreed with her, and that it was an attack of spasms such as she had suffered from before, and was somewhat averse to me being sent for. Upon my arrival about half-past 3, I found her in bed, lying partly on her right side and back, with her body raised and bent forward, complaining of great pain in the epigastrium and about the heart, with urgent dyspnœa, blueness of the lips and around the mouth, face very pale, and countenance expressive of great anxiety. Pulse quickened, but volume good. Whilst there she vomited freely a brownish liquid, apparently the food she had taken at dinner. Ordered a large mustard cataplasm over the epigastrium, brandy and soda-water, and two pills every hour composed of a third of a grain of opium, three grains of camphor, with sufficient extract of henbane to form two pills. Soon after 1 a.m. of the 20th, I was sent for again. All the symptoms aggravated; gasping for breath; pulse scarcely to be felt; had vomited several times; complained of great pain in the back between the shoulders. She remarked that the neuralgia was very bad, evidently thinking the pain she was suffering was similar to what she had felt before. Ordered the mustard cataplasm to be repeated to the epigastrium, and one between the shoulders; to continue the brandy and soda-water and pills, and to have two grains and a half of quinine with half a drachm of chloric ether and five minims of laudanum every two hours. Feeling a desire to have the bowels moved, she was got up to the night-chair, when she appeared to be dying, which caused me to be sent for again. This was soon after 5 a.m. Although the pain was somewhat abated, yet it was evident she was sinking fast; pulse flickering, and extremities cold. She died at half-past 6—sixteen hours after the commencement of the attack.

Sectio Cadaveris forty-nine hours after Death.—Through the kindness of the husband, we were permitted to make an examination of the body. Rigor mortis well-marked, abdomen tympanitic, incipient decomposition. Upon opening the abdomen the stomach was seen much distended with flatus, and nearly empty. When opened there was not the slightest appearance of any inflammatory redness. The gall-bladder was partially filled with bile, and contained one large rough oval stone the size of a small bird's egg, and weighed sixteen grains when quite dry. The duct was large enough to admit the finger for a short distance, after which its size was normal. The duodenum and pancreas were much inflamed, and the peritoneum contained about two ounces of bloody serum. The bladder was empty. No other part was examined. I think it very probable that in manipulating about the gall-duct the stone was forced back into the gall-bladder, and that she died from exhaustion produced by the long continuance of the intense pain and spasm of the diaphragm, impeding circulation and respiration. I regretted not giving larger doses of opium, but a similar attack after her previous confinement yielded to the same treatment, which I hoped would be successful again.

Liverpool.

JAPANESE WARM BATH.

By G. HENDERSON, M.D.,
Indian Medical Service.

A FRIEND who was lately in Japan has described to me a warm-bath apparatus, which he says is used in every house in that strange country, and I find that it is mentioned in Sir Rutherford Alcock's "Capital of the Tycoon."

In England, this apparatus will be invaluable in small Hospitals, and particularly in private houses, where the difficulty of heating a bath often prevents the use of a warm bath altogether amongst the poorer classes. The Japanese warm bath is constructed as follows:—

In the bottom of an ordinary wooden or metal bath tub, a hole is cut six inches in diameter and about an inch distant from the side. Into this hole is fitted a copper cylinder, closed at the bottom by a very open grating. The cylinder is contracted at the top so as to resemble somewhat a large beer bottle; this shape increases the draught.

The bath being ready and filled with cold water, in order to heat it we have only to drop into the copper cylinder from one to two pounds of red-hot coals, and in half an hour the water will be raised in temperature forty or fifty degrees.

The diagram will explain the construction much better than words can do.

In fitting the cylinder into the wood, the simplest way is to make the copper with a flange, projecting like the brim of a hat, all round, and this may be fixed to the wood with screw nails so as to be watertight.

I find that if the diameter of the cylinder at the bottom is less than six inches, the fire is apt to go out owing to the cooling effect of the surrounding water; and, for the same reason, the charcoal when put in must be at a bright red heat, and the grating at the bottom must be very open, otherwise it gets choked up and stops the supply of air. The bottom of the bath must of course be raised from the ground several inches.

Lahore.

CONVEYANCE OF YELLOW FEVER.—The *London Gazette* of Tuesday contains an official notice that the Secretary for Foreign Affairs has received from Panama a despatch stating that yellow fever is prevalent on the Isthmus; that, although supposed to have been introduced by the steamers of the Royal Mail Steam-packet Company, from St. Thomas, persons have fallen victims among the foreign residents, and people who have not been passengers by those steamers; and that there are no quarantine regulations at the ports of the Isthmus.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CHARING-CROSS HOSPITAL.

The Hospital and Situation—The Nursing System—Changes on the Staff—Necrosis of the Shaft of the Tibia—Myeloid (?) Tumour of the Antrum—Prostato-vesical Calculus: Median Lithotomy—Obscure Injury of the Hip-joint—Fractures of the Patella.

BEFORE commencing a more detailed description of the Medical and Surgical practice of this Hospital, we give some short account of the Hospital, and a note of the recent changes which have taken place in the staff and in the school. We understand that considerable alterations are likely to be shortly made in the building, commencing probably with the school buildings, which are at present somewhat cramped. Those to be first altered are the dissecting-room and museum, and the rooms accessory to them; the very limited space of the museum being inadequate fully to display the great number of valuable specimens here collected. The wards of the Hospital will, it is hoped, be also improved and increased in number.

A larger building would be of the utmost value in the position occupied by Charing-cross Hospital, situated as it is in a most densely populated part of London, where traffic is at its height, accessible from every point, and immediately opposite to one of the largest railway termini in the kingdom. It has one of the finest situations of any Hospital in London, and may hopefully look forward to larger public appreciation, which will lead to extended building and improved accommodation.

The number of beds usually made up amounts, we are informed, to 120 or more, no special number being assigned to either Medical or Surgical cases; the latter, however, naturally predominate.

The nursing department is now, and has been for some few months past, conducted on the same principle as that adopted at King's College Hospital—namely, the employment of the nurses from St. John's House, in Norfolk-street, Strand. The same supervision of these nurses by lady sisters (several of whom have migrated from King's College) exists.

Several changes have taken place on the staff of the Hospital and in the school. Mr. Canton, lately Lecturer on Anatomy, has become joint Lecturer on Surgery with Mr. Hancock, Mr. Barwell succeeding to the Chair of Anatomy; Dr. Hyde Salter has been elected Lecturer on Medicine, and Dr. Morris Tonge succeeds him as Lecturer on Physiology and Pathology; Dr. Parson succeeds Dr. Head as Lecturer on Midwifery; Dr. Alexander Silver has been recently appointed Lecturer on Botany; and Mr. Bellamy Demonstrator of Anatomy in the school.

Several cases of great interest have come under our notice in a recent visit to this Hospital, amongst which we mention the following:—

Under Mr. Hancock's care there is in the Children's Ward a case of very extensive necrosis of the tibia, in which he removed nearly the whole shaft of that bone, leaving the periosteum. In our Hospital Reports some while back we reported a similar case under the care of Sir William Fergusson, at King's College Hospital, and which we had the opportunity of seeing recently, the patient having quite recovered, and having a very useful and shapeable tibia.

For the particulars of the following case we are indebted to the kindness of Mr. A. H. Buck, the House-Surgeon, who placed the notes at our disposal:—

A delicate-looking girl, aged 8, with light complexion, and strumous-looking, has suffered for some years from shortness of breath and bad cough. About six months ago she had rheumatic fever. She was attended by the parish Doctor, and, soon after she had recovered, complained of great pain in both legs; the left one would swell up, become red, shiny, and painful. Matter formed, and it was lanced in two places. About the same time that the leg became bad, the right elbow began to be painful, red, and swollen, but by the application of hot fomentations the swelling and other symptoms subsided. There is still an amount of induration left about the joint, and she is still unable to move it much; but it gives her no pain or inconvenience. This child had none of the usual ailments, such as measles, scarlet fever, etc. The father has

three other children, all of whom are healthy. Upon her being admitted into Hospital, the leg was found to be much swollen, red, and several sinuses upon the shaft of the tibia, especially about the ankle-joint, from which a quantity of matter was constantly being discharged. She was put upon cod-liver oil and good nourishing diet.

On Saturday, February 9, Mr. Hancock removed the diseased bone in the following manner:—An incision being made along the shaft of the tibia, and finding that the periosteum was healthy, and in places separated from the bone, he detached it with his fingers so as freely to expose the bone. He then, by a process of gouging and cutting, removed the diseased bone, leaving only the upper portion of the tibia. The periosteum and surrounding parts presented a very healthy appearance. The edges were then brought together by means of silver sutures, and the limb placed upon a splint. There was very little hæmorrhage during the operation, only one pulsating artery proving troublesome, it being enclosed in the upper portion of the tibia; it was plugged by means of a piece of sponge. Since the operation the wound has been dressed with wet lint, and at present looks very healthy. The child seems to be in pretty good health and spirits at the present time (Feb. 19).

Under Mr. Canton's care there has lately been a somewhat unusual case of a tumour, probably myeloid, of the antrum. And for the particulars of this and the following cases we are indebted to his kindness.

A middle-aged man, of previous good health, was admitted under Mr. Canton, early in December last. About six weeks previous to admission, a tumour appeared, apparently expanding the upper part of the left antrum; it was of very rapid growth, and gave him but little pain; it protruded the cheek for about the size of a hen's egg. Mr. Canton determined to remove the superior maxillary bone, from which the disease appeared to spring. He accordingly proceeded as follows:—He first divided the upper lip in the mesial line, and carried the incision along the ala of the nose, and then transversely along the lower border of the orbit. The integuments, which seemed tolerably free of disease, were next dissected off the mass. The front incisors being extracted, the palatine plate of the superior maxilla was cut through considerably on one side with cutting pliers, and next the zygoma. The mass was next seized with a strong pair of forceps, and, by careful manipulation and dissection, the whole superior maxilla and its growth removed. Mr. Canton however, succeeded in preserving a considerable amount of the hard palate, which appeared to be unaffected by disease. The floor of the orbit was removed. There was but little hæmorrhage, considering the extent of the operation. The tumour on examination grew more from the upper and back part of the antrum, from which a process depended into the upper part of the pharynx. The edges of the wound united quickly and well, and the man was discharged in good health, complaining only of the difficulty of suction in smoking a pipe. A careful microscopic examination of the tumour showed it to be one probably of myeloid nature, consisting of very large cells, oval, multinucleated, and containing nucleoli. The circumstances of the case worthy of notice seem to be the very rapid growth of the tumour and its comparatively rare seat. Up till the present time (February 19) there is, apparently, no return of the disease. The preparation has been placed in the museum.

Mr. Canton had lately an interesting case under his care of calculus in the prostate—or, rather, a prostato-vesical calculus. The patient, a middle-aged man, had suffered from irritable bladder for twenty years, and latterly symptoms of prostatic calculus—such as pain and weight in the perineum, frequent micturition, irritation and uneasiness at the neck of the bladder—manifested themselves. There was no pain at the extremity of the penis. Mr. Canton, on February 2, operated for its removal as follows:—He opened the perineum in the median line, as in perineal section, or the median operation for lithotomy, thus dividing the prostatic portion of the urethra; the calculus was tightly lodged, partially in the prostate and partially in the urethra, but after some careful manipulation with the lithotomy forceps he removed it. It was about the size and shape of a small onion, and it would seem, as Mr. Canton remarked, from its shape as if its lesser head (the dumbbell shape being most common in this variety) had been broken off, but on careful after-sounding of the bladder no such fragment could be detected. Up till the present date, the man has been doing well.

It is sometimes difficult to diagnose exactly the form and locality of these calculi, or, more properly, inspissation of the secretion of the gland. They commence, of course, originally in the gland substance, and gradually, by their growth, give rise to symptoms. They distend the prostatic ducts, encroaching upon the prostatic portion of the urethra, in which position they are detected by the sound or catheter passing over them. "These calculi may project into the urethra, and thus have a free urethral and an adherent prostatic portion. Either of these surfaces may become enlarged, the prostatic portion attaining the size of an ordinary urinary calculus, and its urethral portion may extend backwards into the bladder, forming a prostato-vesical calculus."(a) These are the calculi of the prostate, properly so called. Calculi in the prostate gland, however, may be derived from sources entirely unconnected with inspissation; ordinary urinary calculi may become obstructed and lodged in the prostate. Then there is that rare variety, the vesico-prostatic. This is formed in the following way:—"A vesical calculus exists within the bladder, which on increasing in size sends a prolongation through the vesical opening of the urethra into the prostate gland. Here, again, it enlarges, both vesical and prostatic portions increase, and their bar of union remaining stationary produces the same condition as is observed in the prostato-vesical variety—viz., a dumbbell- or barshot-shaped appearance."(b)

We saw recently, under Mr. Canton's care, a man suffering from disease in the hip-joint, the actual diagnosis of which was somewhat obscure; the facts of the case, however, appear to be as follows:—From what can be made out, it seems that the man (a sailor), during the rolling of the ship, fell and struck his knee severely. Injury of some kind was communicated to the hip-joint, which has since been the seat, Mr. Canton thinks, of chronic rheumatic arthritis, as the crepitus is highly indicative of this form of disease. What original injury the hip sustained, is not easy to determine, but, from the shortening and thickening in its neighbourhood, it almost appears to have been the seat of fracture.

The museum of the Hospital is very rich in specimens of this disease, chiefly contributed by Mr. Canton.

We noticed several fractures of the patella put up by simply raising the leg, with a short back splint only behind the ham. These simple forms of treatment we noticed in our late report upon the "Treatment of Fractures in the London Hospitals."

Speaking of fractures of the patella, a curious case of rupture of the tendon of the quadriceps extensor, just at its insertion into the patella, was admitted lately. The patient had some time before sustained a fracture of the lower part of the opposite patella. It is somewhat remarkable that in neither instance was the bone broken through in its usual place.

There are at present several very important cases under treatment in the Surgical wards; these, and some account of the Medical practice of the Hospital, we hope shortly to be enabled to furnish.

ST. BARTHOLOMEW'S HOSPITAL.

COMPOUND FRACTURE OF FRONTAL BONE OVER RIGHT ORBIT—FRACTURED NASAL BONES—COMPOUND FRACTURE OF LOWER JAW—LACERATED WOUNDS OVER LEFT KNEE-JOINT—CONCUSSION—GOOD RECOVERY.

(Under the care of Mr. PAGET.)

Emphysema of the scalp after fracture over the orbit is no very uncommon occurrence, for it results whenever the frontal sinuses, which are filled with air, sustain a fracture of their anterior wall. It is sometimes extensive, spreading widely in the cellular tissue of the scalp. It is a common observation that air so extravasated is absorbed in a very few hours, and that it very rarely undergoes, or induces any decomposition such as would lead to the generation of poisonous gases; indeed, as a rule, emphysema, from the escape of atmospheric air beneath the skin, requires no treatment and leads to no mischief. There was a case under the care of Mr. Skey in the Hospital some years ago in which, after fracture of a rib, emphysema extended itself over the trunk, and head, and neck, and over nearly the whole of the arms and legs, so as to obliterate almost all trace of the natural features and of the natural outlines of the body. Yet the patient remained free from constitutional

(a) See art. Lithotomy, "Holmes's System of Surgery."
(b) *Ibid.*

disturbance, and his recovery seemed in no way checked by the emphysema, which subsided completely within ten days. Speedy recovery in the following case from such formidable injuries as had been sustained was no doubt due—first, to the patient's age and the healthy condition of his excreting organs: the best subjects for recovery after either accidents or large surgical operations are well known to be those whose viscera, and especially whose kidneys, are able to discharge their functions healthily); and, secondly, to the fact that the injuries were of the face, the part of the body in which repair is most perfect and most rapid. For the notes of the case we are indebted to Mr. Humphery, Mr. Paget's House-Surgeon.

James S., aged 21, admitted November 7; was working on a scaffold, and fell twenty feet. Frontal sinuses on the right side laid open, so that air passed at each expiration. Nasal bones broken. There was effusion of blood into the anterior chamber of the left eye. His lower jaw was fractured on the left side, one fragment protruding through the mucous membrane of the mouth. Besides these injuries, he had three large wounds over, but not into, his left knee-joint. Insensible. His lower jaw had a splint of gutta percha moulded on; the left leg was put upon a common back splint, and the wounds stitched together.

8th.—Sensible this morning, and has taken some nourishment. Pulse 96. Milk and arrowroot.

9th.—Face very much swelled, his eyes being quite closed. Great swelling of left conjunctiva. In a good deal of pain. Emphysema of scalp over the right orbit. Tinct. opii ɱxl. h.s.s.

10th.—Slept well; pulse 90, soft; tongue clean; bowels not open; urine passed naturally.

11th.—Says he is quite easy. Face and conjunctiva less swelled; takes his nourishment well. Passed his water to-day unconsciously. Haust. sennæ co. ℥jss.

12th.—In no pain. Pulse 90, soft, quiet; bowels open freely. Restless, and occasionally wandering.

14th.—Face very much less swelled. Sleeps a good deal; still wandering; takes his food well; emphysema has disappeared. Wound over frontal bone suppurating freely. The stitches have been removed from the knee; and the wounds are also suppurating freely. He is now quite rational again.

17th.—Much better; appetite good. Wine ℥vj.

25th.—Sleeps well; jaw getting firm; wound over right eye healing; the left eye is clearing up, but he has no sight in it.

December 6.—His jaw is quite firm; the wound over the orbit healed. His left knee-joint still has a good deal of effusion into it. Splint removed from his jaw.

12th.—He now gets up daily, all the wounds being healed.

24th.—Discharged at his own request, his left eye being completely useless, and his left knee also rather stiff.

STRICTURE OF URETHRA, WITH SCROTAL AND PERINEAL FISTULÆ FOR TWENTY YEARS—EXTRAVASATION OF URINE—GOOD RECOVERY.

(Under the care of Mr. PAGET.)

The following case is an important one. Mr. Humphery, who has been good enough to supply the notes, remarks upon it—"The catheter was only once used during the patient's stay in the Hospital. The patient came in with a bad stricture, and infiltration of urine into the cellular tissue of his scrotum and abdomen. He left with a perfect clearance of all this mischief, and a good passage for his water." It is scarcely putting the case too strongly to say that a great revolution has lately been, and is still, in progress in the treatment of diseases of the urethra. Formerly the catheter was regarded as the great means of cure. A large part of treatment consisted in its frequent use; and in extravasation of urine it was the almost invariable rule to pass a catheter, and leave it in the bladder. It is obvious that, as the urethra in cases of extravasation of urine is generally very much diseased, so that to pass a catheter is a matter of great difficulty, its condition must be much aggravated by the attempt, and also by the subsequent presence of the instrument. Many Surgeons of the highest reputation in England now teach that the frequency of strictures that require dilatation by instruments has been vastly exaggerated; that in a large number of cases, if the patient, instead of constantly standing, or walking about, and perhaps living intemperately, is placed in bed, and kept warm, and supplied with only mild diet, it will be found that his "stricture," which depended in great part on turgescence of the mucous membrane of the urethra, will become so much relieved that no instrument need be passed. The great tendency of practice is to avoid as far as possible all use of catheters. Mr. Henry Thompson has written strongly in recommendation of it, and of the use of flexible rather than metallic instruments, as inflicting much less injury; and we have heard Mr. Paget and Mr. Savory often insist that the habit has been to use catheters much too freely. Mr. Savory had, a short time since, under his care a patient said to have a bad stricture, whose urethra when he came into the Hospital admitted a catheter no larger than a No. 3; but at the end of a week, although the stricture was said to be of long standing, a No. 10 was passed easily, and he was ultimately discharged able to pass urine in a good stream. Many such cases will occur in the practice of any Surgeon who, before he attempts dilatation, allows, what probably the patient has never given himself, the benefit of rest, and warmth, and careful diet; after which the chronic congestion, on which much of the obstruction of the urethra has depended, will subside, and urine will be easily expelled. Of course there are cases which cannot be managed without the use of instruments; but they are very much more uncommon than they are by some thought to be.

W. D., aged 54, admitted October 26 from the out-patient room, where he was being treated for swelled testicle, of which he has had numerous attacks. He had severe rigors on admission, and was sweating profusely, and in great pain. History: A most intemperate man; had gonorrhœa thirty years ago, and says he has had a yellow discharge from his urethra ever since. A year from the time of first catching gonorrhœa he suffered from incontinence. Ten years after that he had an instrument passed, but No. 3 was the largest. Since then he has always had difficulty in making water. A month ago he had a rigor, and his testicles again swelled and inflamed. His scrotum is now swelled and œdematous. His groins are also swelled and tender, and he has great difficulty in making water.

October 27.—Mr. Paget passed a No. 3 catheter into the bladder. It gave him a great deal of pain, followed by a rigor. Ordered a warm bath at night; liq. opii sed. ɱxl.

28th.—Had a fair night. Scrotum more swelled. Ordered full diet; gin ℥vj.

29th.—To-day Mr. Paget made a number of incisions of considerable length into his scrotum, perinæum, and the lower portion of his abdomen, letting out a quantity of fœtid pus and urine. To drink freely of barley water.

November 1.—Much easier. Urine flows through the lower wound in his perinæum. He takes his food better than he did. Has a warm bath every morning; the incisions syringed out with carbolic acid lotion (℥ij. ad Oj.). Passes his water more easily.

7th.—Very free discharge of healthy pus from the wounds, which are healing, large sloughs of cellular tissue having come out. Great discharge from his urethra. Passes his water more freely.

14th.—Very much better in every way. Getting stronger; wounds healing; less discharge from them.

15th.—This morning had a rigor. Thinks it was because he got his gin later than usual. In other respects very well.

24th.—No mischief ensued from the rigor. The wounds are now almost healed. He is quite strong and well, and passes his water freely—as he says, better than he has done for twenty years. To go out.

Mr. Baxter Langley, of Lincoln's-inn-fields, has been appointed receiver under the High Court of Chancery, by a decree, in the case of Brighouse *v.* Margetson.

Vitality of Seeds.—M. F. A. Pouchet, at a recent meeting of the Academy of Sciences, reported that at Elbeuf, a seat of the cloth manufacture, a great number of fleeces had been received from Brazil, very badly prepared, and containing a quantity of seeds of various plants. Having been informed by trustworthy persons that some of these seeds retained their vitality after four hours' boiling in the different processes of dyeing, he determined to test the statement, and found it perfectly correct in regard to seeds of *Mucilago*. As this fact militates against the law held by physiologists, he was induced to study the phenomena; and he asserts that the law has no exception, and that if a certain number of seeds germinate after the continuous contact of boiling water for four hours, it is due to their teguments having remained impermeable during the time, the embryo and cotyledons being thereby protected. Other seeds—wheat, barley, etc.—were found not to possess this property, which probably hereafter may be found in other plants.—*Comptes Rendus*, tome lxiii., p. 939.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0

Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.

Post-office Orders and Drafts on Army or Navy Agents, should be made in favour of Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d. | A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d. | A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, MARCH 9, 1867.

THE OBSTETRICAL SOCIETY.

The Fellows of this Society received, last week, a circular, which we reprint, as follows :—

"136, Harley-street, Cavendish-square, W.,
March 1, 1867.

"Sir,—On Wednesday evening last I received the following note. I will now merely observe that I have had no opportunity of hearing what specific charges are made against me. I have never, therefore, had an opportunity of meeting them. I am simply informed that notice of expulsion will be read on Wednesday next by the President. I will, therefore, only say that what is my case to-day may be your case to-morrow, and ask you to suspend your judgment until placed in possession of the charges and my reply thereto.

"Yours truly, "I. B. Brown.

"'53, Berners-street, February 27, 1867.

"'Sir,—We are directed by the Council of the Obstetrical Society to forward to you a copy of the following resolution, passed at special meetings of the Council, held on the 15th and 25th inst., for the purpose of considering two letters addressed to the President and Council by Mr. I. Baker Brown :—

"'"That, in the opinion of this Council, the published matters in relation to the performance of clitoridectomy by Mr. I. Baker Brown justify the Council in recommending the Society to put in force against him Law IV., Section II., which provides for the expulsion of a Fellow."

"'We are, Sir, your obedient servants,

"'G. W. P. Murray, M.D., } Hon. Secs.
Henry Gervis, M.D., }

"'To I. Baker Brown, Esq.'

"'*Chapter IV.—Of the Withdrawing and Removal of Fellows.*

"'I. A Fellow may withdraw from the Society on paying any contributions that may be due from him, and signifying his intention in writing to the President.

"'II. Whenever there shall, in the opinion of the Council, appear cause for the removal of a Fellow, the same shall be notified by the President of the Society at the next ordinary meeting, and a notice forthwith sent to every Fellow of the Society, making the next meeting special, for the purpose of considering such removal. If, on a ballot taking place, two-thirds of the Fellows present shall vote for the removal, the President shall declare the Fellow in question removed accordingly. At such ballot fifteen Fellows, at the least, must be present.' "

This circular of Mr. Brown's it was which made known to the Fellows the intentions of the Council, and was the cause of a very large attendance at the Society's Rooms on Wednesday evening, and of a discussion, the utterly irrelevant nature of which can scarcely be palliated by the consideration that it arose from the desire to give fair play to a man who may be considered as about to be put on his trial.

Nothing can be clearer than the course which is pointed out by the laws of the Obstetrical Society, and which the Council seem to have followed to the letter.

"Whenever there shall, in the opinion of the Council appear cause for the removal of a Fellow." This is the first item; which throws on the Council the responsibility of forming an "opinion," and binds the Fellows to respect that "opinion" till cause be shown to the contrary. What that cause may be, whether it be or be not sufficient or insufficient, would be now scarcely decent for us to discuss. The Council have assumed a heavy responsibility on the one hand, and seem to have felt it their duty to place Mr. Brown in a painful position on the other. We, as journalists, abstain from comment till the cause is proved, or disproved, or explained away. But we have at present no more right to accuse the twenty members of the Council of having taken such grave proceedings groundlessly, than we have to prejudge Mr. Brown.

The law of the Society proceeds to say that "whenever there shall, in the opinion of the Council, appear cause for the removal of a Fellow, the same shall be notified by the President to the Society at the next ordinary meeting." This was done by the President at the meeting on Wednesday evening, and this ought to have been, as it technically is, the first open part of the proceedings. Everything should have been carefully concealed till this time. In the present case the Council, through motives of courtesy, communicated their intention some days previously to Mr. Brown, whose friends were ill advised enough to make the courtesy of the Council the ground of an attempt to upset the whole proceedings in the following fashion.

The meeting was a very large one, and included at least thirty visitors, some of whom were said to have had the ill taste to indulge in noisy partisan exclamations. Then, to the surprise of the Fellows, an attempt was made to fasten on the Council the effects of Mr. Baker Brown's circular, as if the Council had scattered a notice of the proposed proceedings broadcast amongst the Profession, whereas it was the act of Mr. Brown himself. There was an attempt, also, to fasten an unusual interpretation on the words "*the same*," as if they referred to "the cause for the removal," and as if the President were bound to notify to that meeting the *cause*; whereas the plain meaning of the law is, that the President should notify the *fact* that there was, in the opinion of the Council, cause for the removal. There was also what lovers of fair play and Mr. Brown's friends might reasonably complain of—an importation of the "British jury" claptrap—an attempt to make out that the defendant had already been judged in a Star-chamber, or that the Council had been improperly actuated, or had proceeded in an unfair manner.

The simple truth is, that any discussion on the notification by the President was highly irregular and unfair. It ought to have been received in painful silence, and all discussion avoided till the special meeting that is to follow. If it were competent to Mr. Brown's friends to reject the notification, and thereby, before hearing the whole case, implicitly and explicitly to condemn the Council of injustice in manner and form, it were equally competent to the friends of the Council to have proceeded to vote on the charge against Mr. Brown. The President clearly thought fit to allow the dignity of the chair and the rational rules of business to be jeopardised—to allow a discussion, *without notice*, to be got up by the friends of the defendant, and almost to put to the vote a motion which would have reduced the condition of the Society to the merest anarchy. But we do not blame the President, as he felt no doubt desirous of giving the utmost latitude to the defendant.

The laws of the Society go on to say that, after the fact shall have been notified at the next ordinary meeting, "a notice shall be *forthwith* sent to every Fellow of the Society." Of course, if the Council had issued notices or circulated charges *before* the meeting, they would have acted in the teeth of their own laws; but this is what the noisy and injudicious friends of Mr. Brown affected to desire!

The Fellows cannot help feeling that the Council are now on their trial as well as Mr. Brown. The former have taken a position which they cannot go back from. Not one word of ours shall prejudice the issue. But the Fellows cannot shrink from the individual responsibility of determining whether the "printed matters" on the operation of clitoridectomy do or do not justify the action of the Council; and few questions, not directly involving life or death, can be more serious to individuals, to the Profession, or to that part of society which constitutes the *clientèle* of the Obstetrical Society, than that which the Fellows will have to consider and decide at the April meeting.

LIFE AND DEATH IN THE METROPOLIS.

London, the Registrar-General tells us in his yearly report for 1866, is growing greater every day, and within the registration limits, which embrace an area of 122 square miles (77,997 statute acres, whereof 2778 acres are water), the population is now estimated to number no less than 3,037,991 souls. On the same area 953,863 persons were living in 1801, so that within two-thirds of a century London has more than trebled its population; the rate of increase is, however, a decreasing one, and is now reckoned at less than 1·7 per cent. per annum. The registration limits do not, however, fully comprehend all the surburban inhabitants who may fairly claim to be considered Londoners. The people of West Ham and Stratford, for instance, seem naturally allied to cockneydom. There is, in fact, no boundary line which exactly defines the metropolis, but there are two arbitrary divisions representing what we may call city and town, each having a certain signification more or less useful for statistical purposes. These are the City proper and the registration division, while surrounding the whole is the ring which defines the metropolitan police district. The City is the old nucleus round which has gradually become grouped the London of to-day. The population of this inner circle was 128,833 in 1801, and in 1861 it had decreased to 113,387, and Mr. Haywood, the City engineer, believes that it has further diminished. The City authorities maintain, however, that the enumeration of the night residents does not supply a just account of the numbers belonging to the City, for the bankers, merchants, and traders, who are citizens *par excellence*, go out to their suburban villas at night, leaving only a residue in the shape of "care-takers" during the night; so they have taken a day census, which shows that 283,529 persons now reside during the active hours of the day within the City, where, according to the rate of decrease observed between 1851 and 1861, the night population could not now exceed 102,887. The Registrar-General objects to the principle for which the City authorities contend, on the ground, presumably, that unless the same rule were applied to Westminster and other parts of the metropolis as well as to all the large cities of the Kingdom, population, instead of being a fixed element of statistical basis, would become an intangible, indefinite, abstract idea. It is the old story of the knights and the shield: looked at simply with a view to traffic accommodation, and to representative and municipal requirements, the City authorities may be right in adopting the larger number, but the statists are also right in adhering to the smaller number for all purposes of comparative sanitary and population statistics. The health arrangements of the City are of more vital importance to those whose home is exclusively therein than to those who spend there only the limited working hours of the day. Besides, the Registrar-General points out that the night residents in the City in 1861 included clergymen, lawyers, Physicians, Surgeons, merchants, and respectable tradesmen, who can certainly not come under the category of "care-takers" simply.

Population can never be dissociated from night occupation in the census returns, because where people sleep they, as a rule, live and die, and to compare the deaths or births in the City of London with the number of persons who visit the City, without reference to their place of residence, would be quite fallacious as an index of the fecundity or mortality of the citizens. We need, therefore, not anticipate that the Registrar-General will modify his future census arrangements to meet the wishes of the Corporation of London.

The population of the whole area included in the circle of fifteen miles radius from Charing-cross, which forms the Metropolitan Police District, is estimated at 3,521,267 souls.

107,992 births and 80,129 deaths were registered in London last year, both numbers being above the average record, and the excess of births over deaths much less than in the preceding year. The mortality was at the rate of 26·5 per 1000, which is 2 above the average of the last twenty-seven years. The subjoined tabular statement shows that the increased death-rate was common to all parts of the metropolis, the only exceptions being certain of the Western and Southern districts.

	Area in sq. miles.	Annual increase of population per 1000. 1851—61.	Annual rate of mortality per 1000. 1866.	1840—66
London	122	17	26·5	24·4
West Districts	17	21	22·9	22·9
North ,,	21	23	25·3	22·8
Central ,,	3	—	26·7	25·0
East ,,	10	16	33·9	26·1
South ,,	71	23	24·1	24·9

Among the new tabular matter which appears for the first time in the present return, is a table showing the number of Health Officers and vestrymen, the area, population, deaths, mortality, elevation, and density, and the annual value of assessed property per head of population, in the several London districts. From this table we can see, in some sort, how the work of the Medical Officers of Health is distributed. Dividing the area and population of London among the 47 Health Officers, there would result an average of 64,630 persons, and 1659 acres, as the charge falling to each Health Officer. In 19 cases the area exceeds the average, and the size of these districts ranges from 1942 acres (Kensington) to 5418 acres (Lewisham). In 28 cases the area is below the average, and the size of these smaller districts diminishes from 1509 acres (Marylebone) to 164 acres (St. James, Westminster). Taking population as a basis, 17 Medical officers have more than the average number of persons under their charge, while in 30 cases the numbers fall below the average. Thus, in Chelsea, one Medical officer watches over 65,957 persons, in St. Pancras over 211,825, in Wandsworth and Plumstead over about 16,000 persons.

To judge of the comparative insalubrity of the London districts is by no means a simple matter. Locality, elevation, density, social condition, and other characteristics, operate in promoting or deteriorating health. It is satisfactory, at any rate, to find that, despite the special causes of mortality prevailing last year, some districts appear to have experienced a death-rate below the average. In St. George's, Hanover-square, the mean annual mortality during the twenty years 1841-60 was 19 per 1000, but last year the rate was 18; in the densely populated district of East London the rate diminished from 27 to 25 per 1000; in St. Saviour and St. Olave, Southwark, from 30 to 26; in Rotherhithe, from 26 to 23; in Newington, from 26 to 24; and in Greenwich, from 27 to 24. In nearly every other district the mortality of last year was above the average of 1841-60.

The following twelve districts are the most densely populated in the metropolis:—

St. Luke	258	persons to an acre in	1866.
East London	246	,,	,,
Strand	238	,,	,,
Holborn	217	,,	,,
St. Giles	213	,,	,,
Shoreditch	212	,,	,,
St. James, Westminster	208	,,	,,

St. George, Southwark	204	persons to an acre in 1866.
St. George-in-the-East	197	,, ,,
Whitechapel	188	,, ,,
West London	185	,, ,,
Clerkenwell	168	,, ,,

And the twelve districts wherein the highest mortality from all causes occurred last year were the following:—

St. George-in-the-East	42	per 1000 living.
Whitechapel	39	,, ,,
Stepney	38	,, ,,
Bethnal-green	37	,, ,,
Poplar	36	,, ,,
Mile-end Old Town	32	,, ,,
Holborn	31	,, ,,
St. Luke	31	,, ,,
St. Giles	31	,, ,,
St. George, Southwark	29	,, ,,
West London	28	,, ,,
Clerkenwell	28	,, ,,

It may, perhaps, be useful to add to these the twelve districts which suffered most from cholera and diarrhœa (together) during the year:—

Stepney	12·7	per 1000 living.
Poplar	10·9	,,
St. George-in-the-East	10·5	,,
Whitechapel.	10·0	,,
Mile End Old Town	8·0	,,
Bethnal Green	7·7	,,
Greenwich	2·8	,,
St. Giles	2·5	,,
East London	2·3	,,
West London	2·3	,,
Holborn	2·2	,,
Clerkenwell	2·1	,,

Seven of these last-mentioned districts owe exclusively to cholera and diarrhœa that they were less healthy last year than usual. In Stepney (for instance) the average mortality in 1851-60 was 27 per 1000, and last year 38 per 1000, the difference between the two rates being more than accounted for by the cholera mortality (12·7 per 1000).

We must, however, bring our remarks on these interesting statistics to a close, not because we have exhausted all the points which we should like to analyse, but because space is limited, and time and the printer urgent.

THE WEEK.

ADDRESS TO DR. MARKHAM.

A COMPLIMENTARY address, which has already received a large number of signatures, and is said to be from "the classical pen of Sir Thomas Watson," is about to be presented to the late editor of the *British Medical Journal*. As a testimonial, it is a fitting expression of appreciation of the services Dr. Markham has rendered to the British Association by his able and energetic conduct of their journal during the last six years.

THE RETIREMENT OF GENERAL PEEL.

WE are certain that we express a feeling universally prevalent in the Army Medical Department when we record our deep regret that General Peel will no longer direct its fortunes. We suppose that his retirement will not interfere with the publication of the new scale of pay and retirement which is promised in April. Whether Sir John Pakington or Lord Longford succeed General Peel, we trust that the measures of conciliation and justice, which are so necessary for the revival of confidence in the Department, will not be delayed. If the Medical service of the Army is not to sink into the same slough of despond in which the sister service is swallowed up, prompt measures must answer the expectations which were raised by the advent of the present Ministry to power.

THE MERCHANT SEAMEN'S HOSPITAL SOCIETY.

THE answer given by Lord Derby to the deputation from the Merchant Seamen's Hospital Society, in reference to their application for a part of the now empty Greenwich Hospital, although it only promises the tardy performance of an act of justice, will be received with great satisfaction by all who are interested in the health of our sailors. Lord Derby, who was accompanied on the occasion by Sir John Pakington and Sir Stafford Northcote, is reported to have replied to the deputation that her Majesty's Government were perfectly willing to grant the loan of a part of Greenwich Hospital for the purpose which has been heretofore served by the *Dreadnought*. Without going into the question of the pecuniary claims urged by the friends of merchant seamen on the late administration of the Admiralty and on the Board of Trade, there can be no doubt that the use to which a portion of Greenwich Hospital is now to be put is substantially in accordance with the purpose for which it was endowed, and is dictated by the national sense of justice and humanity. We congratulate the Seamen's Hospital Society on the successful result of their agitation. One block of the Hospital being thus disposed of, there still remains another vacant. It is said that a strong appeal is to be made to Government by the inhabitants of Greenwich and the neighbourhood for permission to use it as a local general Hospital. No doubt there is need of such an institution in the midst of the dense manufacturing and trading population of Greenwich and Deptford, and if the block in question is to remain useless as far as sailors are concerned, it certainly could not be put to a better use.

THE REGISTRAR-GENERAL'S REPORTS.

WE understand that the Comptroller of her Majesty's Stationery Office has, at the suggestion of the Registrar-General, decided on reducing the price at which the Weekly and Quarterly Returns of Births and Deaths are to be issued to the public, after the end of the present month. The Weekly Returns are now sold at 1½d. each, and the Quarterly Returns at 4d. each, which, seeing that the sole object of their compilation is to diffuse as widely as possible information of the utmost public interest, without seeking to make any profit by the issue, we have always thought unnecessarily high prices. From April 1 the Weekly Returns will be sold for ½d. each, the Annual Summary of the Weekly Returns for 1d., and the Quarterly Returns for 2d. The detailed Annual Report, containing the abstracts of marriages, births, deaths, and causes of death throughout the country, which is published in the form of a blue book, is priced according to the tariff for Parliamentary papers in general; the cost of this Report (which is invaluable to Medical men and statists for the immense amount of information contained within its covers) ranges from 1s. 6d. to 2s., and is therefore as low as anybody could desire. Whilst we are on this subject we may mention, as a matter of interest to many students of vital statistics, that the supplement to the Registrar-General's Twenty-fifth Annual Report contains tables of deaths at different ages and from different causes during the ten years 1851-60 in every registration district of England and Wales. In addition, the rates of mortality and density of population are calculated for every district, and a comparative table shows the death-rate in two decennial periods (1841-60); there is also an elaborate introduction to the work by Dr. Farr, on the laws of mortality and their operation under varying circumstances; so that this Report may be regarded as a classical text-book of vital statistics, and its moderate price (3s. 6d.) places it within everybody's reach. We confess we should like to see all these Reports circulated much more freely than they are at present, and we think that the Registrar-General has gone the right way to bring our desire to pass. Five shillings a year will secure now the annual, quarterly, and weekly reports, and any bookseller, either in town or country, can obtain them

through Messrs. Eyre and Spottiswoode, Queen's printers. We have, however, one suggestion to make, and we hope the Registrar-General will be disposed to adopt it, which is that he should take an early opportunity of reprinting the important matter contained in some of his Weekly Returns during the late cholera epidemic in East London, as some of those returns are already out of print. Remembering how promptly and fearlessly Dr. Farr, at the outset, proclaimed the source of the epidemic, and how subsequent events have justified the statements which were made in the Registrar-General's Reports, we think that a republication of those statements in a collected form is most desirable. If it be true, as is reported, that the Old Ford reservoir, which was declared, on the one side, to be of a purity immaculate, and on the other was impeached as being probably defiled by "dangerous proximity" to a tidal sewer, has turned out to be pervious to soakage—we have heard that a Sunday or two ago "all the king's horses and all the king's men" (or, at any rate, a Government official and the engineer of the East London Company) couldn't empty the covered reservoir, inasmuch as the leakage from the river outside effectually neutralised the depletory operations—a record of the prophetic warnings given seven or eight months ago may probably serve on a future occasion *pour encourager les autres*, as well the guardians of the public safety as the companies who have it in their power to work such terrible mischief.

THE CASE OF ACCIDENTAL POISONING IN RUTLANDSHIRE.

The Profession will have seen with pleasure that Mr. Joseph Henry Spencer, the Surgeon of Hallaton, who was indicted for the manslaughter of Mrs. Simkin, has been acquitted at the Leicester Assizes. It will be remembered that Mrs. Simkin had been under Mr. Spencer's care, and that on September 9 her husband called on Mr. Spencer for a bottle of the medicine she was taking, which contained bismuth, henbane, and quassia. Mr. Spencer gave the medicine, and Mrs. Simkin, on going to bed, took the first dose from the bottle. In a very short time tetanic convulsions came on, and the unfortunate lady died with all the symptoms of poisoning by strychnia fully developed. Soon after, Mr. Spencer, who had been sent for, arrived, and very foolishly, to prove that there was nothing in the medicine which could have produced Mrs. Simkin's symptoms and death, swallowed a dose. Fortunately he vomited, but, nevertheless, suffered from similar symptoms. Mr. Spencer was inclined to attribute his illness to hysteria, and stated this at the preliminary inquiry; but all doubt as to the real nature of the occurrence was cleared up by the discovery, by Professor Taylor, of strychnia, in considerable quantities, in the mixture and in the viscera of the deceased. How the strychnia got into the mixture remains a mystery. No evidence on the point was offered by the prosecution, and no carelessness on the part of Mr. Spencer was proved. The jury, without much hesitation, returned a verdict of "Not Guilty," censuring the practice of keeping drugs so poisonous and destructive as strychnine in so unguarded or unmarked a manner. We thoroughly agree with the verdict. There can be no doubt that such drugs as the poisonous alkaloids should not be kept with other medicines. We do not, however, know what might be the arrangement at the time in Mr. Spencer's surgery, and if any carelessness was attributable to him, we are certain that he has suffered already enough to expiate it.

FROM ABROAD.—MEDICAL SERVICE OF THE FRENCH INTERNATIONAL EXHIBITION—THE DISEASE OF JOB—M. DEMARQUAY ON URETHROTOMY.

The approaching French International Exhibition is to be provided with an effectual Medical service. Professor Gosselin, of la Pitié, has been appointed Medical director of this, having seven principal and twenty-eight ordinary Physicians under him. The principal Physicians are either *agrégés* or Physicians and Surgeons attached to Hospitals—viz., MM. Blachez, Desnos, Houel, Labbé, Paul, and Tillaux. After giving the first immediate care to the sick or injured, the Medical service will see that they are removed, with every suitable care, either to their own homes or to the Hospitals. Gratuitous attendance will be provided by it for all the French and foreign agents who are admitted to reside within the precincts of the Exhibition. An ambulance provided with every necessary appliance will be kept in readiness in the vicinity of the Palais du Champ de Mars; and one of the Medical attendants will hold himself at the disposition of the public day and night. Some of the French Medical journals have remarked that they have heard nothing of late concerning the International Medical Congress, to which the Profession throughout Europe has been invited.

We are apt to smile sometimes at the enthusiasm, energy, and industry antiquarians will throw into their investigations upon what may seem to the outside world matters of little importance; and it would seem that the Medicos are not devoid of this spirit on suitable occasions, for the Société Impériale de Médecine de Lyon has devoted two of its recent meetings to the discussion of the nature of the affection from which Job was a sufferer. M. Rollet entered into an elaborate historical investigation upon the subject, and, after rejecting the various other maladies which have been suggested, came to the conclusion that scorbutus was really the one in question. Weighed down by moral causes and depressing influences, the patriarch, the subject first of a general neuropathy, exhibited various cachectic symptoms, chief of which were severe stomatitis, accompanied by fœtid breath, difficulty of eating, emaciation, abdominal pains, and diarrhœa. The blackish colour of the skin, petechial eruptions, purpura, and sanguineous suffusions are all pathognomic of scorbutus. M. Aubert Roche and other observers have shown that scorbutus, accompanied by ulcerations, is of frequent occurrence on the borders of the Red Sea. M. Diday could not admit this view of the case, for it is evident that Job's complaint was regarded as a rare one, and the length of his objurgations shows that the condition of his mouth could not have been very bad. It was, in fact, one of those indefinite forms of tertiary syphilis which we still meet with that Job laboured under, and an analogous example of which the speaker related. The extensive sores, pains in the bones, purpura, and other signs of cachexia, are thus to be explained. The vast sores from which Job suffered, M. Girin believed, arose from his scratching himself so desperately, in consequence of the existence of general eczema, which also gave rise to brown and blackish crusts. M. Gailleton regarded the affection as very like the lepra met with in Mexico at the present time, and if it was not lepra it was pemphigus; but, unfortunately, our defective knowledge as to the etiology precludes a decided opinion on the subject. M. Rodet could not admit the imputation of syphilis, for Job was a man of pure life, and had his wife suffered through his instrumentality her invectives would only have been increased. In fact, gonorrhœa was the only venereal affection endemic in Palestine. That the disease was not the lepra of the Hebrews described by Moses seems clear; nor is it probable that it was the tuberculous lepra observed at the present time, which is never spontaneously cured.

In a memoir addressed in support of his candidature at the Academy of Medicine, M. Demarquay thus describes his mode of performing "External Urethrotomy without a Conductor in Impervious Stricture." The patient having been brought to the edge of the table in the same position as for lithotomy, and put under the influence of chloroform, the Surgeon practises a curved incision in front of the anus, as in bilateral lithotomy, dividing the cellular tissue and tying or twisting the bleeding vessels. This done, he divides very carefully the anterior muscular fibres of the sphincter, and, having tied the anterior hæmorrhoidals, continues the dissec-

tion of the tissues in a direction from below upwards, and from before backwards, between the rectum and membranous portion of the urethra, arriving thus at a triangle, one of the sides of which is formed by the rectum and another by the urethra, the point of the prostate and the origin of the membranous portion being placed at the apex of such triangle. A finger passed from time to time into the rectum and another into the wound indicate clearly the position of parts, and the membranous portion of the urethra is next transversely incised layer by layer by means of a convex bistoury. When an opening has been effected, a female catheter of a peculiar form is introduced into the bladder. This second stage of the operation having been completed, the conduct of the operator will vary according to the case. If the stricture be accompanied with multiple fistulæ, etc., a new incision perpendicular to the first, and springing from the scrotum, must divide the diseased tissues down to the bulb, the most common seat of stricture. A curved grooved sound is to be introduced through the membranous portion and the bulb, so as to meet a special catheter introduced by the anterior portion of the urethra. The indurated textures are divided on the grooved sound, and all the tissues are to be opened either from before backwards, or from behind forwards, through which neither the sound nor a probe can be passed, the sole precaution necessary being not to penetrate the upper wall of the canal.

M. Demarquay has performed this operation in six cases, three of the patients having recovered, and three being still under treatment.

PARLIAMENTARY.—EXTENSION OF THE FACTORY ACTS—PREVENTION OF GRINDER'S BRONCHITIS—CRIMINAL LAW AMENDMENT—THE HEALTH OF LIVERPOOL.

On Friday, March 1, Mr. Walpole introduced two Bills for the extension of the Factory Acts, the first relating to glass, copper, iron, brass, leather, india-rubber, paper, and tobacco works, and all manufactories employing more than 100 hands; and the second to workshops in which fewer than that number are employed, and affecting together nearly 1,400,000 workpeople, chiefly women and children. He said that the main principles of the Factory Acts were—

"First, to provide on sanitary grounds for the health of those employed in factories; secondly, where dangerous machinery is used, to take care that it is properly guarded; thirdly, to adopt what is commonly called the half-time system in regard to children under 13 years of age, in order that they might attend, compulsorily, at some school for the purpose of having their education carried on at the same time that they are earning wages by their labour; and lastly, with regard to young persons and all women employed in these factories, that the hours of work should be limited to 10½ in the course of the day, and those hours should ordinarily be between 6 in the morning and 6 in the evening."

In extending these Acts the main difficulty was not so much as to the extension of their principles, as to the exceptions and modifications which the special and peculiar circumstances of special and peculiar trades required. Under the first Bill the establishments he had mentioned would be subjected to the provisions of the Factory Acts relating to ventilation, hours of labour, and education, time being allowed for their adaptation to the new requirements; and there would be modifications as to night work in trades where it was necessary, women and children being prohibited altogether, and young people being permitted to work at night under certain conditions for their protection. Among the other provisions of the Bill were some relating to the grinding trades. When the grinding stone is used it is found that the dust which comes from steel and stone is so deleterious to the workman that in those places where a fan is not used for the purpose of driving the dust from the mouth, the grinders live on an average only forty years; it is therefore insisted in this Bill that fans, which in some cases are now provided at the workman's expense, shall be fixed to all grinding machines. For the prevention of accidents also it is provided that the stone shall be permanently fixed. The second Bill, he remarked, applying to small workshops and even private houses, was a novel proposition; and having replied in detail to various arguments which had been urged against it, he explained that it would prohibit the employment of children under eight years of age, and would regulate the employment of children between eight and thirteen years of age, and young people generally, very nearly in the same terms as the Factory Act. The enforcement of these regulations would be entrusted to the local authorities, and the contravention of them would be enforced by a penalty on the employer and on the parent of the child.

A general approval of the Bill was expressed by Mr. H. Bruce and Mr. E. Potter, who regretted that there was no provision for education, which he thought ought to be compulsory; after which the Bill was read a first time.

On Monday, March 4,

Sir G. Bowyer gave notice that, in the event of the Murder Law Amendment Bill being read a second time, he would move that it be referred to a select committee.

Mr. Samuelson asked the Home Secretary whether he would lay upon the table the recent report of Mr. Taylor on the sanitary state of certain parts of Liverpool, and on the condition of the dwellings of the poor in that town; and whether he had received from the local authorities of that place any satisfactory assurance that the recommendations of Mr. Taylor would be promptly carried into effect.

Mr. Walpole said that the report of Mr. Taylor was a very long and valuable one, and had only recently been delivered at the Home Office. He had not yet been able to go through it, but would do so without delay, and he would then inform the hon. gentleman whether the report and the other papers connected with the subject could be laid upon the table.

In reply to Mr. Ewart,

Mr. Walpole said that he proposed to put off the Capital Punishment in Prisons Bill and the Law of Murder Amendment Bill to Friday week. He begged to move that they be postponed until that day.

The motion was agreed to.

On Tuesday, March 5,

Mr. Ewart gave notice that on Friday, the 15th inst., on the second reading of the Murder Law Amendment Bill, he would move an amendment to the effect that it was inexpedient any longer to inflict the punishment of death for murder.

THE RECENT VOTE IN THE COUNCIL OF THE COLLEGE OF SURGEONS.

(*From a Correspondent.*)

It will perhaps be desirable to correct an erroneous impression which otherwise might prevail, in consequence of the remarks that appeared last week in the columns of a contemporary, respecting the apparent motives of certain recent members of the Council who voted, with the large majority, against the motion of Mr. Charles Hawkins for the abrupt termination of Messrs. South and Luke's tenure of office as examiners.

The motion had reference to a resolution of the Council in August last that it was inexpedient that examiners should hold office longer than ten years. Mr. Cæsar Hawkins, it was alleged, so fully appreciated the feeling of the Council, that he forthwith resigned; whereas, the resignation of that gentleman was an independent act contemplated long previously, and in no way connected with the resolution then passed. Messrs. South and Luke not having resigned, as a "natural consequence" of that resolution, Mr. Charles Hawkins brought forward his recent motion, specially guarding himself against all imputation of personal feeling, and simply for the purpose of carrying out the principle acknowledged by the Council. Sir William Fergusson supported, referring to the fact that the latest charter defined the period of office as five years only.

The motion was defeated by a majority of 17 to 6 in favour. The "veteran Lawrence," leading the van of opponents from a cave more mysterious than that of Adullam, personified, it was said, the spirit of exclusive conservatism, which also actuated his followers, among them Messrs. James Paget, Busk, and Hancock, from whom, be it observed, as junior members of the Council, professedly more liberal, better things had been expected.

Well, at any rate, the self-interests of the latter gentlemen lay, obviously, quite in another direction, and personal disinterestedness is a quality of human character and conduct which will always command respect. The Examiners, whose further tenure of office was to be thus summarily terminated, were elected under the charter of 1843—"to hold office during the pleasure of the Council, and so long only as the said Council shall think fit." This being the sole condition as to the term of their appointment, it would have been an undignified and unjustifiable proceeding to have virtually disgraced and actually expelled two gentlemen, thus elected, against whose character and capacity not one word could be urged. It may be, however, that the principle of a more limited tenure having been asserted by the motion made by Mr. Hawkins, and by the previous resolution, the Council would now rather leave that principle to operate silently on the equally honourable feelings of those who may consider themselves implicated by its impersonal significance.

THE BRITISH PHARMACOPŒIA OF 1867.

Resuming our survey of the proposed Pharmacopœia, and beginning with the officinal Spirits, we notice that the process proposed in the former edition for the preparation of Sweet Spirits of Nitre has in this been abandoned; it was probably more scientific than the old one, but certainly did not yield such a satisfactory product. A new one has accordingly been introduced, in which the Nitric Acid is reduced by means of metallic copper. The product thus obtained is said to be of much more certain composition than that got by any other plan. Aromatic Spirits of Ammonia retains the strength it possessed in the edition of 1864, which is nearly twice that of the London preparation. Very properly the Spirits of Cajeput, Juniper, Lavender, Peppermint, Nutmeg, and Rosemary have been reduced to one-fifth the strength they had in the former edition, where they closely resembled essences, the dose of all spirits being now reduced to from half a drachm to one drachm, with the exception of those of Camphor and Chloroform, to be given in doses of from ten to thirty minims. The old Fœtid Spirits of Ammonia have been reinstated. Sumbul, the root of a plant smelling like musk, and much used in Russia as a stimulant in low fevers, is introduced for the first time. All Suppositories are now ordered to be made of cacao butter, white wax, and benzoated lard. Why the last two ingredients should be added we do not know. Certainly cacao butter itself produces as fine a suppository or pessary as could be wished. The present preparations are certainly great improvements on the old ones, and their number has been increased by the addition of a Mercurial, and a Lead and Opium Suppository. The only addition to the Syrups is that of Syrupus Rhamni, which is once more officinal for no particular reason we can think of. In the former edition, the Tincture of Aconite was stated to be one-half the strength of the Dublin preparation. This mistake has been now rectified, and it is stated to have one-fourth the strength of the Tinct. Aconiti Dub., and one-third that of the Tinct. Aconiti Lond. The old name Compound Tincture of Camphor has been restored to the Tinctura Camphoræ cum Opio of 1864; it has been found that many patients object to taking it under the former appellation. A compound Tincture of Chloroform, consisting of Chloroform, Rectified Spirit, and Tincture of Cardamoms, has been added to the list, the dose to be from ten to thirty minims. Tincture of Cubebs, Tincture of Acetate of Iron, Ammoniated Tincture of Opium, Tincture of Pyrethrum, Tincture of Quassia, Tincture of Sumbul, Tincture of Veratrum Viride, and Concentrated Tincture of Ginger have been inserted in this edition. Lozenges of Reduced Iron, of Ipecacuan, of Chlorate of Potass, and of Bicarbonate of Soda are, for the first time, made officinal; the Bicarbonate of Soda lozenges of the Edinburgh Pharmacopœia is the only precedent. Among the Ointments we now find one of Iodide of Cadmium, a Compound Mercurial Ointment, and one of Sulphuretted Potass, whilst that of the Red Oxide of Mercury is ordered to be made with yellow wax and almond oil instead of simple ointment. The restorations are the Ointments of Tar, Iodide of Lead, and Iodide of Sulphur, all very useful in their way. The Unguentum Iodi Compositum of 1864 is now termed the Unguentum Iodi, but its composition is unchanged. Yellow wax is substituted for white wax in the preparation of Savine Ointment and the Oxide of Zinc Ointment is now to be termed simply Zinc Ointment. In most instances where lard is directed to be employed, what is termed Benzoated Lard is ordered, this consisting of lard mixed with benzoin, the intention being to prevent rancidity. Black poplar buds have long been used in France for a similar purpose, and many other substances have the like properties. It is, however, to be feared that the benzoin is too irritating in its properties to be mingled with the lard without changing its effects, to some extent at least. We have already alluded to the introduction of inhalations, or vapours, as they are termed. The medications employed are Hydrocyanic Acid, Chlorine, Hemlock, Creosote, and Iodine. Veratrum Viride, said to be of great value in the treatment of acute rheumatism, is introduced for the first time. It has long been officinal in America. Among the Wines we notice as added, Orange Wine, Citrate of Iron Wine, Quinine Wine, and Rhubarb Wine, whilst the Wine of Opium is increased about one-fourth in strength above what it was in 1864; still it is one-fifth weaker than that of 1851; it now approximates the strength of the Extractum Opii Liquidum. In the Appendix we observe with great pleasure that much pains have been expended in preparing directions for volumetric solutions, both according to the decimal and ordinary systems of weights. This, we think, will be of very great value.

All in all, we are much pleased with the proposed Pharmacopœia. If we were to select any one mark whereby to distinguish it from that of 1864, we should fix upon its thorough workmanlike character. In every line is observable the great pains the Committee have been at to please the Profession at large. The meed of praise they deserve is a great one; we hope it will be freely awarded them by the Profession.

RÉSUMÉ OF THE GULSTONIAN LECTURES

by REGINALD SOUTHEY, M.D. Oxon, F.R.C.P.

In his second lecture, Dr. Southey proceeded to point out how long ago tubercle was supposed to be secreted by the glands, and that, curiously enough, the most recent opinions tended to place it among those tumours which resembled imperfectly formed glandular tissue. For a long time tubercle was confounded with the white cells of the blood; but when found in the walls of a blood-vessel, it had been supposed to originate from the granular layer of the external covering of these. The theory of a blood dyscrasia was at the foundation of all theories of tubercle, but in its history it was better to begin with the substance itself. This substance must be considered as distinctly heterologous, seeing that it originates in cells (mostly connective-tissue cells) entirely different from those which constitute its own structure. Cells might be described as originating in two ways: by cell division—*i.e.*, cleaving of the whole body, both periplast and endoplast—or by endogenous formation, where the endoplast alone divides, the periplast not sharing in the process. By the former mode homologous growth is effected, the new cells in every way resembling their parents; by the latter, heterologous formation results, as the cells might differ to any extent from their progenitors. In the latter way tubercle and cancer originate;

therefore both are heterologous, consequently resembling each other in this and other respects. Thus both are accompanied by constitutional dyscrasia; both have sites of proclivity, both are hereditary, both tend to spread and ulcerate. They differ, however, in as far as cancer can grow, while tubercle has no independent power of maintaining itself. Rokitansky thought that the one excluded the other, but this is not exactly correct.

As a tumour, tubercle is of a lymphomatous nature—*i.e.*, one having its type, among the normal structures, in ductless glands, as those of the intestines and the lymphatics. Tumours of this class are of two types—one hyperplastic, that is, simply excessive formation of normal elements; the other heteroplastic, whose constituent cells differ from their progenitors. To the latter type tubercle belongs. First among lymphomatous tumours comes the leukæmic lymphoma, the enlarged condition of the glands seen in leukocythæmia—really the cause, not the consequence, of the latter disease. Next comes typhoid lymphoma—the condition of the glands, especially of the intestine, in typhoid fever, and in which, as they tend to become caseous, there is an approach to tubercle. Hence, also, acute general tuberculosis might be, and often is, confounded with typhoid fever. In scrofuloid lymphoma, the next variety, the new formation is no longer of a simple hyperplastic nature; anatomically, it is related to tubercle, and might be seen in syphilitic subjects. In lympho-sarcoma there is a sarcomatous enlargement of the glands, with a scrofulous diathesis. The new formation is grey or ashen-hued, the glands are larger than in scrofula, and they seldom ulcerate or become caseous. The cervical and bronchial glands are most frequently affected in this manner. Turning to scrofula, the build of body serves to distinguish its diathesis from that of tubercle. Scrofulous people are largely and heavily built; their complexions are muddy; generally they are torpid. Those, again, with a tendency to tuberculosis are tall and thin, with small heads and muscles and fine hair, and are unusually precocious, nervous, quick, and irritable. In scrofulous constitutions there is a tendency to chronic inflammation of an unhealthy character, whilst the tuberculous habit has a tendency to one special disease only. The transition from ordinary to scrofulous disease is by insensible gradations, and the whole tendency of the condition might be summed up in its producing an excessive *vulnerability* of body.

REVIEWS.

Army Hygiene. By Charles Alexander Gordon, M.D., C.B., Deputy Inspector-General of Hospitals, etc., etc. London: John Churchill and Sons. 1866.

We lately had occasion to review a new edition of Pr ofessor Parkes's admirable book on "Practical Hygiene." We recommended it as indispensable, not only to the army Medical officer, but to all Professional men interested in sanitary science. The present work differs very materially from that of Dr. Parkes, but it gives a large amount of information of a practical kind, which will be found particularly useful to Army Medical officers. The author has turned to good account a long and intimate acquaintance with the circumstances of a soldier's life, and the experience he has gained with our army abroad, in his administrative capacity as an Inspector of Hospitals, and as a member of the Sanitary Commission for Bengal. There is but little of that scientific material which makes up the subject-matter of Dr. Parkes's book, but Dr. Gordon has supplemented this by a very practical manual on all the duties of a Medical officer—as a sanitary officer in the field, the barrack, on shipboard, and in the Hospital.

"The attendance on the sick and wounded becomes but a part of the duties to be performed" by the Army Surgeon, and happily the course at Netley now supplies him with an admirable groundwork on which to fall back. The author has some capital remarks on the circumstances of a soldier's life, about the worry of over-inspection, etc., with which we cordially agree. The sooner the private soldier is treated as an intelligent being, with similar likes and dislikes to his officer, the better. The information afforded by Dr. Gordon's book about "Tropical Service" is very full, as might be expected. Here is a remark with which we agree, except the word we have italicised:—

"There are theorists who would place the increased sick and death rates of soldiers in tropical countries down solely to the habits these men pursue. That this may to some degree be true is granted, but that it is only so to a *small* extent is indicated by the fact of a similar rate occurring among lower animals brought to a tropical from a temperate climate."

We may cap this by a statement made to us by a Medical officer of Indian experience when speaking of this very subject. A litter of puppies having all died on their voyage to India, he was interested to know the cause, and he discovered by post-mortem examination that great enlargement of the liver was present in every animal he examined. Parallel with this is another fact: the health of sporting dogs imported into India for hunting the jackal can only be maintained by constant care, and by sending them to the hills.

The remarks on crime and punishment are good, but the subject is one of extreme difficulty. Dr. Gordon makes some shrewd observations on drunkenness in the army and outside it, and the comparison of the soldier with artisans and others in civil life is not by any means unfavourable to the former. As to the issue of beer in India, he thinks, in a sanitary point of view, that the complete success of the measure is open to question. Beer at noon and in the evening, in a climate like India, is, perhaps, less hurtful than spirits, but it "muddles" the soldier, makes him soporose, and increases his liability to congestive disease. We are glad that our author suggests the trial of an experiment with the light French wines, which are unquestionably better adapted for a climate where a man feels depressed, thirsty, dyspeptic, without appetite, and with an abiding feeling that he has a liver, but we fear that it will be some time before the British soldier acquires a taste for these beverages. In the chapter on rations, our author remarks that an occasional ration of salt pork, bacon, etc., is desirable for our troops in India, for the soldier manifests a great desire for these, and appears to enjoy them.

The chapter on the movement of troops contains many practical hints. Dr. Gordon says that troops are, as a rule, remarkably exempt from epidemics during a march. This is to be taken with some limitation as applied to India. The reverse, indeed, appears to prevail in the Madras Presidency. The chapter on ships is full, and contains an epitome of all the regulations and other information connected with this subject. A plate is given of sections of a ship for illustrating the modes of calculating space for troops. Dr. Gordon, like most Medical officers of experience, entertains a strong opinion of the benefits accruing from a regimental Hospital system. His opinion of hill stations is that suitable cases only are fitted for these, and the selection of such cases requires care. "Those who are beginning to suffer, or whose constitutions have already been lowered by residence in the plains, will generally be benefited by a change to the hills. But to those originally diseased or with constitutions greatly debilitated, the change will not be beneficial."

All military Surgeons will agree with us, we think, that there ought always to be a nucleus of healthy, well-disciplined men to which the invalids can be attached.

The chapter on barracks is an exhaustive one. A plan of arrangement of various buildings for a regiment of infantry in India, as proposed by the Sanitary Commission for Bengal, is supplied.

"The subject of barrack and Hospital construction in India has already assumed a tangible shape. The rearrangement of stations to be henceforward occupied by troops of the line has been in a great measure decided upon, and while these pages are being corrected the Budget estimate for 1866-7 contains a grant of £1,800,000—the first instalment of a sum of £10,000,000 to be devoted within the next ten years to the erection of suitable barracks and Hospitals for the men by whom this great empire is held.

"Of the great importance, in a sanitary point of view, of these two measures upon our soldiers it is impossible to form an adequate idea. The vastness of the measures themselves is a fitting celebration of the transfer of the rule over that country to the Imperial Government."

Instead of the flannel waistbelts recommended to be supplied in a soldier's kit in India, we would suggest flannel shirts; soldiers will not wear belts habitually.

Dr. Gordon's proposal for the division of wards and space per patient is a very liberal one, and the expense is calculated to make a Minister of Finance "raise the eyebrows of astonishment," as the Germans say.

There is one subject on which we differ from our author. He proposes to educate Europeans as trained orderlies and

cooks to act in Hospitals, instead of the natives. We question the utility, as well as the practicability, of this. The annual waste of life in India is already a terrible drain on this country—more than can be sustained—and we cannot afford to dispense with the services of the natives. If the Hospital staff be composed of the European and native elements, it is very likely to lead to acts of petty tyranny on one side and discontent on the other. Again, if a soldier-orderly gets drunk or otherwise misbehaves himself, it will involve a court-martial, and so long as he is sick or undergoing punishment his place will have to be supplied by another European; while a native servant is far cheaper, and can be at once discharged and another procured. A soldier, if very sick, is always permitted to have his comrade to attend upon him and nurse him.

Here we must stop. The book is a good one, but, we must add, it is tough reading. The style, in parts, is such that it might have been formed upon an intimate acquaintance with military orders and official letters. If another edition be called for, its author might give it a more careful revision.

PROVINCIAL CORRESPONDENCE.

LIVERPOOL.

February.

It would be unfair, after so much has been written concerning the great mortality of this town, not to notice the very marked improvement in its health that has been manifested for many weeks past. Grave fears were apprehended at the commencement of the winter that the conjoint operation of cold and poverty—an almost unparalleled depression of trade having occasioned much temporary distress just at that time—would be attended by a considerable rise in the already high death-rate. Happily these fears have not hitherto been fulfilled, the death-rate having, on the contrary, so far declined that at present it is less than that of seven other large towns in the Empire. A comparison of the deaths from typhus during the first five weeks of the present and two immediately preceding years will place this improvement in a very strong light. In 1865 it was 324; in 1866, 253; while in the present year it has sunk to 82. So striking a change merits some inquiry as to its cause. To speak of any single cause, however, would be obviously improper, many circumstances having without doubt concurred in the determination of the general result. Foremost on the list should, perhaps, be placed the prompt and thorough measures for the purification of infected localities which were taken during the recent cholera epidemic. One consequence of the prevalence of this disease was the limewhiting, cleansing, ventilation, and disinfection of very many houses and courts in the most densely populated and unhealthy parts of the town. In these very districts typhus has year after year extensively prevailed, and that, too, under circumstances of physical deprivation certainly not more favourable to its development than those which have existed during the present season; and yet, one after another, the weekly reports of the Medical Officer of Health show that the deaths from this disease continue to be exceptionally few.

Dr. Trench, whose extensive experience always entitles his opinion to great consideration, it should be said, regards the diminished mortality as mainly due to the mildness of the weather, and to the extraordinary flow of benevolence which the anticipated distress among the poor called forth early in the season.

The Health Committee are proceeding with their work. With the commencement of the year a very advantageous change was effected by the transfer of the scavenging of the town from the hands of a contractor, who was constantly in arrears with the work, to those of the Corporation, and one of the first acts consequent on this change was the issue of an order that no night soil should be afterwards deposited in Philip-street wharf, the disgraceful condition of which, from the accumulation of the most disgusting filth, elicited a strong expression of opinion from the Government Inspector, and the ill-effect of which on the health of the district was rendered probable by the exceptionally high mortality prevailing in it.

Several cases worthy of notice have occurred in public or private practice of late. First on the list is Dr. Irvine's very interesting one of regeneration of the clavicle after entire removal. The patient on whom this operation was performed was exhibited at a recent meeting of the Medical Society a little over six months from the date of its performance. A good serviceable clavicle, somewhat wider and thinner than the original one, was present, and for many weeks severe exertion had been gone through by the patient—a wood-turner, aged 16—without the slightest inconvenience. The removed bone, which was also shown to the members, exhibited a complete disorganisation of both articular extremities, the central part alone appearing normal. At a later meeting a boy, aged 8, was shown, from whom Mr. Higginson, Surgeon to the Southern Hospital, had excised the right knee-joint. There was very little shortening, and the boy, though provided with ordinary boots only, ran to and fro with the greatest ease and celerity.

On Saturday, February 23, a large abdominal tumour was removed by Dr. Graham, of this town, from a patient aged 44. The case was one of much interest from its close resemblance to ovarian disease, which, indeed, it was thought to be by all who had an opportunity of examining it, except the operator, who thought it would probably prove to be connected with the uterus. It was first observed as a small swelling on the left side two years ago, and from that time gradually increased. A constant distressing bearing-down pain, which necessitated the nightly exhibition of opiates, attended it almost from the very first. The case was first seen by Dr. Graham six weeks ago, who, after careful examination, decided on removing the tumour. At the time of operation the girth at the umbilicus, owing to a rapid increase within the past three months, was forty inches. During that period the patient had been unable to walk. No interior adhesions could be diagnosed. The tumour was not detectable by vaginal examination, but the slightest pressure on the abdomen instantly communicated a movement to the uterus, the cavity of which was considerably enlarged. There was no perceptible tubular *soufflet*, nor had there been at any time uterine hæmorrhage. An exploratory puncture made a short time ago gave only a very slight glairy discharge. Notwithstanding the somewhat contradictory character of the signs, the operator thought the tumour would probably prove to be fibro-cystic, and attached to the uterus—a diagnosis which was very near the true one, for it was attached by a long flat pedicle to the broad ligament, so close to the fundus of the uterus as to seem at first sight to spring from that organ itself, and on cutting it open after removal it proved to be made up of an immense congeries of cysts with thick walls, and full of a tenacious glairy fluid. One or two of the spaces only had attained the size of an orange. To remove it an incision four inches long was made from the umbilicus downwards, and a gallon of dark-brown ascitic fluid evacuated. The tumour at once came into view, and what seemed to be the largest and thinnest cavity was punctured with a large trocar with a long tube attached, three pints of thick glairy fluid slowly escaping. The original incision not being large enough to admit of its removal, this was extended upwards for three inches, when no further difficulty was experienced. The pedicle was slowly divided by the écraseur, and the stump then freely cauterised; but as blood continued to ooze, a double ligature was passed through it, and it was secured in the wound by two long needles passed through it at right angles to each other, and secured from pressing on the skin by plaster pads. The wound was then closed by ten points of silver suture, the cavity of the abdomen having, however, been first carefully cleansed by warm moist sponges. The patient was removed to a warm bed, and a two-grain opium suppository administered. Reaction of a moderate character soon supervened, the pulse never reaching 100, and up to the present—far in the third day—there has not been a single untoward symptom; the pulse 80; the urine voided easily without the catheter; no tympanites; and the patient very cheerful. The tumour was rather larger than an adult human head, and, after the evacuation of the three pints of fluid, weighed seven pounds. I hope to state the ultimate issue on a future occasion.

With reference to the above case, I am able to add that the wound has entirely healed by the first intention. The whole of the sutures were removed on the morning of the eleventh day, the supervention of a troublesome cough having rendered their earlier removal undesirable. The pulse, by the end of the third day, was only 70, and has not at any time since exceeded this.

GENERAL CORRESPONDENCE.

DR. SMYTH'S OPERATION ON THE SUBCLAVIAN ARTERY.

Letter from Sir William Fergusson.

[To the Editor of the Medical Times and Gazette.]

Sir,—In a lecture delivered by me at the College of Surgeons, and afterwards published in the *Lancet*, June 10, 1865, I referred to a case of successful deligation of the innominata "in the hands of Dr. Rogers, of New Orleans," as illustrative of the progress of Surgery, and I gave as my authority the *Pacific Medical and Surgical Journal*, vol. vii., 1864.

Several months afterwards I was made aware, by Dr. Motherell, of Castlederry, Ireland, that I was in error in attributing that operation to Dr. Rogers, and he politely enclosed a paper on the subject by Dr. A. W. Smyth, showing that he (Dr. Smyth) had been the successful operator. Some weeks elapsed before I could again see the *Pacific Journal*, from which I had quoted. I then discovered that Dr. Rogers had only been the narrator of the case, and that the merit of the operation was due to Dr. A. W. Smyth, of New Orleans. Thereupon I immediately wrote to Dr. Motherell and Dr. A. W. Smyth, expressing my regret that such an error had occurred, and that I should correct it the earliest fitting opportunity. I have not published on the subject since, but I have referred to it in my lectures at King's College.

I have not been "repeatedly called" on to correct the error. I did so at once, as soon as I could again see the authority I had quoted; and in thus answering your correspondent Mr. W. Smyth, I am glad of the opportunity of stating in your columns my regret that the mistake occurred.

I am, &c. Wm. Fergusson.

REQUIESCAT IN PACE!

Final Letter from Dr. Moxon.

[To the Editor of the Medical Times and Gazette.]

Sir,—When Dr. Johnson, instead of shaking the substance of my representations, persists in calling them misrepresentations after I have fully substantiated those representations, no course remains open to me other than that of leaving to the judgment of your readers the letters which embody our discussion. My letter of February 25 fully replies to Dr. Johnson's of March 2, except to the only two fresh statements which Dr. Johnson's letter contains. The first of these statements is directly contrary to the fact—the second is as opposite to my ordinary experience in inspection of the dead. As to the first, your readers will find, at pp. 43-44 of Dr. Johnson's notes on cholera, that Briquet and Mignot are cited not as to the anæmia of the lungs, but as to the contrast between the anæmia of the lungs and the hyperæmia of the other organs. I am astonished that Dr. Johnson should make it necessary for me to give this flat denial in a matter so little liable to be misunderstood. Briquet and Mignot are now said to be inaccurate as to the hyperæmia of the other organs; so the contrast they are cited to prove is, as far as they are concerned, exploded. Yet Dr. Johnson gives this as a misrepresentation he is pained to expose.

Dr. Parkes says, "On cutting through the roots of the lungs, a quantity of blood usually escapes from the divided vessels, and particularly from the pulmonary artery." If Dr. Parkes had meant here that the blood came in quantity from the artery alone, he would not have said "vessels, especially the artery;" he must have meant "a quantity of blood usually escapes" to apply to some other vessels besides the artery. Need I go further, and ask what other vessels? Can Dr. Johnson seriously think that Dr. Parkes alludes to the tiny bronchial vessels or the bronchus? It is not possible to keep from seeing that the other vessels from which "a quantity of blood usually escapes" are the pulmonary veins. This statement is, as every one will see, a plain English assertion that the pulmonary veins give out a quantity of blood on section. Therefore I am astonished to find Dr. Johnson saying, "I pointed out that, Dr. Parkes not having mentioned the pulmonary veins, Dr. Moxon makes him assert that blood comes in quantity from the pulmonary veins, and that both sets of pulmonary vessels are very full of blood." Here is another of the misrepresentations which Dr. Johnson finds it a painful duty to expose.

Lastly, Dr. Johnson says that his diagram of what he calls the "comparative" emptiness (look at the plate) of the pulmonary veins represents "an obvious and necessary result of that state of the circulation in which [the left side of the heart had received little or no blood, but had continued to contract upon the last drop of blood which entered it (Parkes on Cholera, p. 23)]. I have yet to learn that the pulmonary veins are ever full when the left side of the heart is empty and its structure normal." The quotation in brackets is Dr. Parkes's opinion on what he saw, and is not a fact, but only an inference. It is monstrous that Dr. Johnson should take that author's expression of opinion to belie his direct statement of fact. If I were arguing the matter with Dr. Parkes, I might ask him how his opinion about the heart corresponded with his statement about "the vessels, especially the arteries." He might be able to show me grounds of correspondence; he might say that, perhaps after the heart had beat its last and closed upon the last drop it could get, some blood slowly made its way through the capillaries of the lungs too late to awaken the heart again, and so rested in the veins, or, as the matter was his own experience, he might not stand by one or other of the statements; he might say his words were incautious, or his observation doubtful. But when Dr. Johnson comes in between Dr. Parkes and me, and takes up Dr. Parkes's parable to a certain distance, I ask him, why not go further? If he trusts Dr. Parkes's opinion about the last moments of the heart—mere inference, as Dr. Parkes was not inside to see the way the heart died—why can't he trust the rest of Dr. Parkes's conclusions? Why give credence just up to where his own theory will fit on Dr. Parkes's inferences, and then turn unbeliever and sceptically refuse to accept that acute observer's reasonings a step beyond? What is Dr. Johnson's footing in the question? What right has he to hand me one of Dr. Parkes's conclusions and withhold the rest? I go further with Dr. Parkes—I believe that Physician is right in the conclusion that there is some condition of the blood which prevents it from being properly aërated. Why, when I have got as far as Dr. Parkes's account of the pulmonary vessels and left heart, does Dr. Johnson stop me and take from me Dr. Parkes's account of full pulmonary veins, and thrust upon me in exchange his striking diagram of them very empty—very remarkably empty—showing me the patched mutilation of Dr. Parkes's theory as his own new theory? I say Dr. Johnson has no right to act so. He may legitimately do one of two things. Firstly, he may take Dr. Parkes's facts and inferences, and so become his follower; or, secondly, he may take Dr. Parkes's facts and reject his inferences, drawing fresh conclusions of his own, and so become a leader; but he has no right to choose at his pleasure amongst Dr. Parkes's facts and inferences, taking where he likes and rejecting where he likes, and putting up an inference where he casts away a fact. For this is to divide Dr. Parkes against Dr. Parkes, and then, in Dr. Parkes's own name, to cast out Dr. Parkes.

As to the pulmonary veins never being full when the left heart is empty, I can assure Dr. Johnson that it is a very common incident. Let him divide the pulmonary vein in cases especially of tetanus or peritonitis, and he will find the phenomenon far from infrequent.

Finally, then, it remains true that—

1. Dr. Johnson's theory rests on descriptions of the pulmonary veins as empty of blood.
2. These descriptions Dr. Johnson rests on Dr. Parkes's authority alone.
3. Dr. Parkes describes the pulmonary veins as giving a quantity of blood when divided.

And so explodes the foundation of Dr. Johnson's theory of cholera.

I am, etc.

6, Finsbury-circus. W. Moxon.

THE MERCANTILE NAVY.

Letter from Dr. W. Domett Stone.

[To the Editor of the Medical Times and Gazette.]

Sir,—As confirmatory of some remarks contained in an editorial article on "The Mercantile Navy," which appeared in the *Medical Times and Gazette* of January 21, I beg to forward a copy of two extracts of letters received by Mr. Mayo, the Registrar-General of Seamen, from Mr. Thomas Carew Hunt, H.B.M.'s Consul at Bordeaux, and Mr. Walter

Maynard, H.B.M.'s Vice-Consul at Cronstadt. The former gentleman states that "there are no regulations, rules, or established customs in the French navy, imperial or mercantile, for the prevention of scurvy, because, owing probably to the general use of the common acidulated wine of France as a drink for seamen, the disease is scarcely known." The latter gentleman says, "I find that there are no laws here for the prevention of scurvy in the imperial Russian navy, but that the commanders of ships are instructed to supply the crews with fresh beef, vegetables, and preserved meat as often as possible, and when out of the Baltic to purchase French red wine, which is served out to the men with water in equal parts. These measures have been found effectual, to a certain extent, as preventives of this disease, without the aid of lime-juice, which is not used in ships of war."

Here, then, is proof positive of the correctness of your assertion that "the light wine is, beyond doubt, as an anti-scorbutic, equal to the best lime-juice."

Perhaps you will allow me to state, if not encroaching to too great a length on your space, that since the appearance of my recent letters in the *Times* I have received numerous communications from gentlemen, many of whom are under the impression that, lime-juice being an antiscorbutic, all other matters affecting the hygienic condition of seamen may be treated as of secondary importance—*e.g.*, the diet, clothing, cleanliness, and the forecastles of ships, which are frequently wet, dark, and badly ventilated, and so small that there is sometimes not even standing room for all the crew at the same time. If no heed be taken of these so-called "secondary matters," scurvy will most assuredly break out. Even where these precautions are rigorously observed, this scourge has been known to manifest itself. In verification of this assertion I may state that in a conversation I had a few days since with Mr. Walcott, one of her Majesty's emigration commissioners, he informed me that Admiral Houston has expressed himself quite satisfied that lime-juice will not always keep scurvy away. In corroboration of this, he says that many years since, when cruising in the Pacific, several seamen were afflicted with scurvy, although they had regularly taken the usual allowance of lime-juice, and that it was not until they had eaten freely of raw potatoes, obtained at Vancouver's Island, that the disease was checked and cured. This one fact, I submit, is sufficient to show that something more is wanting than the mere appointment of inspectors to see that pure lime-juice is shipped. I would here state that I far from undervalue the efficacy of a systematic inspection of lime or lemon-juice, as has been asserted, and that I have, on nearly every occasion on which I have brought the subject before the public, urged the appointment of competent Medical men to examine the juice, and to institute an investigation into any death from scurvy that may have happened during a voyage; and, in order to prevent the possibility of a spurious article being placed on board ship, I have suggested that licences should be granted to vendors of this antiscorbutic.

The reason why scurvy is now seldom or never seen in the Royal Navy, nor the emigration and transport services, nor in the cabins of long-voyage ships, is not so much owing to lime-juice as to the capital preserved potatoes which are regularly issued, and which were said by the late Dr. Andrew Ure "to possess all the antiscorbutic properties of the fresh potato." Since it is an admitted fact that scurvy is caused by the absence of vegetable diet, it seems to me that the most simple remedy must be to give a diet of the preserved potato two or three times a week, as in the Royal Navy and the above-named services. The cost of four ounces per week for thirteen weeks would amount to about 1s. per man.

As regards the light wine question, I have suggested to Drs. Barnes and Ward, Physicians to the *Dreadnought*, a trial of the cheap wine Gauphine to patients under their care, and I am happy to say that the latter gentleman has kindly consented to carry out my proposal, and to favour me with his opinion.

I am, &c.

W. Domett Stone, M.D., F.R.C.S. (exam.)

17, Stanley-gardens, W., Feb. 27.

GRATUITOUS MEDICAL SERVICES.

Letter from Mr. J. N. Radcliffe.

[To the Editor of the Medical Times and Gazette.]

Sir,—Will you permit me to correct an error in Dr. Gibbon's note to you of the 14th ult. (*Medical Times and Gazette*, February 23) purporting to contain a copy of a letter from me to him?

Dr. Gibbon represents my letter as having been addressed to him from the Privy Council Office. It was addressed from my own residence, not from the Privy Council Office, and Dr. Gibbon's reply to me was directed by him to my residence. Dr. Gibbon, in his purported copy of the letter sent to the Lord President of the Council, also omitted the address from which the letter had been sent, and substituted the words "Privy Council Office." Dr. Gibbon having failed to rectify his error, I have forwarded to the Privy Council Office a correct copy of my letter to him, and the further explanation (scarcely needed) that the letter was written on the ordinary office paper, having the seal of the office upon it, and was enclosed in an envelope of the Medical Department of the Privy Council, in accordance with the custom of that department when an inquiry is being carried out under its direction.

I am, &c. J. N. Radcliffe.

70, Guilford-street, Russell-square, W.C., March 5.

ON THE TWO TYPES OF ANCIENT BRITISH SKULLS.

Letter from Dr. Thurnam.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the review of Mr. Pike's valuable work, "The English and their Origin," in your number of the 23rd inst. (p. 206), the writer, adverting to the cranial conformation of the ancient Britons, ventures on a statement so remote from the fact, that I feel called upon to make a few observations in regard to it. The passage to which I refer is as follows:—"The theory promulgated by Dr. Thurnam, that in certain long barrows long skulls are invariably found, whereas in short barrows short skulls are found, apart from the *à priori* impossibility which such a *bizarre* classification appears to carry on its very face, has been proved to be altogether baseless." So far from this being the case, the researches which I have been able to make during the last two years, and since my former memoir on this subject was published, in not less than ten or twelve long barrows of this part of Wiltshire, have produced eighteen additional skulls which show no exception whatever to the formula, which holds good for this part of England, of "Long barrows, long skulls." It may be asserted, without fear of contradiction, that in no case whatever has a short or brachycephalous skull been yet found in the primary interments in any long barrow. On the contrary, the skulls which are found in them are very remarkable for their long and narrow form, such, indeed, as at the present day no longer exists in Europe, and is equalled only in the crania of Negroes, Hindoos, or Melanesian islanders. As regards the round barrows and round skulls, I was well aware that the connexion between the two was far from being so uniform as that between the long barrows and long skulls. But, notwithstanding some facts which show an admixture of the two types of skull, long and short, in the circular barrows, it may still be asserted, as is done even by Dr. Barnard Davis, that in the primary interments in this form of tumulus the prevailing cranial type is short and brachycephalic.

More important than the connexion between the form of the skull and the form of the barrow (which is, of course, altogether accidental, and may be, and no doubt is, reversed in different countries, or even in different parts of the same country), is that which I believe may be regarded as established between the form of the skull and the relative date, or chronological sequence, of the two classes of tumuli in which they are found. I cannot here give the proofs in detail, but there is every reason for believing that the long barrows are the most ancient sepulchral monuments of this part of Europe, and as no object of metal has, in any well-authenticated instance, been found in them, whilst those of stone and bone have so been found, they may clearly be referred to the Stone Age. The circular barrows, on the other hand, may be shown to be the latest of our pre-Roman British tombs, and not only yield objects of stone, but in many cases those of metal (bronze) also. They belong to the Bronze Age; which here, as in most other countries, succeeded to that of stone. It would thus seem that the long-headed race, by whom the long barrows were erected, were at the first in sole occupation of the island; and that succeeding to and encroaching upon them came a short- or round-headed race, who raised round barrows over their dead, and by whom, or in whose time, bronze appears to have been introduced. It is not, however, probable, or in accordance with what usually obtains under like circumstances, that the entire race of long-heads

was extirpated by the new-comers; and thus the remains of both races may be looked for in the circular barrows; though, as a rule, those of the conquering and dominant one will be found to prevail, and are especially met with in the more honourable—primary or central—place of interment.

It will be seen that, equally with the writer of the review, I admit "the co-existence of the two types" of skull, a dolichocephalic and brachycephalic one, among the ancient Britons; but that I differ from him in denying that two such different forms can by possibility belong to one and the same "typical ancient British skull." These two statements are in fact incompatible and mutually destructive. What we actually find are two distinct types among ancient British skulls which, in respect to the cerebral portion of the cranium, differ from each other, on an average, almost or quite as much as do the skulls of Slavonians and African Negroes.

I need scarcely refer to the distinguished anthropologists, both of this country and the Continent, by whom my views on this question have been more or less adopted and endorsed; but may perhaps be excused for naming M. P. Broca and Professor Huxley.(a) It appears to me that whilst it was open to the reviewer to have stated that the results I had arrived at required confirmation from other and independent researches, it was hardly so to assert that they have been "proved to be altogether baseless."

I have embodied the facts collected, during the additional excavations of the last two years, in a paper recently communicated to the Anthropological Society of London, and which, I understand, will be read at the meeting of Tuesday next, March 5. I am, &c.

Devizes, February 25. JOHN THURNAM.

POOR-LAW MEDICAL RELIEF.

Letter from Mr. Griffin.

[To the Editor of the Medical Times and Gazette.]

SIR,—I shall feel obliged by your inserting the annexed letter addressed to the President of the Poor-law Board. I congratulate the Metropolitan Poor-law Medical Officers on the success they are likely to achieve, and I trust the time will come when my provincial brethren will be equally fortunate.

I am, &c. RICHARD GRIFFIN.

12, Royal-terrace, Weymouth, March 5.

"12, Royal-terrace, Weymouth, March 4, 1867.

"Sir,—Having already furnished you with a large mass of evidence on the Medical treatment of the poor of England and Wales will, I trust, plead my apology for troubling you with the remarks I desire to make on your Metropolitan Poor Bill.

"By the present law one half the salaries of the Medical officers, and the cost of medicines when found by the guardians, are a charge upon the Parliamentary grant, and the other half on the common fund of the union; but by your Bill, as I understand it, the entire cost of the asylums will be defrayed by contributions from the unions and parishes forming the district, and in the case of the dispensaries from the common fund of each union, and thus the Consolidated Fund will be entirely freed from the charge. Is this your intention?

"In clause 43 of the Bill you state 'the guardians of each union shall provide proper medicines, and the same shall be dispensed and furnished to such of the poor in receipt of relief as require the same.' Now, it appears to me that by the wording of the clause no person will be entitled to Medical assistance unless already *in receipt of relief*, and thus in future at least one-third of all the sick poor of the metropolis will be deprived of Medical relief at the cost of the rates. Although I grant that many now receive relief both in England and Ireland who ought not to have it, still the line confining Medical assistance to paupers only is far too stringent. (See pamphlet entitled 'Evidence on Poor-law Medical Relief,' pages 6 to 18.)

"The question of who shall find the drugs for the poor is one of vital importance. I think they should be furnished by the Poor-law Board, as the only means of insuring good drugs. This course is followed by the army and navy. On reference to the pamphlet entitled 'Evidence,' pages 89 to 97, this subject is fully entered into; and in the remarks at page xcii. last paragraph, the objections to the guardians finding drugs are specially pointed out. The Parliamentary grant would be a convenient source from which the cost of the drugs might be defrayed.

"The whole of the Medical treatment of the poor, both in asylums and dispensaries, should be placed under the charge of the managers of each asylum district—in fact, the dispensaries might be made appendages to the asylums.

"I have the honour to be, &c.,

"RICHARD GRIFFIN.

"The Right Honourable the President of the Poor-law Board."

"WHO IS A SURGEON?"

Letter from Dr. Lumley Earle.

To the Editor of the Medical Times and Gazette.]

SIR,—Will you kindly insert the following extract from a letter sent by me to two Birmingham daily papers, explaining the cause of my retirement from the late contest for the vacant post of Honorary Surgeon to the Lying-in Hospital?—

"The majority of the Committee (the Board not being unanimous on the question) considered that I was bound to give up both these posts, on the ground that there is a law in their Hospital which makes such a sacrifice necessary to enable me to hold the appointment. The law reads thus:—'The appointment of Acting Medical Officer to the Lying-in Hospital cannot be held simultaneously with the office of Physician or Surgeon to the following institutions:—The General Hospital, the Queen's Hospital, the General Dispensary, and the Children's Hospital.' I agreed to resign my position as Acting Medical Officer to the Children's Hospital; for, although I do not hold the title, I perform the duties of Physician to that institution; but I declined, and still decline, to give up the appointment of Surgeon-Accoucheur to the Queen's Hospital, because I contend—and this opinion is confirmed by that of the best legal authority on Hospital questions in Birmingham—that I do not hold 'the office of Physician or Surgeon to' the Queen's Hospital, and therefore in respect to that appointment the law does not apply to me. There are Physicians and Surgeons, *par excellence*, attached to the Queen's, and I am not one of them. My opponents say I do hold 'the office of Surgeon to' the Queen's Hospital, because I am Surgeon-Accoucheur to it. If this be so, then Mr. S. Adams Parker, who is Surgeon-Dentist to the Queen's Hospital, might with equal truth be said to hold 'the office of Surgeon to it.'"

By comparing it with the paragraph in reference to myself, communicated by the correspondent for Birmingham in last week's *Medical Times and Gazette*, you will see how, in many ways, he has failed to comprehend the question. The extract shows that the point of dispute was not whether I was a Surgeon, but whether I held "the office of Surgeon to" the Queen's Hospital. It shows that words were put into my mouth which I never uttered; it shows further that had I been elected I would have held two public appointments, and not three, as affirmed by your correspondent.

I am, &c. LUMLEY EARLE.

92, Newhall-street, Birmingham, March 5.

PROLONGED GESTATION.

Letter from Mr. Edward T. Blake.

[To the Editor of the Medical Times and Gazette.]

SIR,—In connexion with the above subject, which is of so much import from a medico-legal aspect, and upon which the most serious decisions sometimes hinge, allow me to give the brief particulars of a case which has just occurred in my practice. A short, fair woman, of spare habit, the mother of nine healthy children, has never miscarried, was last unwell on March 27, 1866, was delivered of a moderate-sized female child on February 27, 1867, and was undoubtedly pregnant during the whole intervening time—eleven full months. She tells me that she always goes "over her time." This tendency to the recurrence of protracted gestation in certain persons has been observed by Retzius, Dewees,(a) Hamilton, (b) Sir James Simpson, (c) and others. Retzius has even observed it to be hereditary in one instance.

Wolverhampton. I am, &c. EDWARD T. BLAKE.

(a) See vols. v. and vi. of the *Bulletins de la Société d'Anthropologie de Paris*; and "Notes upon the Human Remains," by T. H. Huxley, F.R.S., in Laing and Huxley's "Prehistoric Remains of Caithness."

(a) "Compendium of Midwifery," 465.
(b) "Practical Observations," 106.
(c) "Obstetric Memoirs," vol. i. p. 342. Edited by Priestly and Storer.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

FRIDAY, MARCH 1, 1867.

DR. JAMES ALDERSON, F.R.S., President.

ANNUAL GENERAL MEETING.

AT the commencement of the meeting the PRESIDENT declared the ballot for the election of officers and members of Council open for one hour.

The auditors' report was first read, and its adoption moved by Dr. WEGG, seconded by Dr. MERRIMAN, and carried unanimously.

The report of the President and Council was then read. In mentioning the otherwise prosperous condition of the Society, it referred to the excessive mortality which had occurred amongst the Fellows, no fewer than twenty-three having died during the year, including some of the most distinguished of them. The total number of Fellows was 630, ten less than the number in the previous year's report, which was accounted for in the statement given of changes which had occurred by death, election, and resignation. The total ordinary income of the Society had been £1397 1s. 4d., and the expenditure £1126 14s. 2d., both slightly less than those of the preceding year. The balance in the hands of the bankers, including that of last year, amounted to £455 10s. 6d. In the item of extraordinary expenditure, the report referred to the advantageous investment of a portion of the Society's property in the purchase of the original lease of the premises occupied by the Society. The additions to the library comprised 447 works (exclusive of periodical publications and about 250 pamphlets), of which 211 were presented and 236 purchased, 209 being English and 238 foreign. The librarians referred to a deficiency in the library which they hoped the Fellows would aid them in supplying—viz., the procuring of complete sets of the Local Sanitary Reports, which have been periodically published in various towns, and which would be of great value, from their minuteness of detail (a matter impossible in the returns of the Registrar-General), if collected and placed in one, if not more, of our great Medical libraries. The librarians also reported with regret that few additions had been made to the collections of engraved and photographic portraits, and to the pathological photographs. With respect to the scientific committees nominated last year, it was stated that the one on Hypodermic Injections had completed its researches, and the report would be laid before the Society at an early date. The other, on Electricity as a Remedial Agent, had not yet obtained sufficient data for a comprehensive report, in consequence of difficulties which had been met with in carrying on their investigations. The President and Council, in conclusion, invited the attention of the Fellows to the urgent need which exists of contributing papers calculated to sustain the reputation of the Society.

The adoption of the report was moved by Dr. G. JOHNSON, seconded by Mr. R. TAYLOR, and, after a few remarks by several Fellows, carried unanimously.

Mr. DIXON moved, and Dr. GREENHOW seconded, the following alteration in one of the by-laws :—"That after the words, 'same session,' the following words be added: 'Nor shall any candidate for the Fellowship, who shall have been balloted for and rejected, be subsequently admitted as a visitor at any meeting of the Society.'"

Mr. PARTRIDGE did not see the force of the alteration. A person who was rejected by the Society was not necessarily a bad character. It was an honour to be elected, but who could say that to be rejected was so dishonourable as to preclude a rejected person from occasionally visiting the Society? He ventured to say no such law obtained in the Royal, the Linnæan, the Geographical, or any other of the learned and scientific Societies of London.

Mr. CURLING said that from the wording of the alteration it would seem that it was aimed against a particular individual, and for a particular purpose. He thought it was unnecessary. No visitor could enter the Society unless by the introduction of a Fellow; and no Fellow would persist in introducing a person generally unacceptable to the Society.

Mr. DIXON and Dr. GREENHOW both contended that, so far as the Royal Society was concerned, the conditions were not parallel. Any gentleman who stands well with the Profession can be elected to this Society, which had no limit as to numbers. In the Royal Society it was not so. There a selection was made, and rejection did not imply dishonour.

Dr. ROUTH said that if such an alteration as that proposed were carried it would have a broader bearing than it might have at present. One gentleman had been blackballed because he styled himself a member of the Royal College of Physicians when he was only an extra-licentiate. That gentleman bore the highest character, and had been admitted since to the Fellowship. Party feeling at the present time ran high, and a man might be blackballed for belonging to a special Hospital and other like causes. Surely the exclusion of such a person from the Fellowship should not exclude him as a visitor.

Dr. O'CONNOR referred to some cases in which gentlemen had been blackballed for the most frivolous causes.

Dr. PITMAN regretted that the subject had been brought forward, and thought that the carrying of the alteration would be a reflection on the liberality of the Profession. He would not interfere with the privilege at present enjoyed by the Fellows of admitting visitors. Gentlemen were often admitted as visitors who had large experience on the subject to be debated, and whose speeches added to the value of the discussion. If a gentleman were generally objected to by the Society, he would not find any Fellow willing to introduce him as a visitor.

Mr. GANT said that personality in discussion was most objectionable in a learned Society, but the proposed resolution was offensively personal.

Here considerable discussion took place as to whether the proposed alteration in the by-law had had the sanction of the Council, whether it was recommended by that body, or whether it was proposed in Council by one or more members, admitted on the minutes, and allowed to be inserted in the circular calling the annual meeting. It was difficult to arrive at any definite or conclusive answer respecting these questions; though it appeared that the alteration had been placed on the paper in a legal manner with the exception that it had not been suspended in the library. But there were doubts on most of the points referred to.

Mr. CURLING suggested that the resolution should be withdrawn. It was, perhaps, illegal; at all events it would not be passed unanimously, and probably not obtain a majority of votes.

Dr. ALTHAUS inquired if any case had occurred which would justify the Society in passing so severe a resolution as that before them.

Mr. DIXON felt strongly on the subject, but would not press his resolution. If, however, a man were rejected by the Society as unworthy of being a Fellow, and was afterwards admitted as a visitor, "having all the privileges of a Fellow for the evening," he thought the resolution was a good and consistent one.

After a few words from Dr. A. P. STEWART in favour of the course pursued by the mover and seconder, the motion was withdrawn.

PRESIDENT'S ADDRESS.

The PRESIDENT, after referring to the report of the Council, which had anticipated so many topics that but little remained for him to notice in his farewell address to the Society, spoke on the ever inevitable subject, the enumeration of the losses which they had sustained in the death of more than an average number of their Fellows. While proposing to pay a short tribute to the memory of the more distinguished of the departed, he regretted that want of information must oblige him to be satisfied with a simple record of many individuals whose career had been passed in distant localities, but whose merits, he could not doubt, would well deserve an honourable record could they be fully known to the Society. Among those whom he especially dwelt upon were Mr. M'Whinnie, whose decease stood first in point of date, distinguished as an anatomist and pathologist. Of Dr. Conolly he spoke with considerable eulogy as a philanthropist and as a great reformer in the management of the insane, and dwelt upon the personal, gentle, and amiable traits which recommended him to the regard of all who knew him. He gave a slight sketch of the career of Dr. Benj. Guy Babington, doing full justice to his ability and many excellent qualities. Of Dr. Hodgkin, who was contemporary with Dr. Babington, he spoke in terms of highest admiration, dilating on the true charity which characterised his whole life. Dr. Seymour, as a man of accomplished mind and success in his Profession, he spoke of personally with

great regret. Of his immediate colleague, Mr. A. Ure, the President also spoke in terms of great personal regard, and noticed his very remarkable success in the management of patients after operations. Mr. Toynbee's sudden decease was likewise noticed as a great loss to the Profession. Dr. Barlow was also spoken of as deserving the respect and regret of all the Profession, no less by his Professional ability than for his amiable character. He spoke of Dr. Brinton as a man rising into eminence, whose loss to the Profession was to be greatly deplored. The last of the distinguished Practitioners whom he had to mention was Dr. Sutherland, an accomplished man, eminent in his peculiar branch of practice, not the less to be regretted because his failing health had for a long time withdrawn him from Professional intercourse. The President then said: "This concludes the long list which it has been my painful duty to lay before you. In referring to the session which is past, I feel reluctant to close my second year of office with a reference to any sort of shortcomings in the business of the Society. The report furnished by the Council seems to hint at a paucity of valuable communications. I would rather temper than echo this reproach, and think that I am not without some ground to support me in this desire. It is true, no doubt, that few very striking communications have been received; but at the same time many very interesting facts have reached us, and some of the papers have shown deep thought, and have not been wanting in originality, and even since the composition of the report to which I refer, a most important and valuable communication has occupied the attention of the Society. In regard to the meetings and their discussions, I cannot think that there is anything to regret, or that the Fellows can look back upon the session with any other feeling than that of satisfaction. Whatever may have been the intrinsic value of the topics laid before you, the discussions have been carried on in a fair and earnest spirit of inquiry, and all have evinced a determination to advance the cause of Medical science. Thus the meetings have been a source of general enjoyment and improvement. For myself, I can only add that they have afforded me unmixed pleasure; and in reference to a remark casually made here only lately, that Presidents who had passed the chair were rarely seen in the Society, I beg to be allowed to say that, in my case at least, I trust that this may prove to be a fallacy."

Votes of thanks to the retiring officers were passed.

The result of the ballot for officers and members of Council for 1867-8 was then announced by the President as follows:—*President:* Mr. Solly, F.R.S. *Vice-Presidents:* Dr. T. K. Chambers, Dr. Peacock, Mr. Prescott Hewett, Mr. C. H. Moore. *Treasurers:* Dr. Pitman, Mr. Paget. *Secretaries:* Dr. Habershon, Mr. Gascoyen. *Librarians:* Dr. Stewart, Mr. C. Brooke. Other members of Council: Dr. Garrod, Dr. Quain, Dr. Radcliffe, Dr. Tyler Smith, Dr. W. Wood, Mr. Birkett, Mr. Dixon, Mr. E. Humby, Mr. J. A. Kingdon, Mr. John Wood.

TUESDAY, FEBRUARY 26, 1867.

A PAPER, by Mr. THOMAS PRIDGIN TEALE, jun., was read on

ENUCLEATION OF NÆVUS.

In this paper the author advocated two principles which have received as yet little attention from Surgical writers in the treatment of the more formidable cases of nævus. The first is, that there exists in most cases of large nævus a distinct capsule, which will enable the Surgeon to enucleate the tumour without cutting wide of the disease, and thereby endangering large blood-vessels or nerves. This principle is advanced by Mr. Paget in Holmes's "System of Surgery," vol. i. page 498. In support of it three cases are here related, in which the author, relying upon enucleation, had removed large and rapidly-increasing subcutaneous nævi in infants.

Case 1.—Emily R., aged 4 months. A rapidly-growing nævus, measuring three inches by four, situated over the right parotid gland, being chiefly subcutaneous, but involving the skin near the lobe of the ear, to the size of a half-crown, removed by enucleation, October, 1863, the nævoid skin being preserved, along with the sound skin, as a cover to the wound. The knife was kept close to the investing capsule, and was used very sparingly in separating the deep parts of the tumour, which extended to such a depth that half an inch of the internal jugular vein was laid bare, and the finger could be placed upon the styloid process. Rapid recovery. Photographs of the tumour, and of the patient two years after operation, were exhibited, as well as the tumour itself.

Case 2.—Alice B., aged 7 months. A rapidly-growing nævus, entirely subcutaneous, and measuring before removal four inches by three inches and a half, was situated over the left parotid gland. Removed by enucleation, January, 1865, the margin and deep surface being separated almost without using the knife. The infant returned home in ten days convalescent. A few days after its return home it was seized with malignant scarlet fever, and died. A photograph and a preparation of the tumour were shown.

Case 3.—Mary R., aged 5 months. A nævus of the size of a walnut, chiefly subcutaneous, and situated over the right parotid gland, was removed in March, 1864. On the fifth day the infant died in a fit of laryngismus stridulus, to which it had been liable for some weeks before the operation. Tumour shown.

The second principle advocated in this paper is—that when a portion of skin covering a nævus is involved in the disease it is not necessary to sacrifice such diseased skin, as it may be dissected off the tumour, and, being retained as a cover to the wound, will gradually regain its natural appearance. This slow change is brought about by the gradual contraction of the internal cicatrix, by which the nævoid skin becomes united to the wound which it covers. It is an instance of the Surgical value of the designed production of atrophy by means of cicatrix, a subject on which the author has collected many interesting facts, which he hopes before long to bring before the Profession. This principle was acted upon in Case 1 in October, 1863, and in the summer of 1864 the preserved nævoid skin had recovered its natural appearance. Recently Mr. Nunn and Mr. Furneaux Jordan have carried out the same principle successfully in the treatment of nævus of the face.

Mr. CURLING referred to the general dread of using the knife in cases of nævus, as there had been some deaths from hæmorrhage. Mr. Teale had adopted the procedure mentioned in the paper in some very formidable cases, but it was not suitable to all. For some of the milder sorts subcutaneous ligature was best, especially for those situated on the head; for those situated on the neck, he thought enucleation might be advantageously employed.

Mr. T. SMITH said that some years ago, whilst assistant to Mr. Paget, the covering referred to had been observed in a case to which the écraseur was about to be applied; in fact, in the preliminary dissection the tumour fell out. He thought that entirely isolated nævi were best adapted for removal, but he objected to cutting in children. On the other hand, the risk of injecting perchloride of iron about the head and face was very great. In one fatal case which had occurred at Melbourne, only a small quantity had been injected, but the blood was found coagulated to the heart. Cases of parotid nævus, although the most alarming-looking, were most likely to end in spontaneous cure, and in Mr. Teale's three cases there was a considerable chance of this had they not been interfered with.

Mr. W. ADAMS thought the preservation of skin a great improvement, as cicatrices grow as well as other parts. This, unfortunately, was not always remembered; in one case he knew, the knife had been used many years ago, and the resulting scar was now most formidable.

Mr. PRESCOTT HEWETT was of opinion that Surgeons are too prone to early operation, as nævi will often disappear with time. In a case of his own where the tumour was close to the orbit, after a while it ceased to grow, and finally disappeared with an attack of hooping-cough. Another now under his care, where the child had suffered from fever, was going away. The facial paralysis described by Mr. Teale was a very serious thing—to be avoided by all means. Sir W. Fergusson had reported a case where many needles and ligatures had been employed with success, and he himself had frequently had recourse to this plan with similar good results. Paralysis was thus avoided.

Mr. BIRKETT stated that in one case where there had been twenty or more nævi all were now gone. A child had nearly the whole of its upper arm affected; it was seized in succession with three infantile complaints, and the nævus atrophied; so also in another case of the same kind. He complained that authors did not refer to the back numbers of the *Transactions* before they brought forward papers. Exactly similar remedial measures, limited, however, to certain situations, were proposed in a paper published in 1847. At Guy's they always excised when the nævi were in certain positions, but in the situation described by Mr. Teale this plan was never adopted. For such nævi subcutaneous ligature was by far the best, entailing no loss of blood, no scar, and no

injury to the facial nerve. Elsewhere excision was probably better.

Mr. CURLING said the case referred to by Mr. Birkett was one where a nævus had been removed from an adult by excision, but such cases were quite different from those occurring in young subjects.

Mr. BARWELL thought it lucky that the jugular vein was not torn in removing the tumours.

Mr. HULKE spoke of an infant which came under the care of Sir W. Fergusson, but on which, for certain reasons, he did not operate. The child soon died, and a large vein was found to pass from the tumour directly into the jugular vein. Many nævi were really cavernous sinuses; their treatment was puzzling. To some cases, as those where the nævus was gradually entering the orbit, the ligature was not applicable, and injections of perchloride of iron were dangerous. Probably setons of perchloride of iron were best.

Mr. SAVORY said the rule of preserving the skin was applicable both to cutaneous and subcutaneous nævi, as it was supplied with its blood-vessels from below; it might, therefore, be left out of the question in ligaturing.

Mr. TEALE replied.

NEW INVENTIONS.

NEW MEDICINES.

MÖLLER'S NORWEGIAN COD-LIVER OIL.—A specimen of this oil has been submitted to our inspection by Messrs. F. Newbery and Sons, and we certainly cannot do otherwise than speak of it in terms of the highest approval. It is almost colourless, its taste is but slightly marked, and we find that the patients to whom we have given it take it more readily than they do ordinary specimens of cod-liver oil.

NEW BOOKS, WITH SHORT CRITIQUES.

Physiological Remarks upon the Causes of Consumption. By Valentine Duke, M.D., F.R.C.S.I. Dublin: Fannin. Pp. 108.

*** We cannot exactly make out Dr. Duke's aim—whether he intends to address the Profession only, or the people generally. If the former, we can only say that what he says has probably all been said before in a terser and more concise way; if the latter, we regret that Dr. Duke should have mixed up so much of what must to the majority of people be simply unintelligible with what, if compressed into half the space, might have done good. Hygiene is very properly the Alpha and Omega of Dr. Duke's directions.

Transactions of the Ethnological Society, Vol. V. London: J. Murray. Pp. 345.

*** The interest of this Society's annual volume is very great, and the present is no exception to the rule, were it only for the papers of Crawfurd and Lubbock.

JOURNALS.

*** The American Journal of the Medical Sciences for January contains a paper by Dr. Gross, son of the well-known author on Surgery, on Wounds of the Internal Jugular Vein, with especial reference to their Treatment by Ligature. He shows that, as a general rule, ligatures may as safely be applied to veins as arteries. He thinks that phlebitis and pyæmia stand in the reverse order as cause and consequence, the latter being in reality a disease somewhat allied to the zymotic class. Thus, when phlebitis of an unhealthy type ensues on the ligature of a vein, it depends on a wound or extensive exposure of the vessel rather than on the thread surrounding it. On the other hand, many Surgeons are of opinion that ligaturing veins is really more advisable than leaving them open and pervious in an unhealthy wound, and that the most usual cause of danger after tying a large vein is secondary hæmorrhage when the ligature separates. Speaking more particularly of the internal jugular, Dr. Gross points out that wounds of its lower third are most dangerous, owing to the intimate connexion of the vessel with the surrounding tissues keeping it open when cut. The great majority of such injuries prove fatal, except immediately brought under Surgical treatment. Primary and secondary hæmorrhage, introduction of air, and pyæmia, are the usual causes of death. In some instances there have been recoveries with an aneurismal communication between the artery and vein.

Dr. Liddell sends a paper on Internal Aneurism as a Cause of Sudden Death, showing how in former days many of these were set down to other causes, as apoplexy. We are somewhat surprised, however, to see certain marks of ignorance about the paper (especially Case I.) which we would hardly have expected.

Dr. Jackson, Kentucky, gives one of the best synopses we have seen on the subject of Trichiniasis, in which we find our own pages more than once referred to.

Dr. Mitchell continues his researches into the Physiological Effects of Cold, having now made use of Dr. Richardson's apparatus for producing extreme cold. Experimenting on birds, these having thinner skulls than most other animals, he was able to freeze different parts of the brain, and, thus annulling their powers, to observe the effects of the arrest of their functions. Some of the most curious results obtained were the effects of cold on the cerebellum and cervical spinal cord in the case of pigeons. When this was excessive, the bird performed a series of backward somersaults or convulsive movements in that direction. When less so, the bird only appeared to be involuntarily compelled to move backwards. He subsequently discovered that a somewhat similar result could be obtained by excitants, such as Tinctura capsici, thus showing that the peculiar movements were produced by the reaction after freezing, so that the plan offers the double advantage of producing the effects of excessive prostration or of excessive stimulation of any organ to which it is applicable.

Dr. Green writes a good paper on Astigmatism, and Dr. J. Richardson sends a communication on a subject which seems to be new to him, but well known to us—the value of heat as a resuscitating agent. Dr. Leavitt writes strongly in favour of permanganate of potash as a local application in cases of carbuncle. Dr. Evans recommends bromide of potassium in epilepsy. Dr. Morton describes a portable douche for cleansing wounds without the use of sponges or contact of the hand; whilst Dr. Cutter gives an account of an operation for the removal of a growth on the vocal cords by section of the larynx, ending successfully. Dr. Cheney relates a case of gunshot wound of the head, whereby a portion of the left anterior lobe of the cerebrum was removed. The patient recovered, only with almost entire loss of memory, especially of the power of spelling words.

The Nashville Journal of Medicine and Surgery, for August.

*** Dr. Herr treats of hospital gangrene as seen in the South during the war. Bromine applied locally would seem to do by far the most good—in fact, to be almost infallible. Nitric acid was tried, but seemed to be almost as bad as the gangrene.

*** The St. Louis Medical and Surgical Journal contains a report of a cure of fracture of the patella by the pressure of a well-padded iron ring, which effectually kept the two pieces of bone together.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, February 28, 1867:—

Henry Franklin Parsons, Frome, Somersetshire; Anthony Herbert Martin, Evesham, Worcestershire; Charles Dorrington Batt, Witney, Oxon; John Sanderson Wyman, Alcester, Warwickshire; Thomas Abraham Jermingham Cocksedge, Kensington Dispensary; Herbert Ridley, Hood-street, Newcastle-on-Tyne.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

GOODING, R., M.B., has been appointed a Surgeon for the Greenwich District of the Royal Kent Dispensary.

HARDEN, G. F., M.B., has been elected House-Surgeon to the Boston Infirmary and Dispensary.

NEAL, JAMES, M.D., has been appointed Honorary Surgeon to the Birmingham and Midland Counties Lying-in Hospital and Dispensary for Diseases of Women and Children, *vice* J. Archer, F.R.C.S.E., resigned.

PALMER, H. R., M.R.C.S.E., has been appointed a Surgeon for the Greenwich District of the Royal Kent Dispensary.

PERKINS, J. R., L.R.C.P. Edin., L.S.A., has been appointed Resident Medical Officer to the Sick Children's Hospital, Edinburgh, *vice* W. O. P. Wolston, M.D., resigned.

SUTTON, F., M.R.C.S. Eng., L.S.A. Lond., Assistant Medical Officer of the Norfolk County Asylum, Thorpe, near Norwich, has been appointed Medical Superintendent of the Norwich Borough Asylum.

BIRTHS.

BRAID.—On March 4, at The Grove, Burgess-hill, Sussex, the wife of J. Braid, M.D., of a son.

EDWARDES.—On January 30, at Alexandria, Egypt, the wife of Dr. H. Stapleton Edwardes, of a daughter.

FYFFE.—On March 1, at 2, Rodney-place, Clifton, the wife of Dr. Fyffe, Staff-Surgeon, of a daughter.

HAMILTON.—At Dalry, Ayrshire, on February 20, the wife of W. B. Hamilton, M.D., of a son.

MARRIAGES.

BOGG.—MARSTON.—On February 28, at Quarrington, Lincolnshire, E. B. Bogg, M.D., H.M.S. *Duke of Wellington*, to Mary, the third daughter of J. T. Marston, Esq., the Old Place, Sleaford. No cards.

CRESSWELL—HAYWARD.—On February 28, at St. Mark's, South Norwood, A. Cresswell, F.R.C.S.E., to Mary, eldest daughter of the late H. Hayward, Esq., of Wilsford, Wilts.

GOODE—DUNNICLIFF.—On March 2, at St. Stephen's Church, Hull, H. Goode, of Derby, M.B. Cantab., to Mary, only surviving child of the late J. Dunnicliff, Esq., Derby.

DEATHS.

BURN, R. D., M.D., Assistant-Surgeon Royal Artillery, at Cheltenham, on March 4, aged 32.

LOWE, E., M.R.C.S.E., at Worcester, on February 18, aged 36.

MONDAY, J. R., M.R.C.S.E., of Olveston, near Bristol, on February 16.

VACANCY.

LIVERPOOL SOUTHERN HOSPITAL.—Junior House-Surgeon.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Axbridge Union.—The Ninth District is vacant; area 11,038; population 3944; salary £66 per annum. Also the Mark District; area 6390; population 1217; salary £34 per annum.

Braintree Union.—Mr. Charles Dixon has resigned the Workhouse; salary £40 per annum.

Chorlton Union.—Mr. Samuel Woodcock has resigned the Workhouse; salary, first year £150, second year £200, subsequently £250 per annum; residence.

Cosford Union.—Mr. Frederick T. Barkway has resigned the Lavenham District: area 9974; population 3391; salary £40 10s. per annum.

Foleshill Union.—Mr. W. R. Horniblow has resigned the Bedworth District; area 2157; population 5656; salary £40 per annum.

Newhaven Union.—Mr. Richard Turner has resigned the Third District; area 12,210; population 1255; salary £26 per annum.

Ulverstone Union.—The Broughton West District is vacant; area 28,956; population 3169; salary £42 per annum.

APPOINTMENTS.

Spalding Union.—Edwin Moore, M.R.C.S.E., to the Moulton District.

Whitechapel Union.—Thomas J. Vallance, F.R.C.S.E., M.D. St. And., L.S.A., to the Industrial School.

THE LEVEE.—The following members of our Profession appear in the *Court Circular* as having attended the levee held by H.R.H. the Prince of Wales by command of her Majesty:—Dr. Armstrong, R.N., on promotion to the rank of Inspector-General, and appointment as Honorary Surgeon to the Queen; Staff Assistant-Surgeon Woodforde Finden, of the Bengal Army; Staff Assistant-Surgeon F. Metcalfe, of the Bengal Army; Dr. Arthur Farre; Dr. Sieveking; and Inspector-General Parratt.

DEATH OF PROFESSOR GOODSIR.—Professor Goodsir is no more; long in delicate health, and persevering in his Professional duty under great difficulty, he might be said to have wasted under the eyes of his pupils. Of his great anatomical knowledge, and of his own contributions to anatomical science, we cannot now speak; certain it is, that in him has passed away one of the greatest lights of the Edinburgh School of Medicine.

CHOLERA is still hanging about us, breaking out here and there where it finds a proper nidus. Carnarvon and Jersey have had their turn; now it has reappeared in Port Glasgow, where four fatal cases have already occurred.

MEDICAL APPOINTMENTS.—At the annual meeting of the Council of the Royal Medical and Chirurgical Society, Mr. Samuel Solly, F.R.S., Surgeon to St. Thomas's Hospital, and a member of the Council of the Royal College of Surgeons, was unanimously elected President of the Society in the vacancy occasioned by the retirement of Dr. Alderson. And at the annual meeting of the Medical Society of London, Mr. Henry Smith, F.R.C.S., Assistant-Surgeon to King's College Hospital, was also unanimously elected President of the Society in the vacancy occasioned by the retirement of Dr. Hare.

"PALL-MALL GAZETTE" PATHOLOGY.—In a recent *Pall-mall Gazette* the public are informed that vaccination is diminishing in value because, owing to its transmission from individual to individual, the formation of what Sir Astley Cooper called "laudable pus" is interfered with! Surely the Medical *numen* inspiring our usually carefully-coached contemporary must have been nodding when this wonderful piece of pathological reasoning was put in type.

MICROSCOPICAL SOCIETY.—The next meeting of the Society will be held on Wednesday, March 13, at 8 o'clock precisely, when the following papers will be read:—"On the Changes which accompany the Metamorphosis of the Tadpole," by W. N. Whitney, Esq.; "On a Gregariniform Parasite," by Dr. Mackintosh; "On a New Form of Paraffin Lamp," by Mr. Lobb.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—At the ordinary monthly meeting held on March 4, Mr. Ramsay read a paper "On the Mechanical Treatment of Cleft Palate." The President, Mr. Ibbetson, announced that at the following meeting, April 3, Mr. Spence Bate, F.R.S., of Plymouth, would read a paper "On the Dentition of the Mole, *Talpa Europæa*."

MANCHESTER NURSE-TRAINING INSTITUTION. — The want of properly qualified nurses has long been severely felt, notwithstanding all the efforts which have been made to improve the quality and increase the supply. We are therefore glad to learn, by the annual report of the above-named institution, that its success is so far assured. Want of funds, as usual, is the great drawback, but we sincerely trust that this will not long remain an obstacle. Its success comes home to every one, for there can be no greater comfort in sickness than the attention of a properly qualified nurse, such as it is the object of this institution to supply. The report is, further, most instructive in itself.

UNIVERSITY OF DUBLIN.—At the Spring Commencement, held on Shrove Tuesday, the 5th inst., in the Examination Hall of Trinity College, the following degrees and licence in Medicine and Surgery were conferred:—*Baccalaurei in Medicinâ:* Henricus Eames, Henricus Alex. Gogarty, Georgius A. Denny, Henricus H. Langstaff, Benjamin F. M'Dowell, Gul. T. Burr, Henricus B. Foster, Henricus Gul. Maunsell. *Magistri in Chirurgiâ:* Jacobus H. Ussher, Henricus Fitzgibbon. *Doctor in Medicinâ:* Thomas Wrigly Grimshaw. *Licentiatus in Medicinâ:* Thomas Foley Brew.

PROSECUTION UNDER THE MEDICAL ACT AT DEWSBURY.—William Knowles, an unqualified Practitioner, formerly a Medical assistant, has been fined £10 10s., with the alternative of three months' imprisonment, by the magistrate of the Police Court at Dewsbury for illegal practice, using the title of a Surgeon, and wrongfully signing certificates of the cause of death in the cases of persons whom he had attended.

PRIZE QUESTION. — The Paris Hospital Medical Society offer as the subject for the Phillips Prize, 2000 fr. in value, the following question:—"Examine and demonstrate to what point tubercular meningitis may be cured or prevented, and what are the most fitting means for the attainment of these results." Essays, in French, to be sent to M. le Dr. Lailler, Secretary, 22, Rue Caumartin, before April 1, 1870.

ROYAL INSTITUTION OF GREAT BRITAIN.—General monthly meeting, Monday, March 4, 1867. Sir Henry Holland, Bart., M.D., D.C.L., F.R.S., President, in the chair. The following were elected members of the Royal Institution:—Jerry Barrett, Esq.; John Brunskill, Esq.; Lord Sackville Cecil; Frederick James Chester, Esq.; Henry Collinson, Esq.; Charles Newton, Esq.; Algernon Perkins, Esq.; Captain Richard Phelips; James Rankine, Esq., B.A.; T. A. Rochussen, Esq., M.I.C.E.; George Lake Russell, Esq., M.A.; Edward Sartoris, Esq.; Mrs. William Spottiswoode; John Williams, Esq.; James Christopher Wilson, Esq. The special thanks of the members were returned for the following additions to "The Donation Fund for the Promotion of Experimental Researches:"—Thomas Williams Helps, Esq. (2nd donation), £10. The decease of Sir George Everest, C.B., F.R.S., and of Lewis Powell, M.D., F.S.A., managers of the Royal Institution, was announced from the chair. The presents received since the last meeting were laid on the table, and the thanks of the members returned for the same.

ARMY MEDICAL DEPARTMENT.—List of gentlemen who competed successfully for appointments as Assistant-Surgeons in her Majesty's British and Indian services at the competitive examination held at Chelsea in February, 1867:—

Maximum of Marks obtainable, 3400; *Minimum required to pass,* 1034.

CANDIDATES FOR HER MAJESTY'S BRITISH SERVICE.

Order of merit.	Names.	Number of marks.	Order of merit.	Names.	Number of marks.
1.	R. E. Bredon	2329	14.	J. F. Supple	1575
2.	E. J. Fairland	2215	15.	N. Wade	1540
3.	Thos. O'Reilly	2195	16.	G. C. Irving	1520
4.	J. A. Bloxam	2120	17.	J. H. Moore	1505
5.	R. P. Murphy	1955	18.	W. J. Wheeler	1495
6.	E. Townsend	1885	19.	J. R. Croker	1450
7.	T. S. Cogan	1770	20.	A. W. Roche	1340
8.	James O'Reilly	1730	21.	T. C. Tolmie	1310
9.	D. J. O'Flynn	1700	22.	R. S. McAlevy	1270
10.	Jos. Gray	1695	23.	J. W. Morgan	1240
11.	R. C. Parkinson	1690		G. C. Purcell	1240
12.	J. Williams	1625	25.	T. J. P. Holmes	1220
13.	D. L. Olden	1580	26.	M. A. Kilroy	1180

CANDIDATES FOR HER MAJESTY'S INDIAN SERVICE.

Order of merit.	Names.	Number of marks.	Order of merit.	Names.	Number of marks.
1.	M. Macrae	2515	14.	J. Arnott	1595
2.	H. Summerhayes	2055	15.	D. A. Kerr	1510
3.	R. Aldren	2035	16.	J. Smith	1490
4.	G. A. Maconachi	2000	17.	J. Shillitto	1430
5.	A. J. Leggatt	1995	18.	H. J. Haylett	1420
6.	R. H. Batty	1975	19.	R. N. Power	1410
7.	T. J. McGann	1860	20.	D. B. Long	1325
8.	J. H. Ritchie	1800	21.	D. R. Thompson	1300
9.	G. Bainbridge	1765	22.	B. Keelan	1255
10.	W. P. Knapp	1760	23.	A. L. Hackett	1200
11.	J. R. C. Lowry	1675	24.	S. B. Haliday	1165
12.	J. McAllister	1635	25.	A. McClory	1095
13.	H. De Tatham	1630			

Cattle Plague Inquiry.—After a prevalence of one year and eight months, the cattle plague has so far ceased to exist that no attacks have been reported from any part of Great Britain during the week ending March 2, 1867. In the corresponding week of last year 9814 animals were reported as having been attacked, while in the week ending February 17, 1866, no fewer than 15,706 cattle were infected by the disease, and for several prior weeks the numbers exceeded 12,000 weekly, after correcting for "back cases" subsequently reported. The number of cattle reported to have been attacked in Great Britain since the commencement is 253,864, or one in every 19 of the estimated ordinary stock of cattle, and 52,641 animals in the aggregate have been slaughtered healthy to prevent the spread of the disease.

Intolerance.—At the annual meeting of the governors of the Charing-cross Hospital, Lord Ebury attended as the spokesman of a party who object to the employment in the Hospital as nurses of the Sisters of St. John's House, Arundel-street. The charge against the sisters was that they wore a peculiar dress, and that they would necessarily have leanings to the Church of Rome, which would prompt them to use their position for the purposes of perversion. We are glad to see that the allegations were completely refuted, and that the Hospital is not to be deprived of the services of a very valuable and efficient set of nurses. A severe rebuke was administered to the malcontents by the venerable late Lord Chief Baron, Sir Frederick Pollock.

Acquittal on the Ground of Insanity.—A woman named Maria Jones, a seamstress, was acquitted of murder on the ground of insanity at Warwick, on March 2. Her victim was a Mrs. Clarke, for whom she worked. She called on Mrs. Clarke, was left alone in the dining-room with that lady, and cut her throat. She had previously shown symptoms of insanity. She was under the delusion that persons were in a conspiracy to poison her, and had on one occasion sent Mrs. Clarke's daughter a claim for £1000 for "bodily injury and defamation of character." How such a person was allowed to be at large is a matter of surprise. We can only suppose that nobody felt inclined to take the heavy responsibility of confining her.

The Paris Museum d'Histoire Naturelle.—The British Museum is not the only institution suffering from a plethora of contents crammed into an insufficient space. In the last report of the Paris Muséum it is stated that if this celebrated establishment be not provided with more room and additional means of study it will soon be living only on its former reputation. At the present time objects of great interest have frequently to be refused, owing to the want of means of giving them even house-room.

The Doctors and the Butchers' Bills.—Our Parisian brethren have the same difficulty in which we find ourselves in keeping up their scale of remuneration on a level with the increased prices of the commodities they have to pay for. The tradespeople, who have doubled or tripled the prices of their own commodities, cannot understand why their Medical attendants seek to augment their charges. Recently, a Doctor having sent in his bill to a flourishing butcher, whose Medical attendant he had long been, was met with the objection that he charged 5 fr. for visits for which he had been used to be paid 3 fr. "That was when you used to charge me from 75 to 90 centimes per demi-kilogramme for *gigots* for which you now charge 120. Either lower the price of your *gigots*, or raise the price of my visits." The butcher was determined to do neither the one nor the other, and the Doctor has to sue him.

The Registrar-General's monthly return for Scotland during the month of January well shows what has so often been observed—the bad effects of cold on health. The mean temperature for the month was only 9° above freezing point, and, as a consequence (for we are entitled now-a-days to view it in that light), 2822 deaths were registered in the eight principal towns, being 145 above the January average of the last ten years, and, with the exception of January, 1864, the highest ever registered in the month. As a matter of course, the feeble were most prone to disease; 1029, or 36 per cent., of the deaths were of children under 5 years of age; also as a matter of course, typhus prevailed, 140 deaths being reported as caused by it; whilst by inflammatory diseases of the respiratory organs 712 perished, with, in addition to these, no less than 321 from consumption alone. The returns for the last quarter of 1866 show the diminution of cholera; altogether it is understood that under 1000 have died in Scotland of this complaint, but the returns are incomplete. On the east coast, where it was most prevalent and where it threatened to spread, especially in October, dull heavy weather of a most oppressive character was recorded. The facts connected with the disease would further seem to bear out the theory of infection by water, as this has usually been observed to be impure where cholera prevailed. The number of deaths registered during the quarter is above the average, being 230 in the 10,000, a higher proportion than has been observed any year, with the exception of 1863; in England, on the other hand, the number was smaller than usual, being only 218 in the 10,000. The increased mortality in Scotland would appear to be chiefly due to the prevalence of cholera, scarlatina, and typhus, with, in some districts, hooping-cough. Cholera was confined to twelve counties in the east coast. Scarlatina and typhus were tolerably generally diffused.

Solar Radiation in relation to Crops. — The Chairman of the Scottish Meteorological Society has announced as the result of experiment the discovery that the rays of the sun, transmitted through glasses of different colours, produce very marked differences in the vegetation of seeds and the subsequent growth of the plants. His lordship suggested that the Society might extend their observations to thermometers placed in the sun and fully exposed to the sun's rays, and that experiments might be made with the view of determining—1. What portion of the value of the sun's direct rays is due to heat, and what to light; and 2. Whether the heat is of value as applied to the roots in the soil, or to its stimulating effects on the plant above ground.

We are glad to witness the gradual introduction of those useful little institutions—Cottage Hospitals. The report of that established at Savernake, Wilts, containing nine beds, has just come to hand. This has only been open for the reception of patients from July, but since that time forty cases have been admitted for treatment. The amount of good which these unpretentious charities effect is really amazing, and we should be pleased to see them increasing in number and prospering more and more.

The Court-martial on Assistant-Surgeon Morris.—This gentleman, one of the officers who, unfortunately for himself, was called on to take part in the suppression of the Jamaica outbreak, has been tried by court-martial upon two charges—one for scandalous conduct, in having, on October 18, 1865, shot one William Gray, and the other for having caused three men to be shot to death on December 21, 1865. The correspondent of the *Times* states that the "trial commenced on December 11, and occupied thirty-seven days, eighty-six witnesses having been examined. The evidence to sustain the first charge was fully pointed out by the Deputy-Judge-Advocate in his summing up on the 2nd. The prisoner denied the act, and produced witnesses to show that he never was on the march to the place where the man was stated to have been shot. Ensign Cullen saw no man shot that day, and it could not have occurred without his knowledge, as he must have reported it to Captain Hole, who was in charge of the detachment. Captain Hole heard of no such shooting. The answer to the charge seems to leave the act quite in doubt. The evidence in support of the second charge, which arose out of the march under Ensign Cullen, was that shortly after the three men had been taken to be flogged, Staff-Assistant Surgeon Morris went out to Ensign Cullen and whispered to him, and the soldiers were immediately after ordered to take the three men down and shoot them, and that Dr. Morris shot one of them. It appears that Ensign Cullen did not go down to where the men were shot. If the prosecution was to be believed, the prisoner took a leading part—some of the witnesses said that he was present, some that he took a leading part, and others that he fired the last shot. It may be that he did so to put an end to the suffering of the man. The prisoner denied that he ever was out of the post-office that day, as he was confined from sickness the whole time he was there, and could not leave his room. In the first charge, the Deputy-Judge-Advocate observed that the Court would say whether such doubts had arisen as to entitle the prisoner to an acquittal; and in the next, whether the prisoner had committed the act at all; and, if so, whether he acted cruelly, wantonly, and not in good faith. The Deputy-Judge-Advocate was occupied for an hour in summing up the evidence, at the close of which the court was cleared, and the door closed, when the Court proceeded to consider their finding." Nothing will be heard of the decision of the court-martial until it is reported from

the War Office. We sincerely hope that Dr. Morris will be found to have established a valid defence. We can conceive of no more unfortunate position for a Medical officer than that of having to superintend or carry into effect the behests of martial law.

Reported Death of Dr. Livingstone.—The following letters appeared in the *Times* of Thursday:—

"*To the Editor of the Times.*

"Sir,—With profound grief, which I am sure will be shared in by the nation at large, I transmit to you the following letter from Dr. Kirk, the former companion of Livingstone, and now Vice-Consul at Zanzibar, addressed to the Assistant-Secretary of the Royal Geographical Society.

"If the detailed accounts which are on the way to myself should arrive before Monday, they will be communicated to the Society on the evening of that day.

"It appears that my lamented friend had crossed the Lake Nyassa to its western side, and was there attacked by the same treacherous people, the Mazite, a branch of the Caffre race, described by him in his last book of travels. It may be as well to state that the nine Johanna men who escaped, and on whose evidence alone we at present have to rely, are natives of the Comoro Islands.

"If this cruel intelligence should be substantiated, the civilised world will mourn the loss of as noble and lion-hearted an explorer as ever lived.

"I am, Sir, your obedient servant,

"Roderick I. Murchison.

"Royal Geographical Society, 15, Whitehall-place.

"'Zanzibar, Dec. 26, 1866.

"'My dear Bates,—I have written fully to Sir Roderick three weeks ago, *via* the Cape of Good Hope and St. Helena, again *via* Mauritius and Suez, with all information we yet have got regarding poor Livingstone.

"'As I am going to Kilwa and Mikindany for a few days to see if anything is there known of the sad story, and to seek for any letters which may have been sent by Dr. Livingstone before crossing Lake Nyassa, I write a note to you that may go by any ship passing here while I am absent. On December 5 nine Johanna men of the party which accompanied Dr. Livingstone came to Zanzibar, reporting that on the west of Nyassa, some time between the end of July and September, they were suddenly attacked by a band of Mazite, and that Dr. Livingtone, with half his party, were murdered. Those who returned escaped, as they say, through being behind and unseen, and they all depose to having helped to bury the dead body of their leader the same evening. Although in the details and in other things the accounts of the various men differ, they all agree that they saw the body, and that it had one wound, that of an axe, on the back of the neck. One man saw the fatal blow given.

"'The attack was sudden, and Dr. Livingstone had time to overpower those who faced him, and was struggling to reload when cut down from behind. I fear the story is true, and that we shall never know more of its details. Full statements have gone home, but this may reach Aden by an American vessel during my absence.

"'You will see, if this arrives first, that we have sad news for the Society on the way.

"'I remain, yours, "'J. Kirk.'"

"Change of Air."—Amongst the many fluctuations of Medical opinion, we have met with few more curious than an opinion just brought under our notice on the value of change of air in disease, especially in phthisis. The author, Dr. J. C. Atkinson, not only sets aside change of air, in its usual sense, as a remedy for consumption, but in a wholesale way proclaims against the prevailing fashion of change, and change, and change again, with much force and, we may say, with much sense. Dr. Atkinson maintains that those modifications in the animal life which follow change of air are determined not so much by the actual character of the air, or, we had better have said, the chemical constitution of the air, as by the barometrical pressure of the atmosphere. He contends that dry air with the least amount of atmospheric pressure may be of service where stimulation is required, but that in consumption (we suppose he means the third stage) the antagonistic action is the grand requirement, and that, to stay the morbid action in the lungs, a moist, low, marshy situation is preferable to a high and dry situation. In short, the consumptive person demands *less* oxygen, an agent which is required in the slow pulses of scrofulous persons, but would infallibly destroy the consumptive patient, whose arterial circulation is already morbid by excessive action. We need neither endorse nor condemn these views, but we may add that they are enounced with a strong smack of common sense, and in most excellent and pleasant English. At the same time, they open a question of vast Professional importance—viz., Is an indiscriminate method of crying up change of air as a panacea sound Medical action and practice?

Early British Skulls.—At the meeting of the Anthropological Society on Tuesday night the paper of the evening was one by Dr. Thurnam, "On the Two Principal Forms of Early British Skulls." The author, whose views on the subject are to be found in another column, stated at length the reasons which led him to advocate the law of association of a long type of skull with the long barrows of England; whilst in the round barrows a round type of skull was usually found. He gave copious tables of measurements in support of his theory. The second paper was read by Mr. Carter Blake "On Certain Skulls from Round Barrows in Dorsetshire." He described these skulls in detail, and pointed out that their measurements gave a lower cephalic index than those which Dr. Thurnam assigned to his long-barrow population. They were extremely dolichocephalous, resembling in this respect the skulls from the South of Ireland, described by Barnard Davis and Beddoe, whose opinions Mr. Blake adopted. Mr. Pike, in very forcible language, pointed out the inaccuracy of Dr. Thurnam's statistics, and the improbability of his "sort of axiom" (*Memoirs Anthrop. Soc. London*, vol. i. p. 158), which said "long barrows, long skulls; round barrows, round or short skulls." Dr. Hunt, while coinciding with the majority of scientific men that there was an *à priori* improbability in Dr. Thurnam's theory, congratulated him on the way in which he had virtually abandoned the ground taken up by him in his first memoir before the Anthropological Society. Mr. Carter Blake defended the French anthropologists, especially Dr. Broca, against the charge of having used an unsatisfactory instrument, the *compas d'épaisseur* of Matthieu, observing that "a bad workman would always find fault with his tools." He pointed out that the occurrence of the Blandford skulls was a case which utterly destroyed the value of Dr. Thurnam's grand classificatory scheme. After a few remarks from some other gentlemen, Dr. Thurnam briefly replied, and adhered to his previous statements.

Metropolitan Poor-Law Medical Officers' Association.—At a meeting of the Council held on the 2nd inst., the hon. secretary (Dr. Dudfield) stated that, in accordance with the resolution passed at the meeting of the Association on the 27th ult., he had written to the President of the Poor-law Board requesting him to grant an interview to a deputation "to present him with a copy of the quarterly report of the Council, and of the resolutions passed at the meeting in question, and, generally, to give expression to the views of the Medical officers with reference to the 'Metropolitan Poor Bill.'" The reply to this letter stated that "the time of the President was so much occupied at present that he regretted to be unable to appoint a day for receiving the suggested deputation. He would be very happy, however, to receive and consider the documents referred to, and the views, in writing, of the Medical officers represented by the Association in regard to the Bill." The hon. secretary was directed to express "the regret of the Council at the inability of the President to receive the deputation," and to forward the report and the resolutions, together with certain propositions which had been unanimously agreed upon, and to express the earnest hope of the Council that the President might be able to give effect to the wishes of the Medical officers as set forth in these documents. The propositions were the following:—

"1. That the power of the Medical officer to order 'extras' and comforts for the sick poor should be defined, so as to preclude the possibility of future collisions with guardians, managers, etc.

"2. That, in the interest of the ratepayers and of the Medical officers, provision should be made for a more rigid examination of applicants for sick relief, and, if possible, a definition of those entitled to such relief should be laid down by the central board.

"3. That an authoritative Pharmacopœia for the metropolis should be issued by the Poor-law Board, in accordance with the practice in voluntary Hospitals, so as to facilitate prescribing and inspection.

"4. That there should be uniform dietaries for all classes

of the poor in the metropolitan workhouses, Hospitals, asylums, and district schools, to be directed by the Poor-law Board.

"5. That provision should be made for the establishment, as far as practicable, of an uniform system of management in the dispensaries, the workhouse hospitals, and asylums."

The following were the resolutions passed at the meeting held at the Freemasons' Tavern on February 27 :—

"1. That this meeting is of opinion that Mr. Hardy's 'Metropolitan Poor' Bill will effect considerable improvement in the Medical care and treatment of the sick poor; and it recognises with great satisfaction that it embodies nearly all the recommendations suggested by this Association. The meeting is, however, strongly of opinion that the proposed common fund should be debited with all expenses pertaining to the housing and maintaining of the indoor sick poor.

"2. That the Council be requested to watch the progress of the Bill through committee, and, if possible, to obtain the insertion of clauses :—1. To secure life appointments for all Poor-law Medical Officers. 2. To obtain for all workhouse Medical officers a seat at the board of guardians; and for all district Medical officers, a seat at the dispensary committee—without vote—so that they may be able to advise their respective boards upon all questions relating to the Medical department. 3. To provide that there shall be in every infirmary a visiting, as well as, when necessary, a resident, Assistant Medical officer. 4. That the nominated managers should include graduates of Universities, Colleges, and other chartered educational bodies. 5. That the dispensary committee shall contain a proportion of nominated managers. 6. That compensation should be provided for outdoor Medical officers when injured by the varying of their contracts. 7. That an appeal to the Queen's Bench should be granted to Medical officers for the settlement of the amount of compensation.

"3. That a deputation wait upon the President of the Poor-law Board, and present him with a copy of the foregoing resolutions, and a copy of the quarterly report of the Council."

Treatment of Ungovernable Lunatics at Colney Hatch Asylum.—At the Sessions of the Middlesex Magistrates on February 28, the Chairman drew the attention of the Court to a letter which had been sent to the Commissioners of Lunacy, setting forth the cases of cruelty and injustice inflicted on the pauper lunatics of this Asylum, it being stated that a patient named Harrison had been put to bed in No. 5 room, in D ward, in the state in which he came into the ward, without bedding of any description, and with only the bare boards and bricks. The letter also stated that a patient named Hobbs was immured for 140 nights during the winter of 1864 and 1865, and that he died one morning soon after being unlocked. This having been brought to the notice of the Commissioners of Lunacy, they felt that the allegations were of so grave a nature as to call for a full inquiry, and a special meeting of the board was then convened, when, the letter referred to having been read to Dr. Sheppard, he at once admitted that the statements therein contained were substantially true, and that a similar mode of treatment was adopted as a system in cases which were going on in the Asylum, where patients habitually destroyed the bedding and clothing, and even the lining of padded rooms. Dr. Sheppard said that Harrison and Hobbs were patients of a very destructive character, and they would tear the bedding and clothes to shreds that were supplied to them. He knew of no other means of treating inveterate patients such as Harrison and Hobbs, and expressed his desire to receive any suggestions upon the subject. He went into some further justification as to the course he had pursued. The Commissioners of Lunacy, however, said, "These disclosures are of so startling a kind, and the practice for the first time brought before the Commissioners is in their judgment so much to be condemned, and affects so gravely the character of the Asylum, that they deem it their duty to submit the facts to the serious consideration of the visitors, and to suggest the expediency of an immediate and full inquiry on the part of the committee. To avoid the possibility of delay, the assembly of a special meeting for the purpose would seem to be the most desirable, and without in any degree seeking to anticipate what the result of the inquiry would be, the Commissioners owe it to themselves to state at once explicitly that in all their experience they had met with no class of insane patients to which such treatment as this letter describes could properly be applied, or would admit of any kind of justification." A long report was submitted by Dr. Sheppard, in which he stated that it was utterly impossible to keep any clothing on such patients as Harrison and Hobbs; that their physical sensations were impaired or annihilated, that they would besmear themselves with filth, that their delusions were of the grand or extravagant kind; that they would stand or sit the whole night naked, with their bed and clothes heaped in one corner of the room, singing, laughing, gesticulating, and giving every evidence of their own happiness; and the only thing which robbed them of their own pleasurable views was restraint. He had put gloves upon a patient at night, but the result had not been satisfactory, for the wrists had been galled by the ceaseless efforts of the patient to free himself. And if he had not destroyed his rags he had not used them. He (Dr. Sheppard) went into a further justification of his conduct, and said his only object had been an endeavour to promote the happiness and well-being of all the patients committed to his care. The Chairman asked the Court, and those in particular who were acquainted with the county asylums, whether that was the way that the poor patients ought to be treated, and he expressed his surprise that in the report of the committee no observation was made on the subject, nor had they reprimanded Dr. Sheppard for his conduct. Nothing of this kind had been recorded by Dr. Sheppard in his journal, and had he required any assistance, or a night watchman for such patients, he was sure the magistrates would not have withheld any assistance for that purpose. Mr. Wyatt, the Chairman of the Committee, said it was their opinion that Dr. Sheppard had committed a great error, but as it was an error of judgment, the Committee did not feel that they could speak to a gentleman of intelligence and sensibility in the strong terms that the Chairman had used, especially as the Asylum had risen in comfort and discipline under Dr. Sheppard's management. He had to deal with 900 patients of the worst class, and although this was an error of judgment, they had taken steps to effectually prevent any similar thing occurring again. The report was then put and agreed to *nem. con.*

The iconoscope, an instrument for giving relief to plane images examined by both eyes, invented by M. E. Javal, was presented to the Academy of Sciences at their meeting on November 26. It is described as a simple application of the laws of binocular vision, and as taking a place between the pseudoscope of Wheatstone and the tele-stereoscope of Helmholtz. By an optical combination, identical with that employed in the binocular microscope of Nachet and in the binocular ophthalmoscope of Girard-Teulon, the two eyes cease to receive different images of exterior objects. From this, says M. Javal, it results that when we look at a picture of large size the eyes preserve the same state of convergence, whatever part of the canvas they may be directed to; and the spectator having no means of assuring himself of the planeness of the surface which he is examining, the picture assumes the form of relief, which becomes more marked the longer it is beheld.—*Comptes Rendus*, tome lxiii., p. 927.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

A Male Medical Student.—We think that such a proceeding will not be necessary.

Naval Assistant-Surgeons.—It is said that the Admiralty will send no more Assistant-Surgeons to be examined at the Royal College of Surgeons.

G.—The office of the Commissioners in Lunacy is at No. 19, Whitehall-place, London, S.W. The proper documents relating to the reception of a single insane patient can be obtained there. The Medical attendant must visit at least once in a fortnight, and must be no near relative of the person taking charge of the patient.

School Breakfasts.—We have more than once called attention to these phantom repasts—tea (*i.e.* hot water discoloured with brown vegetable matter, and sometimes with brown sugar and skyblue), stale bread, and odoriferous butter, in place of the sturdy bread and cheese and small beer of our ancestors. How can girls study with effect whilst their stomachs are pining under such a flatulent mess? We know a young ladies' school of high pretension and cost where, after a thin breakfast, the girls often have to practise the piano in a room without a fire, and continue to study till twelve, when they go out for a walk, hungry enough to eat their boots, as one of them said. "A Parent," who writes on Public School Reforms in the *Sunday Times*, justly calls attention to this, amongst other matters that need the reformer's hand :—

"The subject of 'dietetics' is an important one, and should be under some wise control. It may not be generally known beyond those who are directly concerned in these school matters, that the pupils are allowed to

purchase any kind of food, and consume it in addition to the viands provided by the masters. In cases where boys are so inclined, a taste for variety of foods may be indulged in to very great extent, and many an attack of dyspepsia might be referred to this cause; but there is no one whose business it is to regulate this sort of thing. A remedy for the unsanitary feeding is obvious. The tables at the various houses should be more liberally supplied; some little extras at breakfast—for instance, such as eggs, bacon, marmalade, and so forth—might satisfy the boys with what is wholesome, and remove the temptation to treat themselves with trash. It is rather hard upon the boys that they should have to spend a large proportion of their pocket money upon so-called 'extras,' which really should form part of the regular fare; and it ought to be remembered that the sons of gentlemen, whose board is paid for as liberally as their education, are entitled to expect the tables of the masters not inferior—omitting dainties and luxuries—to those of their own homes."

It really is a fact, that at many "respectable" schools the boys are allowed to purchase eggs, fish, chops, sausages, etc. etc. for their breakfast and tea. Now either these things are necessary or not. If necessary, they ought to form part of the regular school diet, for which the parents pay liberally enough; if not necessary, the practice should be suppressed.

A Collector, Manchester.—Dr. Bulleyn flourished in 1570. There is a portrait, with this date affixed, in Wadd's "Nugæ Chirurgicæ," representing him in his travelling dress. He was Physician to Henry VIII.

Mercantile Marine.—It has been enacted that no ship carrying fifty persons, including her crew, should sail from any place in the United Kingdom unless provided with a qualified Surgeon.

Dr. Benson.—Drs. Sharpey and Storrar are deputed by the Medical Council to visit the Examinations of the University of Durham.

Women as Naval and Military Surgeons.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE

Sir,—The announcement in the "Notes and Queries" in your last number, that our authorities contemplate the employment of women as Army and Navy Surgeons, must fill every well-wisher of his species with comfort. The propounder of this scheme deserves a statue, with the motto,

"Omne tulit punctum, qui miscuit utile dulci."

For the life of me, I can see no end to the advantages of the scheme. As to the women, what openings for their varied and admirable faculties! With what a thrill will British landholders and stay-at-homes read of the unblenching heroism with which our charming surgeonesses and doctresses amputate under fire, and follow the combatants into the thickest of the fight! Who could get on with commanding officers if women cannot? Men cannot, that's clear. No army ever moves in which the Medical officers do not claim, in vain, supplies and sanitary precautions. Would not women be sure to get them? As for the question of uniform alone, what a charming field for administrative genius! What coquettish caps and kepis! What grand opportunity for combination of colours in unforms and facings! Nay, I can hardly trust myself to say, what charming bottines! As for the existing he-holders of commissions as Surgeon or Assistant-Surgeon, of course they would soon find themselves nowhere. I suppose some would go to Australia, some might set up chemists' shops, or, possibly, one here and there might have qualifications which might enable him to get the situation of husband in a doctress's family. He might be trusted to sweep out the surgery, dust the shelves, make pills, keep the books, collect bad debts, answer the night-bell, and, in fact, make himself generally useful.

I seem, Mr. Editor, as I sit and write, to have quite a prophetic glimpse of a new order of things—of an old, corrupt, effete Profession regenerated by its women. More anon. I am, &c.

Another Veracious (Voracious?) Correspondent.

R. and F., March 1.

A New Fungus of Hair.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I have recently observed a peculiar condition of hair produced by a fungus, which, as far as I can learn, is new. The hair is distinguished by a number of knots, each forming a sheath round the shaft. On examination under the microscope, each knot is seen to consist of a peculiar kind of fungus. The spores are large, and very regularly, almost mathematically, divided into two, three, four, or more sections, having great resemblance to sarcine, but differing from it in many respects. By boiling such a knot or vegetable mass in alkaline water, the appearance under the microscope changes, and beautiful ramifications of threads and chains are to be seen.

As soon as my observations on germination, etc., of the fungi are concluded, I shall be glad to publish the same more extensively.

In conclusion, I may be permitted to mention that I have obtained the sample of hair from the warehouse of Mr. Hovenden, where it was picked out by a workman from a very great many different "heads" as perfectly unfit for being cleaned. In all other samples of hair which have been submitted to me for examination, no trace of animal or vegetable life could be detected. I am, &c.

Finsbury-square. H. Beigel, M.D., M.R.C.P. Lond.

A Recent Trial at Melbourne.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The offensive character of an article in your contemporary the *Lancet*, of September 29, 1866, takes from me any inclination to address its editor in correction of some of his gross misstatements as regards facts in the above-mentioned case. In dismissing further consideration of that article, let me observe, however, that so decided an advocacy of one side, and so obvious an exclusion of the facts which make against it, by no means prove the *Lancet* to be actuated by that purity of motive which it has thought proper to call in question in the case of some members of the Profession here.

Your own remarks, in your impression of October 6, 1866, made in a very different spirit and style, call for some reply, and I therefore trust that you will accord to me the courtesy of publication of this letter, in which I shall strive to imitate the temperance and moderation of your own writing, and shall also bring under your notice some facts which I think have not yet come before you.

I never used the word "thrust" in reference to the insertion of my hand into the uterus; I said that I "passed" my hand. This, however, Mr. Editor, is not a mistake on your part, for the reports here contained the expression as you have it.

After speaking of the state of the generative organs of the deceased, the brain and heart, the pleural cavities, and the lungs, you say, "The other organs were reported as healthy, although the cross-examination of the operators and the second *post-mortem* examination proved that the scrutiny to which they had been subjected was of the very slightest kind."

Now, I do not think that this statement does justice to myself and my colleague in the *post-mortem* examination; and it seems probable that no true and complete report of the second trial has reached you. What organs, besides those above named, are usually examined? The liver, the stomach and intestines, the kidneys, the spleen, and the pancreas. Doubtless the spinal cord, the thoracic duct, and the supra-renal capsules were not scrutinised. But, so far as I know, no one has denied that the stomach, the kidneys, the pancreas, and the spleen, had been examined by means of incisions. The only organs whose incision was denied by the witnesses for the defence were the liver and the intestines.

It was not without a feeling of pain that I heard, after my own examination was concluded, several Medical witnesses for the defence, in succession, testify positively that these organs had not been cut into; but to show the loose way in which words were sometimes used in court, I well remember that one of those witnesses declared the liver had not been "touched."

Now, Sir, with a simple remark on the great improbability that the liver, at any rate, was entirely disregarded by us, let me call your attention to the circumstance that at the second trial my evidence concerning these organs underwent no modification. I stated distinctly at both trials that the liver and intestines had been cut into. Of course it was not maintained that the liver had been sliced up, nor that the intestines had been opened from end to end.

But how is the discrepancy of testimony to be accounted for? Only one incision was made into the right lobe of the liver. Its paleness was visible externally, but the section did not grease the knife, and all that I could observe in respect to the organ was, that it was an anæmic and somewhat decomposed liver, not presenting any evidence of disease. What more could have been learned by slicing up every bit of it, or by attempting to tear off the capsule? I believe nothing whatever in regard to the death. Even if, as was suggested by one of the witnesses for the defence, an hydatid cyst had been discovered, how could that have caused death? Admitting, for a moment, the possibility of its existence there, such a cyst could not have been large or superficial, and therefore could not have burst into the peritoneum or pleura.

The condition of the intestines and the nature of their contents were reported by Dr. Pugh and myself. But in the case under consideration, even if the intestines had not been cut into, nor the liver either, your stricture above quoted seems to go rather too far.

At the second trial, I mentioned the influence of advanced decomposition in producing adhesion of organs; this it is, I think, which accounts for our incisions not being observed in the liver and intestines: but all who are familiar with *post-mortem* examinations know that even in a fresh liver a pretty extensive cut may not be instantly recognised when the sides of the section have fallen together. The intestines, also, were matted up and collapsed, and were taken out in several portions. (See on this subject Taylor, "Prin. and Pract. of Med. Jur.," 1865, p. 60)

What did the further examination of the liver prove? Did it in any way contradict our report? One of the Medical Practitioners engaged in the defence (the one who made the second *post-mortem* examination, and who did *not* come into the witness-box) showed me, at the exhumation, a section of the left lobe of the liver, speckled with little aggregations of earthy matter—a condition which I have repeatedly observed in organs somewhat advanced in decomposition, but which I do not remember to have seen described until the appearance of Dr. Taylor's book, before referred to (p. 59)—and asked me if I "did not think that was pus." I declined to give any opinion at that time, but promised to observe that and anything else which those gentlemen might wish to bring under my notice, so that I might be afterwards examined about it in court. A similar appearance was seen on the lining membrane of the heart. That was also shown to me.

I endeavoured to exercise due courtesy towards those Medical Practitioners who conducted and were present at the second post-mortem examination, notwithstanding the evident hostility and the remarks intended to cause annoyance to me. One, who afterwards gave evidence, expressed his opinion that the neglect to ligature the aorta was conclusive proof of the ignorance and carelessness of Dr. Pugh and myself. But either decomposition was much advanced at this time (*malgré* the assertion of one witness that the body was quite fresh), or the gentlemen concerned in this second examination could not claim to be very skilful morbid anatomists themselves; for when a certain organ was taken up there was a difference of opinion and a discussion whether it was the spleen or the pancreas!

I am glad to see that you have quite accurately stated my conclusions. It is plain enough, as you observe, that those conclusions being admitted do not directly involve any individual. They are merely such as I felt myself driven to by the appearances in the body, and I was therefore bound to give them.

Speaking again of the exhumation, you say—"The important points brought to light by the second examination were that in the first examination the condition of few or none of the organs remaining in the body had been carefully tested by section, etc., and that the ovaries were missing. Mr. Rudall, however, who was present, denied that they were carefully looked for."

I have already commented on the section of the remaining organs; I have now to refer to the ovaries.

In my evidence at the second trial I stated that every portion of the body of the deceased was either replaced in the coffin, or delivered by me into the custody of the police, or handed to Professor Halford, with the exception of the portion removed by the accused person himself from the preparation of the generative organs in my study, and which, as I stated, I did not observe. Being merely an on-looker at the second post-mortem examination, it was no part of my duty, but would have been contrary to it, to touch the body or to make any suggestion; but I regarded the neglect to take the body out of the coffin, to thoroughly separate it from clothing and sawdust, to inspect it all over, to examine the coffin and grave-clothes, and even the cavity of the skull, as completely depriving the defence of any strength in the assertion that the ovaries were not there.

Next as to the value of the corpus luteum.

On June 24, 1857, I examined in London the body of a woman who died

about six hours after having been delivered of twins. No corpus luteum could be found in one ovary, and only one very indistinct in the other ovary. There was no mark of attachment of a placenta. For your own satisfaction, Sir, I enclose the name and address of a gentleman, now residing very near London, who was present during a part or the whole of this examination, and who, I am sure, will state what he remembers of it, if applied to.

On March 23, 1861, in the presence of one of the witnesses for the defence, whose name and address I likewise forward to you, I examined the body of a woman, aged 29, who was married about 8 o'clock on the previous evening and died at 7 o'clock on the morning of the 23rd. There was blood about the orifice of the vagina, and when the nymphæ were separated its walls were seen to be ecchymosed. The right ovary was almost, or quite, destroyed by cystic disease; the left ovary contained two large corpora lutea, which I considered could not have been less than a week old.

Quite recently I examined the body of a female, aged about 30, who died of advanced phthisis. The hymen was intact, and by no means unusually thick or strong. In each ovary there were very distinct remains of three corpora lutea.

I must not add to the length of this letter by citing authorities, but there is at least one writer on Medical Jurisprudence (if my memory serves me correctly—Dr. Guy) who says evidence from corpora lutea should never be brought forward. I cannot allow that the absence of a corpus luteum would in any case prove the absence of pregnancy. If this point has never been raised before in a court of law, it has not been omitted in the comprehensive work of Dr. Taylor referred to above (p. 771). In reference to the whole subject, I enclose a translation of a passage in the "Compendium of Midwifery" of Professor Scanzoni. Admitting that a spontaneous rupture of the uterus might occur at the fifth month from natural causes, is the vagina also equally liable to burst of itself? It is not easy to see how "sub-involution" could explain the size of the os uteri (admitting the hand), the distensibility of the vagina, and the bruising of the external parts.

With all due respect to your opinion, Sir, I am unable to admit that a "theory" of false conception or a mass of so called hydatids of the womb "would offer a more probable solution." Whatever value such a theory might have had before the trial, it has since entirely lost, for we cannot suppose that if true it would not have been put forward by the defence in preference to the (as you term it) "not very probable theory of subinvolution." Nor is it likely, if a tumour, whether false conception or hydatids, had been removed, that it would not have been produced at the inquest, or, at any rate, accounted for. Neither is such a theory compatible with the fact that the certificate given by the accused person himself set forth "malignant disease of the womb" as the cause of death.

Near the end of your article you remark, "We have no doubt that, on finding the rupture of the uterus, Messrs. Rudall and Pugh felt that they had discovered the cause of death, and need not go further; but their examination, although satisfactory to themselves, neither satisfied law nor science."

That your view cannot be correct is proved by this—that, after the discovery of the rupture of the uterus, we examined *inter alia* the cranial cavity. Your judgment that our examination satisfied neither law nor science has evidently been given when you had not the means of arriving at the whole of the facts.

In regard to the law, our position in the abstract was simply this:—Certain facts being given—*i.e.*, such facts as we could obtain from the post-mortem examination—we were required to form an opinion upon those facts. In a given case the facts may be sufficient to prove anything or nothing. In this case they seemed to me to be so numerous and so uncontradictory as to necessitate the conclusions at which I arrived.

As to science, it may be said in reply to my observations on the corpora lutea (and I by no means wish to imply that the above-mentioned are all that I have made in the course of several hundreds of post-mortem examinations), that it must be determined whether those bodies were "true or false. Nothing that I can remember ever to have seen goes to show that there is any such distinction. With Dr. Meigs and others I regard it as unphysiological. The theory of the value of the corpus luteum has already been mischievous enough when practically applied, and it is now quite time that an idea which had its origin in false physiology—viz., in the belief that the ovum became impregnated in the ovary, and underwent in consequence certain changes there—should be given up.

If this case should originate a discussion which may tend to explode the old belief, I think it will have been not without use as regards science, for it is often easier to accept new discoveries than to discard old prejudices.

In conclusion, Sir, allow me to assure you and your readers that whenever it can be satisfactorily proved that my opinion in this case was an erroneous one, I shall feel it my duty to make the most prompt and public retractation of it in my power. I am, &c.

James T. Rudall,
Fellow (by examination) of the Royal College of Surgeons of England.

163, Collins-street East, Melbourne, Dec. 26, 1866.

Name and address of the gentleman present at the post-mortem examination, June 24, 1857.—Dr. W. T. Coster, Central London District Schools, Hanwell, Middlesex.

Name and address of the Medical witness for the defence present at the post-mortem examination, March 23, 1861.—Dr. W. M. Turnbull, Russell-street, Melbourne, Australia.

To the Pliocene Skull.—A Geological Address.

A human skull has been found in California in the pliocene formation. It was found in a shaft 150 ft. deep, two miles from Angel's Camp, in Calaveras County, by a miner named James Watson, who gave it to Mr. Scribner, a merchant there, and he gave it to Dr. Jones, who sent it to the State Geological Survey. The published volume of the State Geological Survey, by Professor J. D. Whitney, etc., states that man existed contemporaneously with the mastodon; but this fossil proves that he was here before the mastodon.

Speak oh! man less recent! fragmentary fossil!
Primal pioneer of pliocene formation,
Hid in the lowest drifts below the earliest stratum
Of volcanic tufa!

Older than the beasts, the oldest palæotherium—
Older than the trees, the oldest cryptogamia—
Older than the hills, those infantile eruptions
Of earth's epidermis!

Eo-, Mio-, Plio-, whatsoever the "cene" was
That those vacant sockets filled with awe and wonder—
Whether shores Devonian or Silurian beaches—
Tell us thy strange story!

Or has the Professor slightly antedated
By some thousand years thy advent on this planet,
Giving thee an air that's somewhat better fitted
For cold-blooded creatures?

Wert thou true spectator of the mighty forest
When above thy head the beautiful Sigillaria
Reared its columned trunks in that remote and distant
Carboniferous epoch?

Tell us of that scene, the dim and watery woodland—
Songless, silent, hushed, with never bird or insect,
Veiled with spreading fronds and screened with clubmosses,
Lycopodiaceæ!

When beside thee walked the solemn Plesiosaurus,
And around thee crept the festive Ichthyosaurus,
While from time to time above thee fled and circled
Cheerful Pterodactyls!

Tell us of that food—those half-marine refections,
Crinoids on the shell, and branchiopodous natives—
Cuttle fish, to which the *pieuvre* of Victor Hugo
Seems a periwinkle!

Speak, thou vestige of the earth's creation—
Solitary fragment of remains organic!
Tell us the wondrous secrets of thy past existence—
Speak, thou oldest primate!

Even as I gazed, a thrill of maxilla,
And a lateral movement of the condyloid process,
With post-pliocene sounds of healthy mastication,
Ground the teeth together!

And from that imperfect dental exhibition,
Stained with expressed juices of the weed nicotian,
Came these hollow accents, blent with softer murmurs
Of expectoration.

"Which my name is Bowers, and my crust was busted,
Falling down a shaft in Calaveras County!
And I'd take it kindly if you'd send the pieces
Home to old Missouri!"

Francis Bret Harte,
Secretary to the Superintendent of the Mint.

San Francisco, California.

A Tiger's Toilet.

The following description of a second operation on the large male tiger in the Zoological Gardens of Dublin for ingrowing of the talons has appeared in *Saunders's News-letter*. The writer is understood to be one of the most distinguished physiologists and naturalists of the University:—

To the Editor of Saunders's News-letter.

Sir,—In the month of May last I had occasion to describe in your journal a difficult operation successfully performed in the Zoological Gardens, and which consisted in the complete removal of the claw from the ring finger of the right hand of the magnificent tiger in the collection of the Royal Zoological Society. Since that period the other claws of the same paw began to exhibit an unmistakable tendency to take on a similar abnormal growth, and towards Christmas last three other nails or claws of the same hand had grown deeply into the finger pads, producing three unhealthy-looking ulcers, and causing extreme pain to the poor tiger every time he ventured to place this paw upon the ground. His health had begun to suffer from the excessive pain, and his life would ultimately have been endangered if the ulceration of his paw had been allowed to proceed unchecked. Under these circumstances it was resolved to attempt the removal of all the claws of the paw affected, and decided also that the claws should be cut off as near the ungual bones as possible, and the remaining portions split up longitudinally without actually removing them from the bone. A new Surgical forceps specially devised for the occasion, and which it is proposed to name the *æluronychotome*, was employed. This forceps is provided with a blunt curved probe, which is passed under the claw imbedded in the flesh, and guides the cutting blades to the exact position that may be desired upon any part of the claw. This beautiful instrument is well worthy of the attention of Surgeons who may have occasion in the course of their practice to operate upon lions or tigers, as it can be fitted with a wrought-iron hand-screen to protect the fingers and arm of a timid operator from the angry blow of his enraged royal patient. On Wednesday, at noon, the operator, with seven trained assistants, proceeded to secure the royal Bengal monarch; and in order to prevent interruption, and compel all present to do their duty well, the doors of the carnivore house were locked, and the keys placed in the pockets of the operator. A large rope, with stop-knot, was placed round his neck, and given in charge of three strong men; and a smaller rope, with a double noose, was ultimately put round the tiger's right wrist, leaving both ends free, which were held by two men each, so as to form an angle at the tiger's wrist, which was thus drawn out below the sliding door of the cage, which had been previously lifted to six inches elevation, to allow room for the tiger's paw to be protruded. The operator stood in front of and close to the sliding door, supported by the two men on each side holding the guy ropes of the wrist, while the three men who had charge of the tiger's neck stood further off, so as not to interfere with the movements of those inside. The placing of the guy rope on the animal's wrist caused some loss of time and great amusement, for the royal tiger had learned from previous experience what was about to be done, and had resolved to commence his resistance at the right moment. He offered no opposition to the large rope being placed about his neck, but as soon as he perceived that his paw was about being noosed he showed signs of the greatest uneasiness, but behaved with much cunning and sagacity. He allowed his paw to remain at rest until it was surrounded by the noose; then watching his chance while the hooks were being withdrawn, he would suddenly fling the paw into the air, dexterously casting off the untightened noose up to the roof

of his cage. This play continued for half an hour, when he was ultimately subdued by the superior sagacity of his masters. It is not necessary to describe the details of the operation, which was satisfactorily performed by the removal close to the bone of the claws of the index, middle, and little fingers. It was satisfactory to observe that no attempt whatever had been made to repair the claw removed from the ring finger in May last; and it is hoped that the present operation, though not so radical in its character, yet less dangerous to the tiger, may have the effect of either destroying, or so modifying the growth of the nails that the necessity for completing the tiger's toilet may in future be avoided. Some danger was incurred during the removal of the last claw belonging to the little finger, as it was so deeply imbedded in the corresponding pad, and so covered with long hair, that the operator, in introducing the probe side of the forceps, had to place his head in unpleasant proximity to the sliding door. The enraged beast made two efforts, one with his left paw (nearly successful), and the other with his teeth, to reach his tormentor's head; and, at the moment when the last claw was successfully removed, and the ropes were about being slackened, the royal brute, maddened rather by a sense of baffled revenge than of actual pain, seized with his teeth the iron bars of his cage, which he shook in anger, splintering into a thousand fragments the tips of the enormous canine tusks which he carries on his "starboard bow." The fragments of the teeth were flung with violence across the house, showing the terrific crunch with which he would have smashed the Surgeon's head if he had got the chance. When the operation was over, several bucketfuls of water were thrown over the patient, and his faithful tigress was admitted to the sick chamber, who immediately commenced to lick his face and examine his sore paw with the most expressive whines of sympathy. Half an hour afterwards the poor brute exhibited the same signs of pleasure at seeing his tormentor that attracted so much attention on the former occasion, purring in a loud key, and placing his head and sides against the bars of his cage to be stroked by the hand that was employed in hurting him a short time before, and which he had wished to bite off in his short-lived fury.

I am, your old friend,

ZOOPHILUS.

P.S.—I have shown the splinters of the tiger's teeth to a distinguished geologist, who considers that they have all the characters of the Abbeville flint weapons, presenting the same conchoidal fracture, and having the weathered surface white, while the interior is of a delicate honey yellow, which are considered infallible signs of a remote antiquity, extending to at least 100,000 years before Adam was a boy.

COMMUNICATIONS have been received from—

Mr. W. PARKER; Dr. MUSHET; Mr. FURNEAUX JORDAN; Dr. C. TAYLOR; Mr. FERGUSSON; Mr. W. LITTLE; Mr. FOX; Mr. J. N. RADCLIFFE; Mrs. BAINES; Dr. J. L. EARLE; Mr. GRIFFIN; Dr. CARR; Dr. DUDFIELD; Dr. HOPTON; Mr. E. T. BLAKE; Mr. E. SANDERS; Rev. Dr. HAUGHTON; Dr. MARSTON; Dr. THURNAM; Dr. CARTER; Dr. BUCHANAN; Dr. HUGHLINGS JACKSON; Mr. F. H. MARSH; Mr. P. LEIGH; Mr. J. CHATTO; Dr. MOXON.

BOOKS RECEIVED—

Trousseau's Clinical Medicine, Part II.—Edinburgh Medical Journal, No. 141—Ure's Dictionary of Chemistry, Part XXXVIII.—Pharmaceutical Journal, No. 93—Medical Mirror, No. 39—Journal of the Scottish Meteorological Society, No. 13—Duke on the Causes of Consumption—Weekly Record—Free Church of England Magazine, No. 1—Bulletin of the New York Academy of Medicine—Photographs of Eminent Medical Men, No. 1, Vol. II.—Leach's Report of the Hygienic Condition of the Mercantile Marine.

NEWSPAPERS RECEIVED—

L'Union Médicale—Gazette des Hôpitaux—Sunday Gazette—Gazette Hebdomadaire—Dewsbury Chronicle—Medical Press and Circular.

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 2, 1867.

BIRTHS.

Births of Boys, 1126; Girls, 1089; Total, 2215.
Average of 10 corresponding weeks, 1857-66, 1985·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	670	625	1295
Average of the ten years 1857-66	712·1	685·7	1397·8
Average corrected to increased population..	..	..	1537
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,388	4	5	2	1	15	5	2	..
North..	618,210	14	5	4	3	23	16	3	..
Central	378,058	4	..	1	1	9	5	..	..
East ..	571,158	16	2	11	..	18	3	2	..
South..	773,175	11	2	5	2	13	7	2	..
Total ..	2,803,989	49	14	23	7	78	36	9	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·124 in.
Mean temperature	39·0
Highest point of thermometer	52·3
Lowest point of thermometer	28·2
Mean dew-point temperature	32·9
General direction of wind	W.S.W. & N.E.
Whole amount of rain in the week	0·04

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, March 2, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending Mar. 2.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending Mar. 2.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	2215	1421	1295	52·3	28·2	39·0	0·04	4
Bristol (City) .	165572	35·3	134	74	‡69	51·5	26·3	38·6	0·18	18
Birmingham (Boro')	343948	43·9	289	167	163	52·3	25·2	38·2	0·05	5
Liverpool (Borough)	492439	96·4	358	285	286	50·2	26·0	38·3	0·11	11
Manchester (City) .	362823	80·9	287	205	‡201	49·0	24·0	37·6	0·47	47
Salford (Borough) .	115013	22·2	94	58	51	48·8	24·7	37·5	0·30	30
Sheffield (Borough).	225199	9·9	150	119	110	49·6	24·0	36·5	0·15	15
Leeds (Borough) .	232428	10·8	221	118	139	52·3	18·5	35·2	0·14	14
Hull (Borough) .	106740	39·0	92	49	36	..	..	..	..	..
Nwcstl-on-Tyne, do.	124960	23·4	93	66	74	50·0	31·0	38·0	0·00	0
Edinburgh (City) .	176031	39·8	123	85	89	49·7	29·0	38·9	0·10	10
Glasgow (City) .	440979	87·1	376	257	241	49·0	25·0	37·4	0·14	14
Dublin (City and some suburbs) .	319210	32·8	183	†157	189	52·8	24·3	39·9	0·43	43
Total of 13 large Towns . . .	6187764	34·8	4615	3061	2943	52·8	18·5	37·9	0·18	18
					Week ending	Week ending Feb. 23.				
	(1863)				Feb. 23.					
Vienna (City) . .	560000	..	..	..	335	..	..	42·1§	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·124 in. The barometrical reading increased from 29·86 in. on Tuesday to 30·61 in. on Saturday.

The general direction of the wind was W.S.W. and N.E.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 46·5°.

APPOINTMENTS FOR THE WEEK.

March 9. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Professor Frankland, "On Coal Gas."

11. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

12. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ETHNOLOGICAL SOCIETY OF LONDON, 8 p.m. J. Lamprey, Esq., M.B., Surgeon 67th Regiment, "A Contribution to Ethnology of the Chinese." Hon. George Campbell, "On the Non-Hindoo Tribes of the Borders of Hindostan."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Mr. T. Bryant, "On Internal Strangulation of the Bowel, with Hernia." Dr. Gibson, "On the Condition of the Urine in Epilepsy."

ROYAL INSTITUTION, 3 p.m. Professor Henslow, "On Botany."

13. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 2 p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

HUNTERIAN SOCIETY (Council, 7½ p.m.), 8 p.m. Mr. Maunder, "On Abscess of the Prostate, and Cases of Circumcision in the Adult."

MICROSCOPICAL SOCIETY, 8 p.m. W. N. Whitney, Esq., "On the Changes which accompany the Metamorphoses of the Tadpole." Dr. Mackintosh, "On a Gregariniform Parasite." Mr. Lobb, "On a New Form of Paraffin Lamp."

14. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Frankland, "On Coal Gas."

15. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8 p.m. Mr. E. B. Tylor, "On the Early Mental Condition of Man."

ORIGINAL LECTURES.

CLINICAL LECTURE (ABRIDGED).

CONTAINING A RÉSUMÉ OF A FORTNIGHT'S OPERATIVE SURGERY.

By GEORGE BUCHANAN, A.M., M.D.,
Surgeon to the Glasgow Royal Infirmary.

GENTLEMEN,—At the first formal meeting in this theatre after the Christmas recess, I propose to bring under your notice very shortly, that remarkable series of operative cases which have come under treatment since our last clinical lecture. And even at this period of the session I appeal to you if there has not been a corroboration of a statement in my opening lecture, that in few other Hospitals will you find the opportunities for the study of clinical and operative Surgery excelled, or even equalled. And this is no exceptional session, but just an example of what is on the average the ordinary practice in this house. I commence the commentary on the day after our last meeting.

I. *December* 15.—*Excision of one Lateral Half of the Tongue for Epithelial Cancer.*—The patient was a man of 55 years of age, whose previous history many of you are acquainted with. He came to the Infirmary, first, in July, with a suspicious-looking ulcer on the right side of his tongue. Some irregular teeth having been removed, and palliative measures tried without effect, he submitted to a partial operation for its removal. I employed the écraseur. He left the Hospital relieved, but in four months came back with the disease invading the side of the tongue. Examination showed that the ulcer was the eroded surface of a hard tumour. The operation was performed (the patient being under chloroform) by division of the lip to the hyoid bone, section of the lower jaw at the symphysis, pulling out the tongue, and cleaving it back to the epiglottis, then dividing it close down to the hyoid bone. The lingual artery was easily secured, and little blood was lost. To-day (January 11) the wound is quite cicatrised, the jaw united, the patient free of pain, and can swallow quite well, and speak with sufficient ease to make himself understood.

II. *December* 18.—*Ligature of External Iliac for Inguinal Aneurism.*—The patient was a woman aged 65. Eight months ago she perceived a small tumour at the upper part of her right thigh, which gradually assumed its present condition. Immediately below Poupart's ligament is an oval pulsating tumour the size of a hen's egg, with all the characteristic signs of aneurism. In the abdomen, immediately above Poupart's ligament, is another globular pulsating tumour about the same size. The two tumours seem continuous, the ligament sinking in between them. The operation was somewhat tedious, owing to the difficulty of getting the aneurism needle round the vessel immediately above the upper aneurism. There was about a clear inch of the vessel between the point of bifurcation of the common iliac and the aneurismal sac. On the third day pelvic cellulitis set in, followed by circumscribed peritonitis, which proved fatal on the fifth day. Post-mortem examination showed that there were two distinct aneurisms, and that the upper would very soon have given way. There was also incipient fusiform aneurism of the common iliac, and atheromatous disease of the abdominal aorta.

III. *December* 21.—*Ligature of the External Iliac for Elephantiasis.*—This case being not yet completed, I shall only state that the operation was successfully performed; that the ligature came away on the thirteenth day; that the patient is progressing favourably; and I now present her to you with the leg, which was formerly of elephantine proportions, reduced by at least six inches in circumference, and rapidly diminishing.

IV. *December* 24.—*Vesico-vaginal Fistula.*—This is a very troublesome operation, requiring the utmost patience and care on the part of the Surgeon. The patient, being very nervous, was put under the influence of chloroform, and as the opening was far up the vagina, the operation had to be performed while the patient was in the kneeling posture. This can be accomplished very well in this theatre, the folding part of the table acting as a support to the body and pelvis. Five silver sutures were required after the edges were pared. It is probable that a portion at the extreme edge will not unite, and then a second operation will be required before the opening is completely closed.

V. *December* 25.—*Excision of an Adenoid Tumour from below the Jaw.*—This tumour had been first observed by the patient, a young man of 17 years of age, about four years ago. It gradually assumed its present size, growing more rapidly the last few months. It is a large nodulated mass, projecting into the neck below the jaw on the right side. Although deeply placed, it seems movable over the great vessels. It was removed in the following way:—An incision four inches long was made through the integument parallel with the lower jaw. On dividing the fibres of the platysma, the external jugular vein bulged up, crossing over the centre of the tumour. I passed an aneurism needle under the vein, and applied two ligatures to the vessel, then cut it between these, and turned the ends up and down to afford free access to the tumour. Division of a dense layer of fascia exposed the capsule of the tumour, and the enucleation was completed chiefly with the handle of the knife and fingers, a few adherent points being cut. The submaxillary gland was very closely adherent to its capsule, but evidently quite distinct from it. Two small vessels required ligature. The wound rapidly healed, all the ligatures coming away by the eighth day, and no harm accruing from ligature of the external jugular vein. The tumour was three inches long, two inches broad, and an inch and a half thick.

VI. On the same day (December 25) some of your number saw the operation of ovariotomy, which I performed in private.

VII. *December* 26.—*Excision of the Scapula.*—This operation was required to remove the scapula, which was left exposed after a frightful accident producing avulsion of the arm at the shoulder-joint. The patient, a girl aged 17, was caught by the machinery of a mill and dragged among the wheels, which tore the arm away by the joint, and, in addition, produced an extensive laceration of the soft parts over the scapula, and caused a compound comminuted fracture of that bone. The patient was suffering extremely from the irritation produced by the motion of the fragments of bone; and, although I had little hope of her recovery, it was plainly necessary to place her in a position to allow of that, if her system recovered the shock of the accident. Accordingly, putting her fully under the influence of chloroform, I divided the torn soft parts in such a way as to leave a sufficient covering; then cut out the portions of broken scapula from their muscular attachments. The axillary artery being previously secured, there was no hæmorrhage worth notice, only one or two small points requiring ligature. The patient rallied partially from the shock, but soon became exhausted, and died within twenty-four hours.

VIII. *December* 27.—*Excision of Necrosed Tibia.*—The patient is a little girl of 12 years of age. She was admitted some months ago, with a fluctuant swelling around her left tibia, without much redness or tenderness. As it was evidently full of fluid, I made an incision down to the bone, which gave exit to a large quantity of *liquor puris*, only a few flakes of true pus coming at the end. The bone was completely denuded of periosteum, which formed the bag containing the fluid. The discharge of pus was never copious, and when the bone was examined through the incision, part of it was found of a pale pink colour, from which I hoped that only a partial exfoliation would take place. After a time the girl went home for some weeks, but, as the opening always continued to discharge fluid, she was re-admitted a few days ago. On the morning of the 26th, finding by the probe that there was a large portion of loose bone, the girl was rendered insensible, and a large part of the necrosed tibia extracted from within the shell of new bone.

IX. *December* 28.—*Femoral Hernia.*—The patient was a woman of 50 years of age. Eight months ago, while carrying a heavy basket, she felt something give way in her left groin, on examining which she found a small swelling the size of a walnut. She went to bed and poulticed it, and in a day or two the pain, which she at first felt, abated and soon disappeared. She seemed to have no anxiety about it, and gave it no further attention until two days ago, when it suddenly became painful and hard to the touch. The pain extended up into the abdomen, and the last twenty-four hours vomiting has come on frequently. On admission to the Hospital, Mr. Robinson, my House-Surgeon, tried taxis without avail, and then sent for me.

The above history shows how very careless some persons are, in regard to such affections, and this is not by any means a solitary example in my own practice. I remember being called to examine the body of an old lady who died under rather suspicious circumstances. She was seized during the night

with obstinate vomiting shortly after partaking of supper, but refused to call for Medical aid, believing it was only a passing sickness. Within twenty-four hours she died, and on post-mortem examination I found a small strangulated femoral hernia, which might have been detected and relieved had she called for Medical aid. It should be a lesson to us all, in any case of sickness accompanied by vomiting, even though no local pain be complained of, to examine minutely all the usual situations of hernia.

In the case under consideration, as it was quite obvious that the hernia had become strangulated, I proceeded to operate without delay. The sac was covered by an unusually thick mass of tough fatty matter, evidently the condensed *septum crurale*, which had been protruded before the bowel. On cutting through this, the glistening sac could clearly be seen, and on opening it a small knuckle of intestine, the size and colour of a purple grape, came into view. Though very dark from congestion, it was evidently alive, and, after dividing the stricture at Gimbernat's ligament, I returned the bowel. After the operation the patient had not a bad symptom. I followed my usual practice in the after-treatment. A piece of lint and a bandage were applied for the first twenty-four hours to guard against any protrusion from vomiting or coughing. At the end of that time the bandage is removed, and a bit of wet lint or small poultice is laid on the wound, the patient being urged to lie on the back, or, at least, move as little as possible. An injection of sixty drops of laudanum is given a few hours after the operation. The third day, the bowels are relieved by a dose of castor oil, and rarely after that—as happened in this case—is any special treatment required. The patient is now quite well, and the wound united.

X. *December* 29.—*Lithotomy.*—Some of you accompanied me to an operation for stone; but, as this case was not in the Hospital, I shall only state that the patient was a man 65 years of age, that I removed five calculi weighing in all half an ounce and fifty grains, and that he made an excellent recovery. This is the twentieth operation of lithotomy I have performed with the fortunate result of only one death out of all the operations. In conclusion, I must state that this is intended only as a cursory notice of these operations, in order to draw your attention to those cases which are still under treatment in the wards. I especially commend to your notice that remarkable case of elephantiasis, bearing out as it does the propriety of the treatment, so strange and yet so effectual, introduced by Dr. Carnochan, first performed in this country last year by Mr. Bryant, and now likely to be adopted in all similar cases.

ORIGINAL COMMUNICATIONS.

SURGICAL INQUIRIES.—No. IV.

ON THE HEREDITARILY SYPHILITIC CHARACTER OF AN INFLAMMATION OF THE BONES HITHERTO REGARDED AS STRUMOUS.

By FURNEAUX JORDAN, F.R.C.S.,
Surgeon to the Queen's Hospital, Professor of Clinical Surgery at Queen's College, Birmingham.

About three years ago, a few cases came under my care which struck me as being singular and yet similar. The singularity was, the occurrence of a peculiar inflammation of the bones in combination with undoubted evidence of hereditary syphilis. Since then I have observed many other cases. Of the greater number (fifteen) (a) of these cases I now give brief records. Since my attention has been given to this question, I have been able to recall to memory many cases in past years, and during the last three years I have seen other cases similar in character to those recorded, which I had no opportunity of reporting.

Case 1.—Mr. ——, aged 26, spare, face pale, with slight earthy tint, a single notch in each upper incisor. Eleven years ago, when at school, had occasional pain in the lower third of the left femur, which became obviously enlarged. Dull aching pain followed, and became frequent during the day and very severe at night. For two years these symptoms continued, slowly increasing in intensity, during which time he saw several eminent Surgeons, among others Mr. Bowman, Sir William Fergusson, and the late Sir B. Brodie. At the expiration of two years a small abscess formed at the lower and inner part of the thigh, which was followed by a sinus. Soon a second abscess formed, which quickly healed. During the three years which followed, small irregular fragments of cancellous tissue escaped at the orifice of the sinus. At the expiration of five years from the first symptoms, I assisted his family Surgeon in an operation, which consisted in exposing the bone at the seat of the sinus. The periosteum was thickened, but everywhere adherent to the bone. The trephine was then applied, and a portion of bone removed, which was soft, of a deeply red colour, and mixed with much granulation tissue, or thickened medullary membrane. The operation completely relieved the pain, but the sinus remained open nearly three years longer, when, after closing and opening several times, it finally closed. About twelve months after the operation, there was an attack of subacute synovitis of the knee (due probably to the use of the limb—the patient would never submit to rest), but this passed away with appropriate treatment.

Case 2.—Miss W., aged 30, not stout; pale, with marked earthy tint of skin. Each upper incisor has a well-marked central notch. In her 26th year severe pain seized the large trochanter of the left femur. The pain was greatly aggravated by exercise, and was much worse at night. During the succeeding twelve months abscesses formed, and left sinuses. I saw her eighteen months after the pain set in, and found two sinuses over the trochanter. The hip-joint was quite free from disease. For three months, with rest and splintage, she progressed favourably but slowly. In August, 1864 (when I first suspected the hereditarily syphilitic character of the osteitis), I resorted to the use of small doses of mercury. In a few days the benefit was most striking, and in the following month more progress was made than in the whole of the previous period of treatment. The sinuses ceased to discharge, and in a few months healed. The recovery was complete.

Case 3.—Mrs. B., aged 40, no children; pale, but moderately stout. Has a well-marked single notch in each upper central incisor. Had delicate heath as a child. For last nine months has had occasional stiffness in the right knee, with dull aching pain in the lower extremity of the femur. The pain has been intermittent, worse at night and worse after exertion. For the last four months has been subject to slight starting pains. On examination, the lower end of the femur was found to be enlarged, and tender on deep pressure being made. The synovial membrane also was slightly thickened. There was slight wasting of the leg of the affected side. Was greatly improved with rest and a mild mercurial course.

Case 4.—Rosetta E. H., aged 14, employed in a shop. Health has always been delicate. The upper central incisors have each a single notch. The bridge of the nose is flattened. Complexion of a pale earthy tint. Has very marked enlargement of the lower part of shaft and the inner condyle of the left humerus, which are also the seat of intermittent pain and considerable tenderness. The presence of synovitis of the elbow joint is doubtful.

Case 5.—Elizabeth C., aged 17, single. The upper central incisors have both a characteristic single notch. The complexion has a decidedly earthy tint. When 10 years old the lower third of the right femur enlarged. Five months later the affected part of the thigh became the seat of chronic abscesses, followed by sinuses. Two years later the tibia of the same side underwent slow enlargement in its upper third, with the formation of abscesses and sinuses. In her 15th year the sinuses over the tibia gradually closed, the cicatrices of which are now pale, depressed, and adherent to bone. No piece of bone ever escaped from the tibia. The sinuses over the femur, which were the first to appear, were longer in healing, and one still remains open; from this an irregular fragment of cancellous tissue, one inch in length, escaped seven months ago. The knee has continued unimplicated, although there are adherent cicatrices to the femur and tibia not more distant from the joint than one inch and a half.

Case 6.—Mr. B., aged 23, single, a clerk; thin, and of delicate appearance; skin of pale and earthy tint. A slight notch is present in each upper incisor. Seven years ago he fell, and bruised the right shoulder, since which he has a pain when one peculiar movement is made—the hand being carried above the shoulder. No other symptom followed until ten months ago, when slight but frequent starting pains occurred, with pain and slight enlargement in the upper extremity of the humerus. Under the influence of rest, mild mercurials, and counter-irritation, very great improvement has taken place during the last three months.

(a) Since the above was written I have seen a much larger number of cases, all bearing out the conclusions now put forward.

Case 7.—Emma P., aged 10. The notches in the upper incisors; earthy complexion, flattened nose, and traces of interstitial keratitis (of recent occurrence); all very characteristically marked. There is enlargement of the lower third of the right femur, which has come on so gradually as only recently to have attracted attention. No pain or tenderness. There is slight synovitis, which, with some contraction of the hamstring muscles, has just set in.

Case 8.—Emma S., aged 24, married, rather stout, complexion earthy. The upper incisors have a well-marked single notch. The right cornea is now opaque from interstitial keratitis, which occurred in her eleventh year. Nine months ago she fell on her right hip, since which she has felt pain when walking, but has not been lame. Five months ago swelling was observed in the locality of the trochanter, and was especially marked at the front and back of the trochanter. The swelling is now the seat of tenderness, of intermittent pain, and of occasional starting pains in the thigh. The thigh is not wasted. She remained only a short time in the Hospital, but derived marked benefit from rest and mild mercurials during her stay.

Case 9.—Thomas H., aged 17, a saddler, was admitted into the Queen's Hospital under my care with chronic enlargement of the upper portion of the left tibia. There was slight tenderness and occasional pain. The knee-joint was quite free from disease. The pain and the tenderness disappeared in three weeks under the influence of the bichloride of mercury.

Case 10.—Thomas A., aged 26, marked earthy tint of skin. Bridge of nose thickened, single notch in upper incisors, especially in the left. Has a brother with caries of the great trochanter, whose case is also recorded. Nine months ago an abscess formed over the right ilium; this was opened six months ago. A sinus has since remained. A probe passes to the dorsum of the ilium, but not to denuded bone.

Case 11.—G. A., aged 40, at ten years of age fell on the ice, but not heavily. At thirteen an abscess formed over the left trochanter, which, after existing for nine months, was opened. A sinus followed, which remained open for nearly twelve months. For twenty-seven years the sinus has opened and closed; once it remained closed for eight years. At present there is a slight discharge. Many years ago a few small fragments of bone escaped. The left upper incisor has a single shallow notch, the right is round. The skin is of a slight earthy tint. The hip-joint is free. This patient is brother to the young man with osteitis of the iliac bone.

Case 12.—G. P., aged 24, came to the Queen's Hospital complaining of stiffness in the right wrist, especially felt in extension. The lower extremity of the radius was found to be the seat of pain, tenderness, and some enlargement. There are occasional starting pains of the wrist. The symptoms have been present for twelve months. The right upper incisor and the lower incisors are typically notched. The skin is earthily tinted. Is under treatment.

Case 13.—Jane E., aged 27, single, a servant, was admitted into the Queen's Hospital for disease of the elbow-joint. The upper teeth were much decayed (early decay of the front teeth, especially in the upper jaw, and especially of the central incisors, is very common in hereditary syphilis). The skin had a markedly earthy tint. In early life the right knee had been the seat of protracted disease, which passed away leaving the extremities of the bones enlarged, and the synovial membrane thickened. The left elbow had been the seat of pain, tenderness, and swelling for eighteen months prior to admission. For the last seven months sinuses have been present. On excision the bones were found enlarged, condensed, and heavy. A useful arm followed the operation.

Case 14.—James S., aged 17, a smith. Has a peculiar combination of rose colour of the cheek with an earthily brown colour of the skin generally. The upper central incisors, especially the right, are characteristically marked. For the last four weeks the left trochanter has been the seat of intermittent pain, tenderness, and some enlargement, with slight wasting of the whole limb, and occasional starting pains. The hip-joint was perfectly free from disease. Complete recovery followed six weeks' rest in bed, with splintage and a mild mercurial course.

Case 15.—William N., aged 29, married, slight earthy tint of complexion. Bridge of nose thickened. The upper incisors slightly notched, the left outer especially so. For twenty months has had pain and tenderness over left great trochanter (it will be seen that, in my cases, the left trochanter is the most frequently diseased). For the last eight months three sinuses have been present over the trochanter. The hip-joint is free from disease. With two months' rest the sinuses almost ceased to discharge. The irritability of the digestive tract prevented the proper use of mercury. Mercurial inunction should have been, but was not, resorted to.

(To be continued.)

CASE OF HYPERTROPHY OF THE SPLEEN.

By W. BOYD MUSHET, M.B., M.R.C.P.,
Physician to the North London Hospital for Consumption.

Emily C., aged 8½ years, was brought to the North London Consumption Hospital on June 7, 1866. She was born and lived at Hammersmith, near the West Middlesex Waterworks, close to the river. The child appeared to be tolerably well in health, with colour in cheeks. She was thin, but not emaciated. There was great enlargement of the abdomen, which had been noticed to increase gradually during the last twelve months. It was reported that one Medical man stated the liver was enlarged, and another that she suffered from worms. Her appetite was good, not ravenous, and she was not molested by vomiting or diarrhœa. The health of the family was affirmed to be good, but all its members were attacked by "gastric" fever four or five years since.

On examination, an irregularly ovoid, movable tumour was discernible in the abdomen by palpation. It was perfectly smooth on the surface, and extended from the left flank, near the spine, to two inches beyond the umbilicus anteriorly. Above it stretched to the margin of the ribs, and below almost to Poupart's ligament of the same side. It was hard, solid, resistent, and painless on rough manipulation, absolutely dull on percussion, and had a well-defined notch at its anterior border, about the middle. There was no history of ague or of exposure to malaria. The child had a slight fall about twelve months ago, but she told me she fell upon her head, and she did not appear at that time to have been much hurt.

Measured at a later period (October 11), the tumour, which was evidently the spleen, was found to be eleven inches in its transverse, nine in its greatest vertical, diameter. From June to October 11 the patient was ordered quinine and bromide of potassium, with ointment of biniodide of mercury (gr. xvj. to ℥j.) to be nightly rubbed on the abdomen. From October 11 to November 8 the medicine was changed for ♏x. of the tincture of iron twice a day. At the latter date the tumour had slowly, but manifestly, increased across the abdomen, which had become more prominent. I was informed that she was not so well under the steel, so the quinine and bromide were resumed.

At this time a few drops of blood were kindly examined microscopically by Alexander Bruce, M.B., M.C., F.R.C.S., Sub-curator of the Museum of University College. These were discovered to be so abundantly charged with white corpuscles that this gentleman declared the blood to be as highly leucocythæmic as any he had ever seen.

On January 16, 1867, the little patient was suddenly attacked with vomiting—first of watery colourless fluid, next of yellowish matter, followed by "masses like bruised liver," in all about a pint. A Medical man in the neighbourhood ordered beef-tea and brandy-and-water.

On the 18th I visited her, and found her pale, anxious, and much prostrated. Pulse above 120; respiration hurried, but breath-sounds normal, with occasional cough; tongue clean; no pain over tumour; bowels had acted in the morning without melæna; occasional sickness best relieved by small doses of brandy-and-water; no œdema, but greater emaciation.

She died on the 22nd from exhaustion, six days after the access of intercurrent symptoms.

The father, an intelligent man, readily permitted an examination of the abdomen and removal of the spleen eighty hours after death.

The face presented a very lifelike apearance, with slight colour in cheeks. The body measured 3 feet 9 inches in length. The abdomen was much less distended than during life, and the spleen could be felt through the parietes to encroach much less across the middle line, especially at the superior half, as if the diseased organ had notably shrunk after death. After removal the spleen, carefully measured with a rule and callipers, was found to be 10 inches in length, 6½ inches in greatest width, and 3⅜ inches in greatest thickness. It weighed 3 lbs. 13 oz., or 61 oz. avoirdupois. It was smooth, with a notch anteriorly, before spoken of, and presented two grooves or sulci posteriorly at its upper part. The

colour was mottled, reddish brown, very much lighter than that of a normal spleen. There was a very slight, thin patch of old lymph near its superior edge, but it was not in any way adherent to the walls of the abdomen. On section, which was firm, the aspect was paler and browner than the surface, resembling hepatic tissue (nutmeg liver) to the eye. There was a slight caseous deposit, about the size of a pea, penetrating a short way into its substance, probably tubercular. The liver was very large and pale; it weighed 4 lbs. 11 oz., or 75 oz. The increase of size was mainly in the right lobe. Each kidney, also pale but apparently healthy, weighed about 4 oz. The stomach contained a little mucus; it was much congested, with unusual prominence of the larger veins.

The spleen was submitted to Mr. Bruce, of University College, for minute examination, and he favoured me with the following particulars, for which I am exceedingly indebted. I give them in his own words:—"The structure appears to be perfectly normal, consisting of a highly vascular fibrous stroma, which supports a pulpy matter—an albuminous fluid very rich in corpuscles of the same type as the white corpuscles of the blood. The Malpighian bodies appear less numerous and less prominent than in ordinary spleens, but this may be due to the increased density of the structure, which prevents their appearing as prominently as usual. Their structure is normal. There are no elements present having an abnormal or morbid character."

Hence the case seems to have been one of simple hypertrophy of the organ, the cause of which must be regarded as obscure. Was the fever which affected the family in 1862 of an intermittent or remittent character, in consequence of the slight elevation of their dwelling and its proximity to the Thames? Mr. Spurgin, of Hammersmith, mentioned to me that although he does not meet with ague, many cases of fever in his vicinity, according to his impression, assume a modified type, being marked by distinct exacerbations and remissions. But, on the other hand, the remainder of the family do not appear to be affected by similar enlargements. Before concluding, I should add that at various times the question of removal of the diseased mass was canvassed, but a consultation was unfortunately postponed, as the child did not present urgent symptoms, and suffered but little beyond the inconvenient weight of the tumour. I thought the father, whom I did not see until near the close of the case, might imagine recovery to be not absolutely impossible without recourse to operation; and, as a decision on the point might not appear to him to be imperatively demanded, the operation, if acceded to and fatal, might be viewed as directly anticipating death. In this respect I misjudged him, as I found when too late.(a)

85, St. George's-road, S.W.

NOTES ON CERTAIN

METEOROLOGICAL PHENOMENA IN CONNEXION WITH CHOLERA AND OTHER DISEASES.

By A. LEITH ADAMS, M.B.,
22nd Regiment.

During the presence of epidemics we are naturally more on the outlook for meteoric phenomena than at healthy seasons, and often, perhaps, more disposed to accord importance to appearances that would not receive all that attention on other occasions. There is besides the error of not satisfying oneself that what appears remarkable under one condition may or may not prevail during an opposite. Now, with reference to the nature of these various mists, whether dependent on the same conditions or widely different in composition, it must be allowed we know next to nothing concerning their chemical composition or microscopical characters. My own observations have been simply confined to noting their presence and external aspects in connexion with health and disease, leaving the consideration of the most important questions regarding their internal structure and composition to others better circumstanced for such fields of inquiry. The result has been that, although unable to convince myself that the varieties of the mist, haze, blight, or whatever it should be called, are only varieties of one atmospheric state or widely distinct conditions, I am at all events certain that they do exist without any reference to the presence of cholera, and, to the best of my belief, are in no ways affected either by its presence or absence. As to the identity of any of the varieties with that observed by the English meteorologists lately, I cannot more than surmise. The rare and no less remarkable phenomenon named the "red fog" observed from time to time on several of the islands and along both shores of the Mediterranean, with its brick-coloured dust, said by Ehrenberg to be composed of South American infusoria and other organisms, would form a very suggestive example of the transmission of minute bodies for very long distances, provided it were proven that such infusoria do not exist in Africa and a direct communication shown betwixt the S.E. trade wind of that region and those winds which blow over the watershed and basin of the Mediterranean. When this fog is present it is invariably accompanied by a haze sometimes so dense that a ship is not visible at sea beyond a quarter of a mile, and it imparts likewise a "straw colour" to the atmosphere.

For some time before and at the commencement of the cholera epidemic of 1865 in Malta, the prevailing winds were northerly; Alexandria, to the S.E, being the nearest point where the disease was raging, from whence vessels were arriving daily with cases on board.

As far as my own experience extends, I must candidly aver that I have sought in vain for convincing proofs of the atmosphere or winds being the means of conveying this disease from one country to another. The so-called pandemic and epidemic influences constituting a pestilential condition of regions may or may not be a means of transporting epidemics from place to place; but beyond a prolonged high temperature there are no data to go upon, whilst, on the other hand, the facts elicited from observations of late years, with reference to the communicability of cholera by human intercourse, must not be lost sight of. Methinks this truth has not come home to our understandings sooner than it ought, when we think of the fifty years and upwards that the disease has been decimating the human race; it is only now that this important fact has forced itself on the public and the Profession. That it would have done so at an earlier stage in the history of cholera is not improbable, had the phenomena connected with its progress from place to place been more carefully studied, and observers been less wedded to preconceived opinions and prejudices. In the latter respect there is much that is curious and not uninteresting in the published literature of the disease. Even at this day there are authorities in sanitary science ready to support the old doctrine and laugh at quarantine, not on account of its inefficiency and bad organisation, but that it should ever enter the mind of an intelligent community to fancy cholera is transmissible by contact with the excreta of the infected. To those who carefully watched its progress last year from Arabia, throughout the Mediterranean, and finally to England, there surely can be but one impression on that head—how, as steamer after steamer from infected districts discharged its human freight at various points along the shores of the great inland sea, there came tidings, first of doubtful cases and sporadic attacks of cholera (by many purposely disguised, not to excite panic), until the disease blazed forth in all its frightful proportions, intensified by the almost tropical heat of the region and the neglected hygienic conditions of localities and peoples. Sicily, Greece, and one or more seaports on the South African coast, established "*sfratto*" and entirely escaped. Later on we have the emigrant ships to America, with their cholera-stricken passengers—some putting back to Liverpool, others reaching their destination—until at length the disease gains a sure footing, and slays its hundreds daily in New York, Boston, and other cities of the great Republic. At the present moment it would be unfair to reject entirely the possibility of atmospheric conditions as one of the probable means of propagation; but the evidence, as far as it extends, most certainly points the other way, and surely it is sufficient for sanitary science to know this reality in order to put forth all its strength to isolate and stamp out the disease wherever it appears, not by waiting until the scourge has gathered its forces together and gained a footing on the high road of civilisation, but striking it at its fountain-head, and taking such measures as will secure the safety of nations brought into intercourse with the pestilence.

(To be continued.

(a) In the case of Mr. Spencer Wells (*Medical Times and Gazette*, January 6, 1866) the spleen in a woman, aged 34, weighed, when removed during life, 6 lbs. 5 oz. In my case it weighed 3 lbs. 13 oz. in a girl of 9 years, when removed three days after death, at least relatively as large as in the former, without taking into consideration, in the latter instance, whether contraction and diminution in weight did not ensue subsequent to the child's decease.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

ST. GEORGE'S HOSPITAL.

Situation of the Hospital—Operations for Strangulated Hernia—Aphasia—Cases Reported on by Candidates for the Indian Military Medical Service—Excision of the Elbow-joint; Re-excision—Gunshot Wounds—Tetanus Treated by Subcutaneous Injections—Subcutaneous Injection of Atropine in Sciatica—Wry-neck—Frost-bite—Purpura—Westphalian Turpentine in Hæmorrhage—Doubtful Exanthem—Question of Tracheotomy; Abnormal Relation of the Arch of the Aorta to the Trachea—Treatment of Cases of Hemiplegia—Gallic Acid in Albuminuria.

Situated as this Hospital is in the vicinity of the parks, and in a district where manufactures and commerce are at a minimum, there are fewer of those accidents which render the Surgical practice of such Hospitals as the London valuable both to teachers and taught; but, on the other hand, being further west than any other of the great Hospitals—St. Mary's alone excepted—it receives all the sick of an extensive district. This circumstance renders the practice to be seen at St. George's, of a more diversified character than is to be seen in some other Hospitals, and probably more asssimilated to that which one meets in ordinary life. St. George's is singularly fortunate in an airy situation, as on almost every side it looks on an open space, and on two upon the parks. Nevertheless, these advantages do not seem to have banished those great drawbacks to Hospital therapeutics—pyæmia, phagedæna, and erysipelas. Of certain cases there appears to have been a run in the Hospital for some time. Thus, since January there have been eight cases of strangulated hernia in each of which an operation had to be performed, four being femoral and four inguinal. The results have been favourable in all except one instance; the patient having in this case been too long in applying for relief, death followed the operation. The average number of cases of strangulated hernia has in this Hospital been for some years about sixteen, the operation being usually quite successful. One very curious case of the kind referred to occurred very recently in the practice of Mr. Henry Lee. The patient, a young man, was carrying clothes, when he felt something giving way in the abdomen, with a painful sensation following. This was about 5 o'clock in the afternoon; vomiting came on about 8 or 9, and the patient was brought to the Hospital about 11. The tumour, which was on the right side, was then about the size of an ostrich egg, and filled the whole scrotum. Taxis was gently tried, but failed, and at a quarter to 2 a.m. the operation was performed. On opening the sac the bowels and omentum forcibly protruded, whilst the sac was found to be excessively tense, and to contain no fluid. On introducing the finger a laceration, large enough to admit its point, was discovered at the lower part of the sac, at a spot where it had not been interfered with. The stricture (situated at the inner ring) was excessively tight, and even after division there was some difficulty in returning the protrusion into the abdominal cavity. The patient recovered without a single bad symptom, being even at the visit in the morning entirely free from pain.

Another curious variety of disease has been pretty freely represented here lately—we mean aphasia. One case of a typical character was reported by Dr. W. Ogle to the Pathological Society some little time ago, and a case is now under the care of Dr. Fuller of which, unfortunately, no history has been obtained, as the patient is completely incapable of expressing himself, and his friends have given no account of him.

Not the least interesting in one way are the Surgical cases submitted to the candidates at the recent examination for army and Indian military appointments, several of which are still in the Hospital; for a list of these we are indebted to the kindness of Mr. Prescott Hewett. Some of the cases were tolerably easy of diagnosis, but others were well calculated to try the diagnostic powers of one possessing the amount of practical knowledge usually possessed by students or young Practitioners. First was a case of thickening around the cervical vertebræ, with partial loss of power in the arms and legs and occasional epileptiform convulsions. Very properly, syphilitic cases supplied a considerable proportion of the sum of those subjected to the candidates. Thus, there was one case of long-standing syphilis, with pains in the head, epididymitis, varicocele on the left side, and glandular enlargements in the neck and groins. In another case of syphilis there was a rupial eruption, with pains in the head, and hoarseness resulting from disease of the larynx. A third patient with the syphilitic cachexia exhibited, as a consequence, disease of the bones of the nose. A fourth was one of those curious cases where, with syphilitic testicle, the scrotum becomes enlarged from effusion into its cellular tissue; whilst a fifth combined syphilitic orchitis with hydrocele. Another of the cases was one of simple hydrocele; whilst another suffered from an old dislocation of the jaw. Angular curvature of the spine of long standing, equinus varus, and elephantiasis of the leg, might be considered among the simpler cases, others presenting more doubtful characters. Such were one case of effusion into the knee, with enlargement of the synovial cysts in the ham; an oval exostosis on the lower part of the femur on its inner side; epididymitis following gonorrhœa; and a case of chronic rheumatic arthritis affecting various joints, but especially of the knee. One patient was suffering from abscess of the chest, discharging externally, and another was affected with lepra. A very curious case, still under the care of Mr. Pollock, completes the list. The subject, a boy, suffers from necrosis of the jaw, with general and well-marked scrofulous cachexia; he also exhibits symptoms of partial hemiplegia, probably from disease of the brain. It is likely that there is also some affection of the upper cervical vertebræ, as the patient cannot fully inflate his chest, the intercostal muscles being partially paralysed, so that the patient breathes mostly by his diaphragm. A somewhat similar case came under Mr. Pollock's notice some time ago. This patient had been ordered all sorts of violent exercise, but when Mr. Pollock came to examine him, he found the cervical vertebræ soldered into one solid mass, the chest perfectly immovable, as if the patient were suffering from injury of the lower cervical vertebræ, respiration being carried on entirely by the diaphragm.

Under the care of Mr. H. Lee there is a case of very great interest, not only from a pathological, but from a therapeutic, point of view. Some months ago a woman had her elbow-joint excised for strumous disease; for a time all went well, but by-and-by the wound became exceedingly unhealthy, the fingers became contracted, and had their sensibility greatly impaired; at the same time she complained of excessive pain in the situation of the wound. Ultimately, seven months after the former operation, resection of the joint was performed, and the patient is now doing remarkably well. On examining the portions of bone removed, it was found that almost complete union had taken place, but just at the point where the old bone of the humerus terminated, the spot where pain was complained of, was found a small sequestrum. *Query:* Was this the cause of the mischief? In the second operation on this patient Mr. H. Lee employed acupressure, and found it answer admirably.

Cases of gunshot wound are by no means common in our Hospital practice, but one of a very disagreeable character was lately under the care of Mr. Tatum. While carrying a gun the patient by some means sent it off, and the contents lodged in his right shoulder. When brought to the Hospital there was but little bleeding, but the wound was excessively ragged, and on exploring it the head of the humerus was found to be completely smashed. The fragments were removed, and for a time the patient did well, but the wound became unhealthy, the temperature of the body rose, the pulse increased in frequency, while it diminished in strength, and ten days after his admission the patient sank from pyæmia. No post-mortem was obtained.

Under the care of the same gentleman was a case of compound and comminuted fracture of the arm. Some time after the injury was sustained tetanus came on suddenly, beginning with trismus and gradually extending to the whole body; twitching was universal below the neck, which was quite rigid. A plan of treatment which seems to be a great favourite in this Hospital, and certainly most deservedly so, was adopted—viz., the subcutaneous injection of sedatives. The substances had recourse to were meconate of morphia and sulphhate of atropine dissolved in water. Now, according to the views of Mitchell, Morehouse, and Keen, these two antagonise each other. Such, however, is not the experience of the Medical officers of St. George's; for in this case, as in many others, their introduction was followed by marked relief, and the patient is now doing extremely well. The same injection has been used by Dr. J. Ogle in the treatment of

sciatica, and has been found to prove more beneficial than either substance alone. This gentleman has further seen decided relief produced by atropine by itself, which again contradicts the above-named American authorities, who hold that atropine introduced below the skin does not allay pain.

The treatment of wry-neck might not be considered a subject of very great importance, seeing that the condition involves neither life nor limb, yet its discomfort and unsightliness render it to the patient a matter of very grave importance. Shortly since a girl came under the care of Mr. Prescott Hewett with strongly marked wryneck, which, as there was the history of an abscess in that situation, could not readily be pronounced either functional or organic. However, on the patient being put under chloroform, the head could be readily moved, and Mr. Hewett has therefore determined to attempt a cure by the aid of appropriate mechanism alone.

Under the care of Mr. Pollock is a case which still shows the effects of the intense cold at the beginning of the year. The patient, an old man, suffered from frost-bite in his feet; in one of his heels there was a considerable amount of sloughing, enough to lay bare the tendo Achillis, and this wound has not yet healed. Under the same gentleman's care is a case where the bone of the tibia is laid bare to some extent. In such instances Mr. Pollock is in the habit of applying sulphuric acid, in a greater or less degree of concentration, to the exposed bone, and is of opinion that this plan decidedly favours removal, especially when the bones of the head are affected.

Turning to the Medical wards, which are usually well filled with a great variety of cases, we would remark on the scanty number of students who go round with the Physicians, the great majority attaching themselves to the Surgeons. Could they not manage to give a share of their attention to both? Under the care of Dr. Fuller there was lately a case of considerable interest. The subject was a tailor's clerk, who had been earning good wages, and living comfortably enough until he came into Hospital, at which time he was discharging blood from every canal of the body. Under the skin there was in some parts a considerable amount of extravasation; in short, he presented all the appearances of what is usually termed purpura. He had suffered from a similar attack some three years ago. Iron, chlorate of potass, turpentine, and a great variety of other remedies, were tried in vain, and the man sank about a month after admission. In this case the disease may to a certain extent have depended on blood-poisoning, as he had for a long time been labouring under albuminuria.

In a somewhat similar case, which occurred some time ago in the practice of Dr. J. Ogle, this gentleman employed a variety of turpentine imported from Westphalia, which is almost tasteless. It sat on the stomach much better than the ordinary oil of turpentine, but did not seem to do much more good in the case in which it was used. In this instance the hæmorrhage appeared to depend on degeneration and rupture of the coats of the minute vessels throughout the body, and it is possible there may have been something similar in the case of Dr. Fuller's, just narrated. The most interesting case we saw under the care of Dr. Barclay was one of those of aphasia already alluded to. The loss of intellectual language, with a perfect understanding of what was addressed to him, was extremely well marked in this instance.

Dr. Page some time ago admitted a case presenting peculiar features. The patient, a child, was brought from a place where scarlatina was prevalent, but when examined did not present the ordinary characters of that disease. The rash was measly, and there was considerable lachrymation. There was, however, well-marked sore throat, and the urine was affected. Erysipelas of the head and face supervened, and the child sank. When examined after death the tonsils were sloughy, the kidneys congested, some of the tubules being filled with epithelium, others entirely denuded of it, whilst the spleen presented an appearance similar to that ordinarily encountered in diphtheria—that is to say, in some parts it was so much congested as to resemble a clot of blood, whilst in others it was tolerably normal.

A pathological preparation in the museum, which we were shown by Mr. Pick, the curator, is worthy of notice. It consisted of the glands of the neck enormously enlarged, probably scrofulo-lymphomatous in character, and pressing on the neighbouring organs so as to cause considerable displacement. The pressure had been so annoying that an operation had at one time been thought of. Now, had tracheotomy been determined on, what was the condition of parts? The arch of the aorta was pressed over to the left side, where the innominate rose, so that to reach the right side it had to cross the trachea, which it did close up to the larynx. The possibility of such a disposition of parts is well worth bearing in mind with relation to tracheotomy.

Under the care of Dr. J. Ogle we have seen a great variety of cases, especially a number of patients suffering from hemiplegia, some syphilitic, some scrofulous, a few hæmorrhagic. When of a syphilitic origin, Dr. Ogle usually employs mercury or iodide of potassium, according to which has been used previously (if either has been so), along of course with nutritive food. When, again, of a scrofulous nature, he prefers employing iodide of potassium, supporting the patient with wine or brandy, and applying counter-irritation by means of iodine or liniment of cantharides. Should the hemiplegia be produced by a clot, he considers local depletion advisable, following this up by ice-bags, giving internally iodide of potassium, and moving the bowels by enemata. A case of considerable interest is now under his care. A man came into Hospital some weeks ago with glandular enlargements; these have since rapidly increased in size, and from their extensive diffusion, rapid growth, and the tuberous condition of the liver, they can only be reckoned as malignant. Pressure symptoms have now come on to such an extent as to greatly impede both respiration and swallowing; yet, curiously enough, the man persists that he was quite well three months ago. Two cases of diabetes, where the excessive flow was almost arrested before death, recently occurred in Dr. Ogle's practice. In one also, just at the end, a large quantity of albumen was secreted, although none had appeared before. In ordinary cases of albuminuria, gallic acid appears to be extensively used here in twenty-grain doses. The effect seems to be highly beneficial, and, combined with a few doses of compound powder of jalap, it ordinarily effects a cure. Iron in debilitated subjects seems to do most good in ordinary cases of albuminuria. In some cases under Dr. Ogle, where the kidney had been for some time diseased, very small doses of opium seemed to exercise a highly prejudicial effect. The last case we shall mention is one of fæcal vomiting, which entirely recovered under the influence of belladonna.

No one should go to St. George's without paying a visit to the fine Pathological Museum. A catalogue has just been compiled—the work of the late Mr. Gray, Dr. J. Ogle, and Mr. T. Holmes—and a more valuable work we could hardly conceive. Mr. Pick, to whom we are indebted for much kind attention, is now curator; he has recently hit upon a capital way of preparing bony preparations. Instead of macerating for months in cold water, a few weeks in water kept at a uniform temperature of 100° or upwards suffices for a far more thorough removal of grease than was formerly possible. The bones prepared in this way are also very much whiter than those cleaned according to the old process.

Finally, we must thank Dr. Reginald Thompson and Mr. Ring, the Medical and Surgical Registrars, as well as Mr. Jones, Apothecary, and Mr. Lee, House-Surgeon, for much trouble taken in our behalf.

MEDICAL COLLEGE HOSPITAL, CALCUTTA.

(Communicated by J. Fayrer, M.D.)

INJURY TO THE MUSCULO-CUTANEOUS, "PERFORANS CASSERII," AND OTHER NERVES OF THE RIGHT ARM.

(Under the care of Dr. J. FAYRER.)

A tall, powerful officer, aged 26, came on May 20 last to consult me about an injury which he had received in the previous March when in action with some of the hill tribes of the south-eastern frontier. In ascending a hill occupied by the enemy, he was struck on the outer side of the right arm by large stone rolled down on him from above. The stone knocked him down. He rolled down the declivity for some distance, and on recovering himself found that he was unable to move the right arm, which was much contused and swollen. The swelling subsided in about ten days under appropriate treatment, and the ecchymosis also disappeared, but loss of power in the arm remained. Perfect numbness lasted for a month. The little finger regained its sensibility soonest. Thumb and other fingers still somewhat numb.

I found on examination that the limb was powerless, colder than natural, and its muscles wasted, especially above the elbow. The shoulder-joint was so much relaxed that the

arm seemed to be partially dislocated by its own weight. He was unable to flex the forearm on the arm, could swing the arm backwards and forwards, and could move the fingers and muscles of the forearm when supported on the other hand. In other respects he was in good health.

I ordered a blister to be applied over the seat of the injury, friction to the limb generally, and a magneto-electric current to be passed twice a day through the muscles of the arm and forearm to keep them in action and, if possible, arrest the atrophy and fatty degeneration likely to result from inaction.

27th.—The arm is not so flabby; he can use the hand and make some movements with the forearm more freely than he did, but the arm is still quite powerless. Continue the same treatment.

June 3.—Some improvement; more power and more sensation in the forearm and hand. Continue the treatment.

24th.—He has gone into the country.

I saw him again in December somewhat, but not much, improved. There is more power in the hand and forearm, but the arm is much in the same condition.

Remarks.—The lesion in this case seems to have been chiefly due to contusion of the musculo-cutaneous nerve. The paralysis of the muscles of the arm and the loss of sensation in the forearm and hand point chiefly to this nerve as the chief seat of injury, though from the extent of the bruise it is probable that the circumflex and musculo-spiral nerves were also partly involved in the mischief. The prognosis is, of course, doubtful, as the result entirely depends on the extent to which the nerve trunks have suffered, whether their functions may be restored or not. The period that has elapsed since the injury is not yet sufficient probably to permit of complete restoration of the natural state of parts to have taken place. I therefore expressed my opinion to the patient that though he may ultimately regain the use of his arm, it is probable that a weakened state of the limb may result. I recommended the continued use of the magneto-electric current, with counter-irritation over the injured nerve trunks. As it is probable that the nerves have only been contused and not divided, unless the injury has been very severe, there is reason to hope that in time, a year or two perhaps, with due attention to keeping up contraction in the paralysed muscles, their functions may be restored.

EXCISION OF THE CARPAL ENDS OF THE RADIUS AND ULNA.

(Under the care of Dr. J. FAYRER.)

M. C., a country lad, aged about 10 years, admitted on May 4, 1866, with compound dislocation of the right wrist, the result of falling from a height of thirty feet out of a mango tree six days before admission.

The radius and ulna were protruding through a wound on the ulnar aspect of the forearm to the extent of half an inch. The hand being dislocated outwards, the protruding portions of bone were denuded of periosteum, and there was a fetid discharge from the wound.

The boy appeared to be in very fair general health, and to have suffered but little constitutional irritation from the severe injury. The protruding ends of the bone, dry and denuded of periosteum, were sawn off up to where the periosteum remained. The ulna and radius having been adjusted and the wound closed, the arm was placed at rest on a splint. He is said to have had fever four days before admission, with slight rigors. He progressed steadily; had one or two slight attacks of fever; and at one time I was rather apprehensive of osteo-myelitis. An abscess formed on the radial side of the arm; it was opened, and since then he has done well. The wound gradually healed; the ends of the bones appeared to become adherent to each other; and, though the rotatory movements of the forearm were diminished, yet the wrist-joint otherwise was very good.

On June 27 he was reported as quite recovered; flexion and extension excellent, but supination and pronation much interfered with.

Remarks.—Accidents of this nature are by no means uncommon in Bengal at this season of the year. The boy had climbed the tree to pluck the fruit, and fell from a height on his hand, dislocating the wrist. Being a resident of the country, and not of the city, he was in good health, and not only bore the shock of the injury well, but made a good recovery. Such injuries and sections of bone in adults, and especially in those resident in Calcutta, are but too prone to terminate in our Hospitals in suppuration in the bone and consequent pyæmia.

LIGATURE OF THE BRACHIAL ARTERY.

(Under the care of Dr. FAYRER)

G. G., a Hindoo, aged 20, was admitted into the Medical College Hospital on December 3, 1866, with profuse hæmorrhage from two deep incised wounds on the posterior and outer aspect of his left forearm. They were inflicted in the night, with a sharp knife, by a thief whom he was attempting to arrest in his house. The wounds were several inches in length, deep, and dividing the integuments, supinator and extensor muscles, and several arterial branches. Nine ligatures were applied by the House-Surgeon on admission, and the arm was placed at rest on a pillow. He bled again on December 6. This hæmorrhage was arrested by pressure. After this, although he was considerably reduced by the first loss of blood, the wounds took on healthy action, and he appeared to be doing well. But, from a movement of the arm during the night, when he probably struck the wound against some hard substance, bleeding recurred on December 15 from several points. Ligatures were applied, but would not hold, the granulating tissues were so soft and brittle. Acupressure was tried, but also failed; pressure was equally unsuccessful. As he was very weak and losing blood rapidly, I put a ligature on the brachial artery at the bend of the elbow, which at once completely commanded the hæmorrhage.

December 18.—There has been no return of hæmorrhage. The wound is looking healthy, and his general condition is improving. Temperature of the arm slightly diminished.

20th.—He is doing well. Wounds healthy. Temperature of forearm still low, but vitality perfect. He looks and feels much better.

21st.—A sharp attack of hæmorrhage occurred to-day from the wound, arrested by pressure.

23rd.—No more bleeding. Is doing well.

25th.—Doing well. Ligature on brachial artery came away to-day.

28th.—A collection of pus has formed above the wound, very near the elbow-joint. Pus evacuated.

31st.—No extension of the mischief. Wound looks well. He is improving in general health.

January 1, 1867.—He is doing well. Wounds healing. Passive motion of the elbow-joint ordered, as it has stiffened from inaction.

10th.—The wounds are all rapidly cicatrising. A faint thrill of pulsation can be felt in the radial artery of the left wrist.

15th.—He is nearly well, and is rapidly regaining the use of his arm and his general good health. A faint pulsation is perceptible in the radial artery of the injured limb.

Remarks.—This is an interesting case. It shows the advantage of ligaturing the main artery in certain traumatic cases where the bleeding vessels cannot be secured at the seat of hæmorrhage. The softness of the tissues here rendered any attempt to ligature the bleeding points useless, and left no alternative but that of deligation of the main trunk. Hæmorrhage, as might have been expected, occurred on the sixth day, but during this interval the progress of repair had so far advanced that pressure was then sufficient to control the subsequent bleeding. The time gained was therefore of the greatest advantage, and allowed the reparative changes to be so far completed that when hæmorrhage recurred it was easily arrested by pressure. It is interesting to note the gradual return of circulation in the radial artery. The ligature on the brachial being applied in front of the elbow-joint and below the "anastamotica magna," the collateral circulation was soon re-established.

ALLEGED POISONING BY STRYCHNINE.—Paul Augustus de Menstein, otherwise Cornen, aged fifty-five, a nobleman, had been a physician in Germany, but owing to an affection of the eyes threatening blindness, he relinquished practice, and came to England. His circumstances becoming impoverished, his wife obtained a mangle, he assisting her. Latterly he attended at the Westminster Ophthalmic Hospital, Charing-cross, where he assisted the dispenser, with the ultimate view of obtaining some employment in that institution in the dispensary. On Tuesday week he returned home in a staggering condition, as though intoxicated, and said he had drunk some water from a vessel in which there had been some strychnine, which had produced twitches in his limbs, but as he was suffering from lumbago, it would do him good. He went to bed, and in about an hour died.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0
Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

Terms of Subscription for India, £1 15s. per annum.

The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.

Post-office Orders and Drafts on Army or Navy Agents, should be made in favour of Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d. | A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d. | A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, MARCH 15, 1867.

THE METROPOLITAN POOR BILL.

Mr. Gathorne Hardy appears entitled to congratulation, both on the success which has attended the passage of the Metropolitan Poor Bill through Committee, and on the suavity and good temper with which he met the amendments suggested to certain of its clauses. He is doubtless indebted in great measure to this good temper, and to the courtesy with which he received deputations on the subject of the Bill, for its comparatively easy passage. It may now be looked upon as virtually safe, and we only wish the Government were in an equally fair way towards a settlement of their Reform troubles. But, whatever may be their political fate, it appears unquestionable that, if the powers which the Bill confers be only exercised with judgment and liberality by the Poor-law Board, the Conservatives will have won no small social triumph in the combat with misery, affliction, and disease.

Nor is the good which has been of late effected in regard to the sick poor limited to the scope of the Metropolitan Bill. We understand that for the last six or seven months important and much-needed reforms have been quietly effected. We do not pretend to say whether these are the result of the revelations of last year, or of a change in the directorate of the Poor-law Board, or whether they are consequent on the late kaleidoscopic shifting of the inspectors from district to district. Certain it is that from all parts of the country come reports of the appointments of paid nurses, and of the abandonment of the pauper-nurse system; of the engagement of competent dispensers, and of the supply of drugs, sometimes of all kinds, sometimes of an expensive nature, by the Unions. It may be that the guardians were moved to take these steps by the exaggerated rumours current at the beginning of the session as to the powers to be sought for by the Poor-law Board. But it seems more probable that they are the result of the adoption of a minute system of personal supervision by the President, of which Mr. Hardy, on Monday evening last, expressed himself an advocate. We believe that such supervision is likely to secure, not only for the poor, but also for those to whom they are entrusted—for Poor-law Medical Officers—many rights and privileges from which they have long been excluded.

THE LATE OCCURRENCES AT COLNEY-HATCH ASYLUM.

The paragraph which we inserted last week in the department of our journal devoted to "Medical News," relating to the treatment of two ungovernable lunatics at Colney-hatch Asylum, and which was a reprint of what had appeared in the public journals, must not be accepted as stating the whole truth. It was merely what it professed to be—a report of what took place at the session of the Middlesex magistrates, for the correctness or fulness of which we were in no way responsible. We abstained from any remarks of our own until the whole of the facts were in our possession. We think it would have been as well had all our contemporaries been similarly cautious in not accepting as gospel truth what on the face of it was a most improbable statement. We do not by any means constitute ourselves the champions of Dr. Sheppard, but we claim for him English justice. We do not think him even free from blame, but we do think that the blame is not all rightfully his. To those who desire to learn the entire history of the occurrences which have been subject to animadversion we commend the perusal of the Sixteenth Annual Report of the Colney-hatch Asylum, which contains the whole of the correspondence in the matter, and also Dr. Sheppard's own account of what really took place, an account upon the accuracy and candour of which not a breath of suspicion has yet been cast. The following may be taken as a faithful abstract:—

On May 28 last year the Commissioners in Lunacy received an *anonymous* letter, calling attention to "the following cases of cruelty and injustice inflicted on the pauper lunatics in this Asylum. A patient of the name of Harrison has been put to bed in No. 5 room, in D ward, in the state in which he came into this world, *without bedding of any kind, only the bare walls and bricks, entirely naked* every night, commencing on the 18th of this month. This is not the only case of the kind. A patient of the name of Hobbs was so immured *every night for* 140 *nights in succession during the winter of* 1864 *or* 1865, and then died one morning soon after being unlocked. There are other patients who have been so punished (*sic*), some for longer terms and some shorter," etc. Now, no one can read this without perceiving a malicious animus of some kind. The author is strongly suspected to have been a discharged attendant. But this would not affect the seriousness of the charge had it been strictly true. The Commissioners, on June 18, requested Dr. Sheppard to attend their meeting, when he admitted to a limited extent the truth of the charge, but excused his conduct upon grounds to be presently referred to. On June 26 a letter was sent to the Committee of Visitors, calling upon them to institute an inquiry, and the Visitors called upon Dr. Sheppard for a report. This bears the date of July 9. Dr. Sheppard's report is too long for full insertion, but the leading points, partly given in his own words, are these:—"Daniel Hobbs was admitted into the Asylum on April 21, 1864, and died on June 27 in the same year, so that he was *an inmate here for a period of only* 67 *days*. He was not placed in his room more than *four* nights out of 67, and this in consequence of great destructiveness, which I had no means of controlling but by restraint—a measure which I do not approve of except for Surgical purposes. But it is certain that during his residence in the Asylum, although (with the exception of the four nights alluded to) he had coverings and bedding of the ordinary kind or strong rugs only, he was always in a state of nudity—that is to say, he was actually in the same condition as if he had been placed in his room without any clothing whatever." So much for his being immured for 140 winter nights without clothing or bedding. "The patient John Harrison is another of the same class as Daniel Hobbs, and although he has been occasionally for one night without clothing in his room—sometimes in the padded room, sometimes in an ordinary room—he is for nights together in a state of nudity, with rugs and clothing torn, or unused by his side." So much for his having been shut up for ten successive nights without clothing or bedding. Dr. Sheppard proceeds to tell the Visitors what these patients were. They were suffering under insanity complicated with what is known in asylums as general paralysis, and, like most of that class of patients, their physical sensations were impaired, and their skins of an unnaturally high temperature.

Their delusions were grand and extravagant, and their happiness consisted in standing or sitting all night naked, with their bedding and clothing heaped in a corner, singing, laughing, and gesticulating. Now, it is well known to asylum superintendents how terribly destructive such patients sometimes are. Nails and teeth are perseveringly brought into aid of the fingers in tearing to tatters everything in the way of covering with which they may be provided. Clothing of any kind is torture to their hot hyperæsthetic skin, and nudity alone supportable. Dr. Sheppard admits that, in five or six cases at the outside during five years of his residence, the destructiveness has occasionally attained such a pitch that, under the pressure of short supplies, he has felt justified in occasionally placing a man in his room without clothing, "anticipating thereby, for a few minutes only, that state of nudity which is to a destructive maniac extreme delight." Hobbs and Harrison were two of those instances. He says, "I have been unwilling to see county property destroyed night after night for no sort of purpose." Such is the charge—grossly exaggerated; such are the bare facts, and, we think, even the author of "Very Hard Cash" would find a difficulty in founding a sensation novel upon them; and such is Dr. Sheppard's excuse.

We have said that we do not free Dr. Sheppard entirely from blame. His treatment was perhaps, nay probably, humane, certainly not cruel or unjust. It would have been vastly more cruel to have increased the sufferings of the poor patients by covering them forcibly with clothing which their instincts rejected, and by the adoption of the only possible means of retaining it upon them—namely, bodily restraint. Nor is there any proof that either of the men suffered from the exposure of their skins to the free action of the air. How often does each of ourselves—sane though we be—when restless and hot at night, throw off every article of clothing, except a night-shirt, before we attain the sensation of comfort essential to sleep! How many of us have not been guilty even of walking about our room naked as we came into the world, in order to attain the same object? Is a lunatic not to be permitted a similar gratification of a harmless, perhaps beneficial instinct? The fault of Dr. Sheppard was, that he permitted considerations of county economy to prevail in his mind over the thought that it was within the range of possibility that his patient, when he had cooled himself to his satisfaction, might feel a happiness in using even the shreds of his torn clothing and rugs. Another fault, and this is really the most serious one, is, that he failed to enter in his note-book the fact that on such a night Hobbs or Harrison was not supplied with clothing or bedding, and that the reason was that they were destroyed as fast as given, while the Asylum supply of these articles was severely taxed. This was "the great error in judgment" of which the visitors condemn their official—not the denial of clothing, as one of our contemporaries appears to believe. The Committee say that they "deeply regret that the Medical Superintendent has treated any case contrary to the general custom of the Asylum, without fully reporting the same in his diary, and *thereby enabling the Committee to consider the expediency or otherwise of such treatment.* They have expressed to him their feeling in this matter, and have informed him that he is expected in future to record fully every case *in which the treatment presents the least peculiarity.*"

Now, we have given this passage of the letter of the Committee of Visitors in full, because it enables us to show how, as we stated before, the Medical Superintendent was not alone to blame. It lifts the veil which conceals from vulgar eyes the management of the Middlesex Asylum. This is not the first time we have had occasion to remark upon it. The Medical Superintendent is supposed to be in charge of the Medical treatment of the lunatics, but everything else is the business of the Visitors and their lay officers, as much as it is his. With him they share responsibility; to the Visitors he is accountable for the treatment he thinks fit to pursue; they constitute themselves the judges of its expediency. They cannot see—how can they be expected to see, not being specially educated to the Profession?—that every case of disease, be it lunacy or anything else, has its peculiarities, and that the peculiarity of each case must rightly demand some peculiarity in management. But the least peculiarity of treatment is to be specially reported. We wish Dr. Sheppard joy of his new duties, although the order may not refer to whether this patient requires the Turkish bath, or that a nightly dose of henbane.

But this is not quite all we have to say in extenuation of Dr. Sheppard's error. Not only has he a divided authority with a sole accountability, but the number of patients under his direction is twice as large, at least, as any one man can possibly do justice to. On the last day of 1866 there were under his charge no fewer than 826 patients, and under the charge of his colleague 1210. The Asylum, then, on that day contained as many as 2036 patients, each of whom, besides being simply insane, had some peculiarity of constitution or mental condition, which the Superintendent in charge was bound to know, to study, to carry constantly without confusion in his mind, to consider every day when visiting and directing treatment, diet, exercise, employment, etc., and in respect of which he was liable to be called to account by the Committee of Visitors. Are these men fairly treated? Is it to be wondered at that a thoughtful and conscientious Superintendent, even, should now and then commit an error in judgment when his powers are thus overtaxed?

WHO WERE THE ANCIENT BRITONS?

Most of our readers notice at times paragraphs in the newspapers, detailing the accounts of the examination of ancient burial mounds by the Rev. W. Greenwell. They may also be interested in the controversy now going on with regard to the round and long head, and the round and long barrow question. They may, besides, wish for materials for settling the question, Who were the ancient Britons? A few years since, as an eminent French archæologist says, the name *Gothic* was applied to almost all the buildings from the eleventh to the sixteenth century. Are we more precise in our use of the word *Celtic* to any pre-Roman remains in Britain and France? Are the inhabitants of these islands even more mixed than is commonly believed? Did a mixture of Berber and Basque from Africa and Spain, and of Lapp from Scandinavia, precede the mixture of Belgian, Celt, Frisian, Dane, and Norman? In order to furnish materials for thought on these topics, we propose to give some notes of a discourse delivered last Friday evening at the Royal Institution by the Rev. Canon Greenwell, in which he presented a summary of his researches.

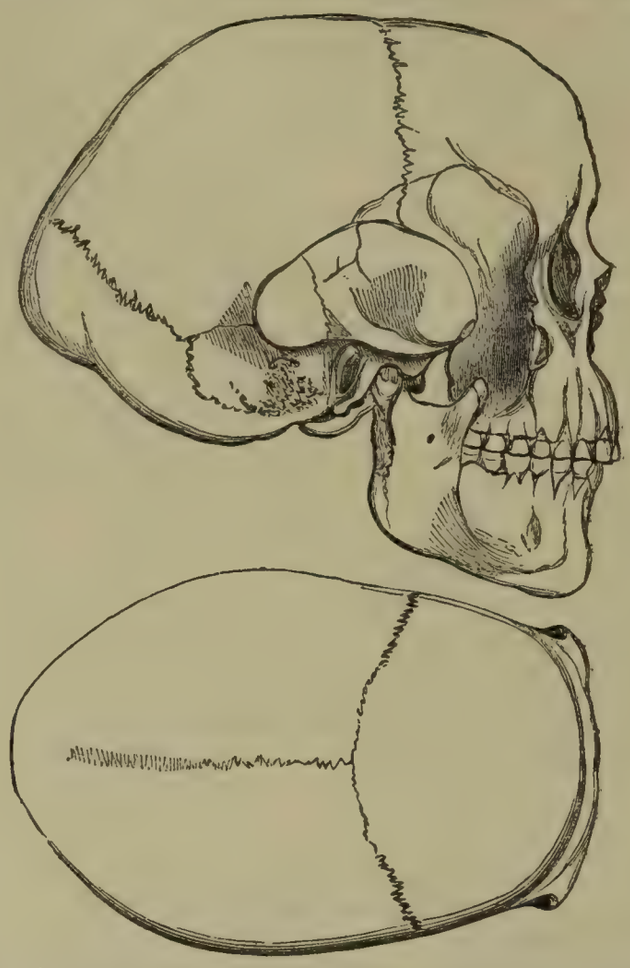
The east wolds of Yorkshire—the place where the principal explorations have been made—were described as a somewhat quadrilateral district, of moderate elevation, with its surface varied by deep waterless valleys and rounded chalk hills, like the Wiltshire downs; covered with scanty herbage, thorn, furze, and ling, little wood, and no animals; bounded on the south by the valley of the Humber, on the east by the sea, on the west by the York valley. Now, there is evidence that this district was largely cultivated in pre-historic times—evidence derived partly from the occasional discovery of the site of rude circular wigwams from fifteen to twenty feet in diameter, sometimes excavated in the ground, sometimes built above it, and sometimes still retaining vestiges of a rude stone bench around, and of a central hearthstone whence the smoke ascended through the roof. Such vestiges, however, are soon obliterated by the plough. There is no evidence of large camps; the people were probably divided into small tribelets. The trackways by which they went to the nearest stream to fetch water are yet visible; and the territory seems bounded on the north by an earthen mound with fosse, nearly twenty

miles long—whether for defence or as a landmark seems uncertain. It is most likely that the people who inhabited these wolds got their food by hunting in the swamps and thickets which bounded them, and which, whilst affording covert to animals, offered scarce any habitable or defensible positions for man.

Who were these people? Without borrowing from Ptolemy the names of Brigantes and Parisii, Mr. Greenwell proposed to determine this question by examination of their remains; and has come to the conclusion that there were two races, of which one inhabited the district first and alone, whilst at a later date they existed side by side with another race which intruded itself amongst them. He is led to conclude that the earlier people were a long-headed or dolichocephalic people; that they buried their dead under barrows, tumuli, or mounds of an oblong shape—from three to four times as long as broad—generally lying east and west, with one end larger than the other, and the *primary interment* under the large end. By the term *primary interment* is meant, of course, the first body buried. Many other burials may have succeeded, the bodies being placed in part of the circumference, and the mound enlarged to cover the new bodies.

Let us say, by way of parenthesis, that the general plan of mound burial seems to have been identical, all over the West of Europe, England, Ireland, and Brittany. The body was placed in a square chamber, constructed in the best method available:—in some places a humble square excavation into the chalk, covered over with a pile of stones; in other magnificent instances which abound in Western Brittany, a huge chamber formed of colossal stones, one at the bottom, one at each side, and one for a cover; this chamber, too, perhaps, with a vestibule or wings added. But, in any case, the whole was covered with a huge mound of earth. These mounds are now in the farmer's way; they are perpetually levelled by the plough; thus in time the central stones (if any) become exposed; people see one huge stone atop, supported by others, tablewise; they overlook the fact of the interment; or the bones are scattered and forgotten, and the denuded stones pass with the vulgar as Druidical altars; and the solemn circles of stone set up to mark and dignify the burial-place, inspire the brains of antiquaries with notions of a primæval worship of the serpent that tempted Eve, or of some diabolical attempt to figure the signs of the Zodiac. Were the matter sufficiently Medical, we should be glad to treat of *menhirs* and *dolmens;* but we must stick to ethnology.

The elderhood of the long barrow, and of the long skull found therein, is, according to Mr. Greenwell, evident—first, from the total absence of metallic remains, and from the abundance and excellence of the flint implements, which are superior in finish to those found in the assumed later barrows along with bronze. Secondly, from evidence of cannibalism. This evidence consists in the discovery of bodies buried, as is believed, at the same time with the primary interment, and never disturbed since: in one case so many as eighteen bodies were found at the east end of a long barrow; of men, women, and children; the bones scattered and broken, and in such a way as could only have been done with the recent bones. In the long barrows in the wolds, the bodies had evidently been burned, although the action of the fire was in some instances very incomplete. It seemed as if the bodies had been deposited, then covered over with a layer of chalk and flint, and wood heaped on the top of this, so as to burn the body within, and weld the covering into a compact, half-vitrefied mass; but in many cases the action of the fire was evidently very imperfect. In one case, over a mass of burnt chalk and bones 35 feet long and 3 feet high, had been raised a mound of chalk, rubble, and earth 140 feet long, 50 feet wide, and 7 feet high. The skulls found in the long barrows, according to Mr. Greenwell, illustrate Dr. Thurnam's alliterative axiom—long barrow, long skull. The face is upright, with no tendency to prognathism; the forehead, on the whole, narrow, but not receding; the superciliary ridges only slightly projecting, and the middle of the skull along the line of the sagittal suture assumes to some extent a keel-shaped form. (See engraving.) The parietal prominences are ill-developed and much rounded off, and the upper

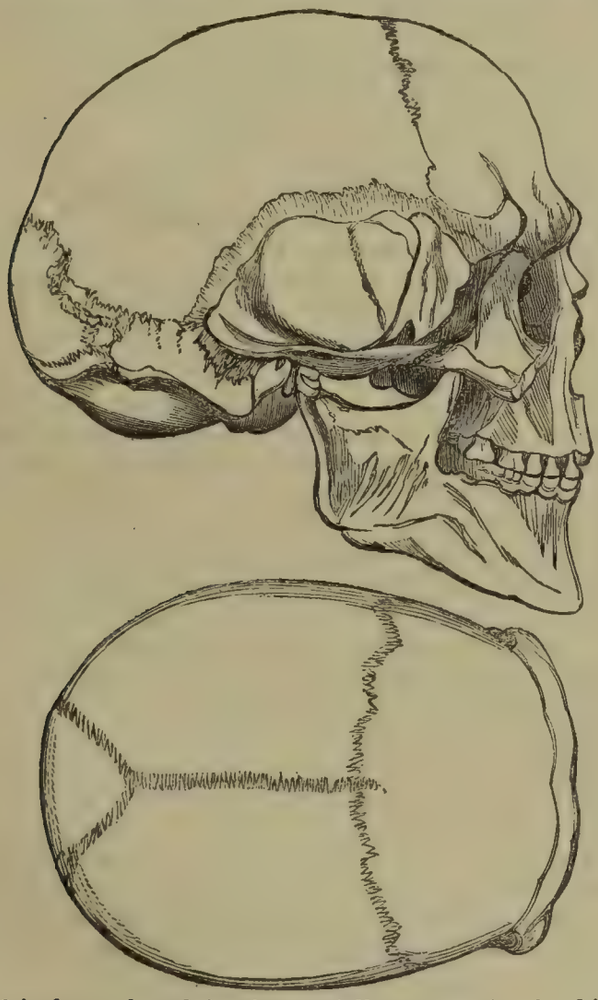


part of the occipital region is very projecting. Judging from their bones, these people were probably not more than 5 feet 5 or 6 inches in height, and probably of pleasing appearance, with soft rounded features, and an absence of ruggedness of outline in the skeleton. In Mr. Greenwell's opinion, they were the earliest inhabitants of these wolds, for no sepulchral remains of any race before them have been found. He thinks that we must look to Spain and North Africa for a people similar to them. The Basque head is decidedly dolichocephalic. The paucity of long barrows tends to show that the population at the time of their erection was but scanty.

The round barrows of the later race are very abundant. They are of various sizes, ranging from 15 feet in diameter to above 100 feet, and in height from 2 feet to near 20 feet, the most common being about 50 feet in diameter and 5 feet high. In shape they are like a flattish inverted bowl; they are usually formed of surface soil and chalk rubble, and they generally crown the heights. They were, no doubt, erected only over the remains of the chiefs of the people and their families. In some cases, perhaps, the wives and children and attendants of a distinguished chief were slain and buried with him, and it is not uncommon to find a very young child occupying the central place in a large barrow. The ordinary dead were doubtless buried without barrows in cemeteries, and at one of these places (at Elton, near Beverley), in making a railway, above seventy bodies, placed in the ordinary "British" manner, were discovered. Mr. Greenwell also referred to the circles formed of stones, earth, etc., intended to preserve the barrows from desecration. These barrows also afford evidence of burial with burning and without it, the latter being the more prevalent mode, due, doubtless, to the scarcity of wood. In some cases both were adopted contemporaneously. When unburnt the bodies appear to have been interred with their

clothing, with the knees to the chin, most frequently on the left side, sometimes being laid on the ground, and sometimes in a cist formed of four or more stones set on edge with covers. At Gristhorpe, a perfect skeleton was found in the hollow of a tree, which, from its colour, has been termed "the Black Prince." The remains of burnt bodies have been found in various positions in urns or small hollows. In the latter part of this discourse Mr. Greenwell gave full details of the investigation of several series of barrows containing unburnt and burnt bodies. In the former, besides the bones of persons of all ages, the investigators came upon relics of the funeral feast, broken bones of wild oxen, deer, swine, and goats, potsherds, flint chippings, etc. In the barrows containing the remains of burnt bodies they discovered, besides many flint implements, bronze daggers with bone handles, ornamented urns, food vessels, and drinking cups. The bodies of males in many cases were associated with stone weapons and implements, and those of women with stone rubbers or corn-crushers, flint knives or scrapers, jet and amber necklaces, buttons, and other ornaments. Bronze celts and other weapons are also found.

The skulls of the people buried in the *round* barrows present two distinct types, as well as a third, possessing the characters of both combined, probably descended from a mixture of the two. One type is that of the long-headed race already described; the other, that of the intruding conquerors, was of a round-headed people, with an average stature of 5 feet



8 or 9 inches, a broad head, especially square in the hinder part, and a high forehead, the parietal bosses being strongly developed, and the occiput so much flattened as to suggest the idea that it had been made so by artificial means. These people must have presented a savage appearance, as all their features were prominent, the mouth and eyebrows projecting, and the cheek-bones high and angular. With regard to their origin, Mr. Greenwell considers that we must look to the North of Europe, as they approach in the type of their skull to that of the people of the stone age buried in the chambered barrows of Denmark, who may have been allied to the Lapps, the representatives of a race at one time probably widely spread over the North of Europe. In conclusion, Mr. Greenwell alluded to the objections made to his view of the antiquity of these people. He stated that Cæsar and Tacitus testified to the use of iron by the Britons of their time, and affirmed that no iron had been found in any of these barrows, and that hitherto no evidence of Roman influence had been discovered in them. He said that, however easy it might be to say to what period they do *not* belong, it is impossible to give more than an approximative date to them. With more extended researches we may be able to arrive at more certain conclusions. "In the meantime it is safer not to lay down any specific date, but to say, what we can with confidence do, that they belong to a time which ends a century or two before the occupation of Britain by the Romans."

THE WEEK.

AMENDMENT OF THE MEDICAL ACT.

The Home Secretary is most favourably disposed towards such an amendment of the Medical Act as shall make it more effective against outsiders who pretend to qualifications which they do not possess. As for titles assumed by men who do not practise—whether they call themselves Doctor or Captain—they will not be interfered with. As for men who practise without assuming a Medical title, they, too, will be free as ever. There is not the smallest chance of anything like protection against unqualified Practitioners, as such; but if an unqualified person be engaged in the practice of Medicine, and take or use a title commonly employed by qualified Medical Practitioners (no matter what his *intention* may be or may be alleged to be), that is quite another affair. If we may use the illustration happily presented to Sir George Grey by the Registrar some years ago, the case is precisely like the chicory question. Chicory and quackery are both legal articles of commerce; but the chicory must not be labelled coffee, and the quackery must not be labelled as qualified physic. As for any further protection within the Profession itself—for instance, of double qualification men against single—we suspect there is not the slightest chance of it. Doubly qualified men are already protected, as regards eligibility to public appointments, and laymen would argue that their superior education and status should put them above the need of legally devised protection. If present negotiations turn out well, the M.R.C.S. as a single qualification will cease to exist.

GRATUITOUS SERVICES.

In a valuable paper in the current number of *Fraser*, Miss Cobbe sets forth some of the lessons which we may derive from a consideration of that admirable organisation, the American Sanitary Commission, through the instrumentality of which the philanthropic sympathy of the nation was enabled to so powerfully aid in alleviating the horrors of war. This it did not only in consequence of the munificence of the contributions it had at its disposal, but by its judicious co-operation with the authorities, in subordination to which it always acted. The cheerful combination of effort which took place between it and the Army Medical Bureau was, we believe, greatly due to the sagacious anticipation by Surgeon-General Hammond of the happy results likely to spring from this well-directed enthusiasm. Miss Cobbe points out our schools, penitentiaries, workhouses, and sanitary necessities as offering a proper field for the harmonious co-operation of philanthropic effort and State action, neither of which alone can accomplish its objects satisfactorily. But she also cautions us against a too indiscriminate resort to gratuitous services, believing fully in the good old maxim that "the labourer is worthy of his hire;" and she especially exemplifies this in the cases of nurses. She deprecates ladies of wealth and position

*

assuming these posts, and in this way displacing those equally qualified for them, but requiring to be paid for their services. There is work enough for the wealthy as visitors, patrons, or teachers; but the actual nursing should be undertaken by those who are seeking for a remunerative profession. And were the remuneration suitably raised, there would be no want of well-qualified women to really work for it.

ARMY MEDICAL SERVICE.

On Friday, the 8th inst., there appeared a *Gazette* such as the members of the Army Medical Department have not had the opportunity of seeing for many years. Three Deputy Inspectors were promoted to the rank of Inspectors-General; twelve Surgeons-Majors were promoted to be Deputy Inspectors; and sixteen Assistant-Surgeons dropped the prefix Assistant and became Surgeons. This was "the big *Gazette*" anticipated with so much curiosity and anxiety by our Army Medical brethren, which mainly arose out of the new Medical appointments for India. We are curious to know what the members of the department think of the principle of "selection" in practice. Of course it is impossible to satisfy everybody. That which may be the best plan for the public good may not always be the happiest for the members of a department; still, the first is the thing to be attained. If you adopt the principle of seniority, you reduce all to a dead level, and shut, bolt, and bar the door in the face of merit; if you adopt selection, you run the risk of promoting some good men over the heads of others equally good whose merits are not so well known to those with whom selection rests. We are assured that the new Army Medical Warrant will be published next month, when there will be a new Director-General, and, let us hope, the commencement of a new era for the Army Medical service.

EXCLUSION OF NAVAL SURGEONS FROM THE COMPANIONSHIP OF THE BATH.

We believe that the *Medical Times and Gazette* was the first journal that drew attention to the fact that Naval Surgeons, under the rank of Deputy Inspector-General, are excluded from the Companionship of the Bath. Whilst so many Regimental and Staff Surgeons in the sister service are worthily enjoying this coveted honour, no one can wonder that the exclusion of all Naval Surgeons is one of the minor causes which combine to render her Majesty's Navy probably the most unpopular service for Medical men in the world. It may be that the omission of this class of officers has depended on a mere piece of official carelessness—that after the issue of the Naval Medical Warrant of 1859 the authorities at the Admiralty did not think it worth their while to have the statutes of the Order revised, although the example had been set them by the War Office the previous year. After the issue of the Army Medical Warrant of 1858, a reprint of the statutes appeared, which includes Medical officers of field officers' rank. But this indifference to the honour and status of the Medical officer is just what has reduced the Medical service to its present deplorable plight. We would impress, therefore, upon the naval authorities the necessity of removing this glaring omission, which places the Naval Surgeon, practically, in a less honourable position than the Surgeon of the same rank in the Army. Surely the Lords Commissioners of the Admiralty can have no difficulty in obtaining a fresh publication of the statutes of the Order, and we urge upon them the necessity of placing the Surgeon of the Navy upon a perfect equality as regards honorary distinctions with officers of corresponding rank in the executive class.

We have already stated the fact that the new Medical circular in its present form by no means meets the requirements of the Naval Medical Service, and our opinion is daily confirmed by the complaints which reach us. We believe that a measure including the following particulars would go far to allay permanently the discontent which has so long prevailed:

1st. All *compulsory* half-pay time to count towards retirement.

2nd. The appointment of Deputy Inspectors-General to all our Hospitals at home and abroad, and to flag-ships on foreign stations. And

3rd. Permission to retire after twenty-five years' service with the substantive rank and minimum half-pay of a Deputy Inspector-General should be accorded to all Staff-Surgeons who may not be fortunate enough to obtain promotion.

REMUNERATION OF POOR-LAW MEDICAL OFFICERS FOR EXTRA SERVICES DURING THE CHOLERA — IMPORTANT LEGAL DECISION.

Dr. W. H. Fitzpatrick, who is Medical officer for the district of West Derby, deserves the thanks of the Profession for obtaining a legal decision on the question whether a Poor-law Surgeon can claim extra remuneration from the local Poor-law authorities for services rendered during an epidemic visitation. Dr. Fitzpatrick has held his present position as Medical officer under the Poor-law since 1848. In the epidemic of 1849 he received from the Board of Guardians a gratuity for extra services rendered. In May of last year he undertook, at the request of the guardians, to attend all cholera cases that might occur in his district, and on the question of remuneration being raised, one of the guardians said:—"You know very well we treated you liberally on a former occasion, and we will do so again;" adding words to the effect that they were all houourable men." It need scarcely be added that on this assurance he willingly undertook and carried into effect all the preventive as well as curative measures rendered necessary by the epidemic. When, however, the danger had passed, the Doctor applied in vain for his extra remuneration. It was refused, and in consequence he brought an action in the County Court. The case was tried before Mr. Sergeant Wheeler and a jury, the latter being summoned at the request of the defendants. In summing up the judge put the following questions to the jury:—First, did the guardians order or authorise work to be done by the plaintiff that was not within the scope of his contract with them? and if "yes," secondly, did the plaintiff do the extra work in pursuance of such order or authority? If again "yes," thirdly, when the guardians ordered or authorised such extra work, did they intend thereby to bind themselves to pay for the work, or did they merely intend that the plaintiff should, as in 1849, trust to them for a gratuity? And, fourthly, was the plaintiff ready and willing, and did he, in fact, trust to such gratuity? The jury (after a lengthened consultation) stated that as to the first two questions they replied in the affirmative; and as to the remaining questions they thought the defendants undertook to pay for the extra work done. They therefore gave a verdict for the plaintiff for 10 guineas. We congratulate Dr. Fitzpatrick, not on the amount of remuneration awarded, for that appears far too small, but upon the fact that he has obtained a legal recognition of the principle that extra pay must be given by Poor-law authorities when they impose extra services on their Medical officers.

PRIZE ESSAYS.

The announcement in our advertising columns last week that a member of the Ladies' Sanitary Association offers a hundred pounds for the best essay on Vaccination, its benefits and its alleged dangers, and another advertisement which has lately appeared in the *Times* to the effect that a certain gentleman who is "desirous to benefit his country and his kind has instructed the secretary to the British Anti-Tobacco Society to offer £50 for the best approved Essay on the History and Properties of Tobacco, and on its physical action on the human

body, through its various modes of employment; and £50 for the best approved Essay on the Moral, Social, and Economical Results of the use of Tobacco," will interest some of our readers. If the premiums be awarded to the essayists who examine the subjects most thoroughly and fairly, the donors will deserve the thanks of all. But it must be clearly understood that the prizes are not to be given as rewards for the production of a one-sided argument or an exaggerated estimate of facts.

OBSTETRICAL SOCIETY.

We learn that the following notice has been circulated amongst the Fellows of this Society:—

"53, Berners-street, March 11, 1867.

"Dear Sir,—We are directed by the President and Council to inform you that, in accordance with Law IV., Section 2, the next meeting of the Obstetrical Society, on April 3, will be made special, for the purpose of considering and voting by ballot upon the following resolution of the Council, as notified to the Society at its ordinary meeting, held on the 6th inst.:—

"'That, in the opinion of this Council, the published matters in relation to the performance of clitoridectomy by Mr. I. Baker Brown justify the Council in recommending the Society to put in force against him Law IV., Section II., which provides for the expulsion of a Fellow.'

"We are also directed to inform you that the published matters referred to in the above resolution will be forwarded to you with the utmost possible despatch.

"The next meeting being special for the consideration of particular business, no other business will be transacted, and visitors cannot be admitted.

"We are, dear Sir, yours obediently,
"G. C. P. Murray, M.D., } Hon. Secs."
Henry Gervis, M.D., }

THE ENLARGEMENT OF CHARING-CROSS HOSPITAL.

We are delighted at last to see that tenants of that part of Charing-cross Hospital lately used for shops have put up notices to the effect that their premises are required for the enlargement of the charity. In our Hospital reports last week we had occasion to refer to the probability of certain changes, both in the Hospital and school, and we cannot but think that they are very desirable for all parties — patients, students, and teachers. The locality of the Hospital demands more space, and energetic measures are required for the due maintenance both of the charity and of the school. Of late, things have greatly improved, and a larger entry, for one thing, has been the result. Should this continue, larger school buildings will be absolutely requisite for the proper carrying on of the various lectures. A larger, higher, better-lighted dissecting room would render the work done there more agreeable and interesting both to students and teachers. The nursing department, as we have already stated, is now conducted by the sisters and nurses of St. John's House, on the same principle as at King's College Hospital, and with the best possible results. The tenure of office of the seniors is, we believe, to cease after the age of 63, and the assistant to have full rank after ten years' service. These and other important changes are likely to be shortly effected, and they most certainly will conduce largely to the welfare of the charity and the success of the school.

WANTING TO KNOW!

A question was asked in the House of Commons last week by Sir J. C. Jervoise, "whether the statement in the weekly report of the Registrar-General, November 17, 1866, that Dr. Frankland had investigated some of the physical properties of cholera-stuff (cholerine) was exactly true; and whether it was the intention of her Majesty's Government to introduce any measure tending to obviate the loss, alarm, *and injustice* (!) consequent on the theory of the infectious nature of certain diseases, when unsupported by demonstration." In his reply, Mr. Walpole stated that the Registrar-General had published Dr. Frankland's report because, in his opinion, "it tended to put the public on their guard with a view to exercising greater care to destroy what was supposed to increase the number of cholera cases;" adding, with scarcely concealed irony, "that he was not at present aware of any Bill which it would be advisable for the Government to introduce on the subject." Nothing daunted by the ill-success of his attack on the Registrar-General, Sir J. C. Jervoise then opened fire on the Medical Officer of the Privy Council for stating in his last report "the mode in which cholera contagium was generated," but omitting at the same time to divulge "his method of obtaining this deadly agent." It was then explained to the honourable inquirer that the discovery referred to was not due to any individual, but was the result of "scientific investigations carried on by many eminent men." Now, whatever may have been the motive which prompted these "interpellations"—whether to cast odium on two valuable public officers, to protect "vested interests," or purely a philanthropic feeling—there can, we think, be but one opinion as to their utter uselessness for any practical purpose. It would be an irreparable misfortune if those who are charged with the care of the public health should be hindered in any way from expressing plainly and unreservedly such facts and deductions as come under their notice, whether in ordinary or extraordinary times of prevalent disease. And that the Registrar-General is not likely to be deterred from the path of duty is pretty evident from a passage in his last Weekly Return, wherein he retorts upon the hypercritical Baronet with the significant remark that if any such measure as was hinted at should be brought before the House, "it must be so extended as to obviate such losses, both of life and property, as have been sustained by the *people* of East London." Sir J. C. Jervoise did not specify those who would, in his opinion, have a claim to be preserved from "loss" and "injustice," nor can we conceive who is referred to, unless it be the water companies; but the Registrar-General maintains that there are paramount claims on behalf of the sufferers by such "fatal accidents" as, it is beginning to be widely believed, caused the late violent cholera epidemic in East London. The cost in suffering and anxiety to those who were bereaved admits of no calculation, but the money value of each life lost can be estimated, as well as the cost of Medical and sanitary measures of precaution and relief, and this would be a very interesting thing to know.

FROM ABROAD.—THE THERAPEUTICAL SOCIETY — PROFESSOR FRÉMY ON SCIENTIFIC CAREERS — RESPIRATORY THERAPEUTICS.

A society under the title of the "Therapeutical Society" has just been set on foot in Paris, which, it is to be hoped, will undertake some of the investigations which Dr. Acland in vain proposed to our "Medical Council of Education" to sanction. In the prospectus it is stated that its object is to successively investigate the various agents of the Materia Medica which have been employed from ancient to the present times. It is especially desirous of instituting numerous experiments on animals for the appreciation of the physiological action of medicinal substances, clinical observation then being resorted to in order to control these and exhibit their true therapeutical action. With this view, the Society will not be exclusively confined to Medical Practitioners, but will also admit into its ranks veterinarians, chemists, and all those who are engaged in experimental physiology. The number of members is, however, to be confined to sixty—viz., forty-five Doctors of Medicine, seven Veterinary Doctors, and eight Pharmaciens. The *Bulletin de Thérapeutique* is declared the official organ of the Society. The Society starts well as regards officers—viz., MM. Trousseau, Honorary President; Pidoux, President; Guéneau de Mussy, Vice-President; Paul, Secretary; Delpech, Treasurer; Gubler, Bouley,

and Mialhe, "Conseil de Famille;" Bricheteau, Moutard-Martin, and Hérard, Publication Committee.

A *brochure* recently issued by Professor Frémy, of the French Institute, directs attention to a topic which should prove of as great interest here as in France. He entitles it "On the Organisation of Scientific Careers," and its chief suggestion is that a certain sum of money should be applied for the encouragement of those who have manifested an inclination and aptitude for a scientific career. To use his own words:—

"Several liberal careers are organised in France, and lead to a regular advancement, while scientific careers offer nothing but an uncertain future to those who pursue them, the young man led on by his taste for science almost always meeting with difficulties of all kinds at the commencement. In order to retain for the cultivation of science those who, for this reason, are obliged to abandon it, and thus to stimulate the great industrial discoveries which are never otherwise than the consequences of the labours of pure and abstract science, it is essential that a regular scientific career should be established, independently of the rare opportunities furnished by vacant Professorships. With this view I ask for the institution of sixty places, which shall be bestowed upon persons who cultivate the mathematical, physical, and natural sciences with most distinction, the advancement of science by their labours being the mission of the *savants* who may succeed in obtaining those positions. They may be distributed into three classes, accordingly as they receive 6000, 4000, or 2000 francs per annum. Altogether, the almost insignificant sum of 240,000 francs will be required, while the glory to the country and utility for all which its expenditure may entail are incalculable."

It seems that Professor Frémy has not confined himself to mere suggestions, for during the three last years he has thrown open his laboratory at the Museum to young chemists who were desirous of ascertaining their aptitude before entering definitively on their career. The results have surpassed his hopes; for several of these young men have presented works of importance to the Academy; and they constitute a sort of seminary, whence the science of the future may select its votaries. Still, for the accomplishment of what he has in view, M. Frémy finds that his own resources are quite inadequate, and he calls upon the Government to come to his aid; and so enlightened is the French Government with respect to its duties in regard to requirements of this description, that it is highly probable his appeal may not be made in vain. Would that we could predicate as much with regard to ourselves! And yet our position is no less pressing in this matter. Are there not amongst us abundant talent and energy willing to devote themselves to the pursuit of science, even for a very moderate remuneration, did channels for their operation exist? And, were such means rendered accessible, much that we have now to seek for from the learned leisure of Germany would spring up amongst ourselves. Who that knows what is going on but must have often cause to regret the diversion of rare talent for research and power of exposition into the most commonplace means of maintaining an existence?

At the last sitting of the Académie de Médecine, M. Béclard read a report on the memoir on "Respiratory Therapeutics" submitted to that body by M. Sales-Girons. As our readers are aware, this Physician claims for his mode of introducing pulverised fluids into the air-passages not only the power of acting locally upon the air-passages in pulmonary affections, but also as being a means of introducing medicinal substances into the economy of superior efficacy to the ordinary mode of gastric ingestion. M. Béclard at once admits that the physiological possibility of such introduction has been completely made out by M. Demarquay's and the author's observations. Indeed, the absorbent power of the pulmonary mucous membrane is remarkable for its rapidity. Twenty-five litres of water may be thrown into the bronchi of a horse in six hours, and become immediately absorbed, without occasioning any sensible inconvenience to the animal. In less than half a minute, all the mass of the blood passes, so to express it, globule by globule through the substance of this tissue of such an admirable tenuity, so that the absorbable matter is brought into rapid contact with all the elements of the fluid. Of the superiority in rapidity of absorption of the pulmonary to the gastro-intestinal surface there can be then no doubt, and such absorption is compatible with the physiological action of respiration. At present the reporter regards the physiological aspect of the question as all that has been proved, M. Sales-Girons' observations upon the applicability of medicinal agents and their dosage being at present too few, and standing in need of confirmation. M. Durand-Fardel, while admitting that pulverised fluids are of considerable utility in diseases of the throat and larynx, doubts whether they possess an equal efficacy in affections of the bronchi, while in most of the maladies in which they are useful they do not possess any superiority over gaseous or vaporised inhalations. M. Guérin, commenting upon the discussion, observes that the fact should not be lost sight of that during the inhalation of pulverised fluids considerable oppression is sometimes felt—in fact, the air loaded with pulverised fluids, being possessed of less tension than the surrounding atmosphere, may induce an afflux of blood to the surface of the bronchi, giving rise to hæmoptysis or other accidents in the predisposed.

PARLIAMENTARY.—SANITARY STATE OF HOLYHEAD—CHOLERINE AND CHOLERA-CONTAGIUM—INCREASED PAY OF ARMY MEDICAL OFFICERS—THE METROPOLITAN POOR BILL—QUALIFICATIONS OF DISPENSERS—THE APPOINTMENT OF MEDICAL OFFICERS BY COMPETITIVE EXAMINATION—THE DETERMINATION OF CONTRACTS WITH WORKHOUSE MEDICAL OFFICERS—RESIDENT MEDICAL OFFICERS—MR. RUSSELL GURNEY'S CRIMINAL LAW AMENDMEMT BILL.

In the House of Commons on Thursday, March 7, in answer to Mr. O. Stanley,

Mr. Walpole said the report of Dr. Buchanan to the Medical Department of the Privy Council upon the sanitary state of Holyhead would be published in the report of that Department, and need not, therefore, be printed separately.

Sir J. C. Jervoise asked the Secretary of State for the Home Department whether the statement in the weekly report of the Registrar-General, November 17, 1866, that Dr. Frankland had investigated some of the physical properties of cholera-stuff (cholerine) was exactly true; and whether it was the intention of her Majesty's Government to introduce any measure tending to obviate the loss, alarm, and injustice consequent on the theory of the infectious nature of certain diseases, when unsupported by demonstration.

Mr. Walpole would not undertake to say whether Dr. Frankland's report was scientifically true, but he had been informed by the Registrar-General that it having been made by a very eminent chemist, he published it in an appendix to his weekly return, believing it to be a very valuable document, and tending to put the public on their guard in dealing with what were supposed to be cholera cases. He was not aware of any bill on the subject which it might be advisable for the Government at present to introduce.

Sir J. C. Jervoise asked the Vice-President of the Committee of Council on Education whether his attention had been called to the report of the Medical officer of the Privy Council (1866), in which he states, pp. 39-40, the mode in which cholera contagium is generated; whether the discoverer has divulged his method of obtaining this deadly agent; and, if not, why not; and whether the annual report of the Medical officer, which was not accessible to members till towards the end of July in the last, will be so at an early period of this session.

Mr. Corry said the statement referred to was not due to any single discoverer, but was the result of scientific investigation by many competent authorities. With regard to the annual report, a great deal of extra labour had been cast upon the Medical officer by the cholera outbreak of last summer, and he could not, therefore, hold out the expectation that it would be presented much earlier than it was last year.

In moving the Army Estimates, General Peel stated that the warrant for increasing the pay of the Medical officers of the

army, of which he said he highly approved, would add £18,000 to the estimates.

On Friday, March 8, the House went into committee on the Metropolis Poor Bill, Mr. Dodson in the chair.

The first four clauses were agreed to. A discussion took place on Clause No. 5, relating to the provision of district asylums, but it was ultimately agreed to.

An amendment moved by Mr. Chambers on Clause 9 was directed against the "nominated" managers of the Workhouse Hospitals, and proposed to substitute "elected" members for them. Several members supported the amendment on the ground that the introduction of nominated managers cast a reflection on the guardians. The amendment was opposed by Mr. Hardy, and on a division was rejected by 115 to 10.

Mr. Vanderbyl moved an amendment to the effect that the Medical officers should be members of the board, without power of voting.

The amendment was supported by Earl Grosvenor, Colonel Hogg, Mr. Ayrton, Mr. Villiers, and Dr. Brady. It was opposed by Sir H. Verney and Mr. Hankey.

Mr. Hardy objected to the amendment on the ground that it would place the Medical men in a false position.

The amendment was then negatived without a division, and the clause was agreed to, and added to the Bill.

Clauses 10 to 30, inclusive, having been agreed to, the House resumed, and the Chairman reported progress.

On Monday, March 11,

The House resolved into committee, and resumed the consideration of the clauses of the Bill.

On Clause 42,

Mr. Vanderbyl thought that the words "proper persons" did not give sufficient guarantee that the dispensers of medicine selected would be fully qualified for the performance of their duties, and he therefore moved the insertion of the following words in their stead:—"Persons on the Medical Register, or duly certified as competent under the provisions of the Pharmacy Act of 1852, or the Apothecaries' Act of 1815."

Mr. Hardy was as fully impressed as was the hon. member with the importance of appointing only properly qualified men to the office of dispensers. Instead of the hon. member's amendment, however, he thought it would be better, by inserting the word "qualifications" a little lower down in the clause, to bring that subject under the cognisance and supervision of the Poor-law Board.

Dr. Brady supported the proposal made by the right hon. gentleman the President of the Poor-law Board.

Mr. Gilpin also thought that the object which the hon. member for Bridgewater sought to attain would be secured by the proposal of the right hon. gentleman.

Mr. T. Cave supported the amendment of the hon. member for Bridgewater, because he thought that such an opportunity of giving the pharmaceutical chemists of England that status to which from their education they were entitled, and which they found no difficulty in obtaining on the Continent, ought not to be lost.

Sir J. Simeon was of opinion that their object was not to establish the status of any particular class, but merely to provide a good safeguard, and that he believed would be attained by the proposal of the right hon. gentleman the President of the Poor-law Board.

The amendment was then negatived, and the word "qualifications," as suggested by Mr. Hardy, was inserted. The clause as amended was then agreed to.

On Clause 43,

Mr. Alderman Lusk proposed the omission of the words "in receipt of relief," the effect of which would be that medicine and Medical assistance might be claimed by the poor indiscriminately if they required them.

Mr. Alderman Lawrence hoped the clause would be rendered more clear. Undoubtedly parties might receive Medical relief from the parish Doctors or Dispensaries without being in the receipt of other relief from the parish.

Mr. Hardy said the clause merely provided that those coming to the Dispensaries as paupers were to have medicines dispensed to them on prescription.

Mr. Alderman Lusk suggested that the words "such of the poor as require relief" should be substituted for "in receipt of relief."

After a short conversation, in which Mr. T. Chambers, Mr. Villiers, Lord Edward Howard, Mr. Neate, and Mr. Locke took part,

Mr. Hardy proposed the words "entitled to," instead of "in receipt of," which were agreed to, and the clause, as amended, was ordered to stand part of the Bill.

On Clause 45, relating to the appointment of Medical officers,

Mr. J. S. Mill said he had ventured on a former clause to make some suggestions which had been received very courteously, and he was now going to make two other suggestions which were not new, but had been frequently made by perhaps the highest authority on the subject, Mr. Chadwick, the only surviving member of the Royal Commission which drew up the Poor-law. That Commission was one of the most enlightened and able that ever sat, and, so long ago as 1834, proposed principles on the subject of education, which Parliament, being afraid of doing too many good deeds at once, left for adoption by generations to come. He regretted Mr. Chadwick was not himself a member of that House; there was scarcely any one whose services would be more valuable on many points of administrative improvement. The first suggestion he had to offer was this—if they wished the poor to be effectually taken care of, the Medical officers appointed should not be in private practice. It was not to be expected in the ordinary run of human affairs that public duty would not be neglected for private practice. It was eminently honourable to the Profession that public duties were so well attended to as they were; but Medical officers should be under no temptation to postpone their public duties to private practice. This Bill transferred the appointment of Medical officers from the local authorities to the Poor-law Board, but he thought it would be better to adopt a system similar to that which existed in Paris with respect to Medical officers in Hospitals. He would suggest, therefore, that the Colleges of Physicians and Surgeons, in conjunction with the Civil Service Commissioners, should frame a system of competitive examinations for the purpose of testing the fitness of Poor-law Medical officers. It was clear that the House was not at present prepared to adopt this suggestion, but he laid it before the House and the right hon. gentleman, in the hope that it might be taken into consideration on some future occasion.

In reply to the Chairman,

Mr. Mill said he did not move any amendment on the subject.

Mr. Hardy said the hon. gentleman was wrong in supposing that the appointment of Medical officers was to be vested in the Poor-law Board. They were, on the contrary, to be appointed by the Dispensary Committee. He did not think that in the country it would be possible to get men to take the duty if they were prohibited from having a private practice as well. (Hear, hear.) In the metropolis they had been obliged to give up all private practice in certain cases, where sufficient employment was given to them in connexion with the Poor-law. It was true that some instances had come under his notice where Medical men having very urgent cases in connexion with the Poor-law Board had not given them that preference which they ought to have done, considering that they were receiving a regular salary for their services to the poor. At the same time, he was bound to remark that in many cases the salaries were so small that the Medical officers could not be much blamed for endeavouring to get money from other sources. The second suggestion of the hon. member was one which he could not discuss on this Bill. He had had no experience of competitive examination of Medical men, and did not believe it had ever been tried in this country. He could not, therefore, say that he should be prepared to give in his adhesion to such a system. Under the existing system, if complaints were made to the Poor-law Board, they were always attended to, and rigorous measures were taken in cases where these had been neglected. In his opinion the present checks were sufficient.

Mr. Brady disapproved the suggestion of the hon. member for Westminster respecting competitive examinations.

Mr. Mill remarked that if his suggestion were acted upon it would necessarily involve a large increase in the salaries of the Medical officers, but money could not be more beneficially expended than in obtaining for the poor the best possible Medical attendance.

The clause was then agreed to.

Clauses 46, 47, and 48 were respectively agreed to.

After some discussion clauses up to 59 were agreed to with verbal alterations.

On clause 59, relating to the determination or variation of contracts with Workhouse Medical officers,

Mr. Neate asked what was to be the basis of compensation in cases where, for instance, the Board might appoint a resident Medical officer in place of an out-door Medical attendant.

Mr. Mill said the clause, as he understood it, would empower the Poor-law Board to dismiss the officers of any Poor-law district, though those gentlemen had hitherto held office for life, except in case of misconduct. Whatever the confidence which those officers felt in the right hon. gentleman, they did not like to be in the power absolutely of an unlimited line of his successors. They would accordingly be very glad if the right hon. gentleman would either sanction an appeal or a reference to arbitration, so that they might not be at the mercy or discretion of a single officer.

Mr. Hardy said it would obviously be necessary, in case great changes took place under this Bill, to have the power of dealing with gentlemen already in possession of office and emoluments. Many Medical men had distinct contracts, and in their cases compensation must, of course, be calculated according to the terms of their contracts. Many of them, however, who were in the enjoyment of private practice, would, of course, be unwilling to take the position of resident Medical officer to the asylum or workhouse infirmary, and this clause had been drawn with the simple object of doing them justice. For what the hon. member had been good enough to say of him he felt obliged, but he trusted that any one hereafter occupying the same official position would be equally ready and anxious to do justice; remembering, also, that for every act he was responsible to that House. Had any hon. member suggested that the Poor-law Board should be relieved of this responsibility, he should have been willing to entertain the suggestion; but the Bill had now been a considerable time before the House and the public, no such amendment had been suggested, and he therefore felt bound to accept the responsibility.

In reply to Mr. Gilpin,

Mr. Hardy said it was intended that the resident Medical officer should not be one of the highest class, but capable of attending cases as they came in, while the infirmaries would still be under the supervision of one having the highest Professional knowledge; in fact, it was intended to copy the plan pursued in Hospitals.

The clause was then agreed to.

After a considerable discussion, the other clauses and the preamble of the Bill were agreed to, the Committee rejecting, by 92 to 27, a proposal to omit Clause 79, which gives the Poor-law Board power to nominate a certain number of guardians.

On Wednesday,

Some progress was made in Committee with Mr. R. Gurney's Criminal Law Bill. A few unimportant amendments were made in it, a motion by Mr. Hunt to omit the clause which empowers judges in certain cases to pay the expenses of witnesses for the defence being rejected by 93 to 64.

The amendments in the Metropolitan Poor-law Bill were considered, and the Bill was ordered to be read a third time to-day.

LOCAL ANÆSTHESIA AND THE ROYAL SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS.

We announced several months ago that Dr. Richardson's method of producing local anæsthesia by ether spray had been applied with remarkable success for the performance of painless Surgical operations on the horse and on other of the inferior animals. In accordance with its legitimate function as a public body, the Royal Society for the Prevention of Cruelty to Animals has, we are glad to see, considered the subject worthy of its serious consideration. On Tuesday last Dr. Richardson met the committee of the Society by appointment, and after demonstrating local anæsthesia and performing experiments on himself, Dr. Sedgwick, and Dr. Fraser, proceeded to read a report on the operations which had been painlessly conducted on the horse and on other of the inferior animals. The operations of nerving, of firing, of removing tumours, of castration, and of applying caustics to open and irritable surfaces, were all, the author showed, easily and readily performed under local anæsthesia; indeed, he maintained that if the members of the community demand it, every animal so valuable to man as to be considered the proper subject for a Surgical operation may now be subjected to such operation without any physical suffering. A very interesting point was also brought forward by Dr. Richardson, having reference to the degrees of common sensibility possessed by different animals, as shown by the readiness with which their sensibility was capable of extinction on one uniform process of experiment. It was explained that no two animals possess the same degree of sensibility, and that no animal has so distinct and high a degree of sensibility as man. After man, the horse, amongst the domestic animals, is most endowed, and after the horse, the dog and the guinea pig. Rabbits have a low sensibility. Descending to animals much lower in the scale of creation—viz., to frogs and leeches—the diminution of sense power is so marked that hardly a comparison can be instituted between them and man. Professor Tuson, of the Royal Veterinary College, having been called upon by the chairman, gave striking and valuable corroborative evidence of the complete success of the local anæsthetic process in cases of firing. He had seen as many as forty lines cut in the leg of the horse with the actual cautery, without any indication of pain. He believed that in veterinary Surgery the use of the ether spray was not only a means of preventing pain, but an economy to the operator. At the close of the debate, in which Dr. Sedgwick, Dr. Fraser, Mr. Gurney, Mr. Cook, Mr. Mackinnon, M.P., Mr. Colam, and others took part, Dr. Richardson was unanimously requested to allow his report to be printed; and the request having been responded to affirmatively, the committee resolved to publish and circulate two thousand copies forthwith.

THE CHOLERA AT JERSEY.

(From our own Correspondent.)

March 6.

Herewith I send you a tabular statement of *all* the cases of so-called *cholera* which have occurred from the outbreak till the 4th inst., when the last report was issued. I say *so-called cholera*, because the members composing the Medical Board mixed up all cases of bilious fever, diarrhœa, and cholera together. They failed to draw the line between the two latter. You will, I think, agree with me that we have been singularly fortunate (if it be *genuine Asiatic cholera*) to have lost only fifty-two by death from February 6 to March 5. Its principal victims were drunkards, and many children were carried off. As to the question of propagation, it seems in one locality to have been spread by the circumstance of the graves in the Strangers' Burial-ground having been disturbed during the soft, warm, damp weather which then prevailed; and in another to have been dependent upon the water in a pump being strongly impregnated with animal matter from sewage. What favours the latter supposition is, that as soon as the pump was locked up by the authorities and no longer used, the disease ceased *at once*. As regards treatment, the castor-oil plan was tried, and failed. A mixture of sulphuric acid with the oils of anise, cajaput, and juniper, with tincture of cinnamon, seems to have been useful. I am not aware that there was evidence of spasm of the pulmonary artery. In one case of post-mortem examination the intestines were found filled with rice-water discharge, and in another well-marked case nothing of the kind was found; but the intestinal canal was *quite empty*.

Returns of Cholera in Jersey, 1867.

From February 6 to February 19, 80 cases had occurred—43 were under treatment, 2 had recovered, 35 had died.

	February							March			
	20.	21.	22.	23.	25 & 26.	27.	28.	1.	2.	3 & 4.	5.
Remaining under treatment	43	52	47	29	24	24	19	18	16	14	4
Fresh cases	13	8	7	7	7	3	1	2	1	1	—
Recovered	1	9	23	10	4	8	2	2	2	10	—
Died	3	4	2	2	2	0	0	2	1	1	—
Remaining under treatment	52	47	29	24	24	19	18	16	14	4	—

THE UNIVERSITY OF ABERDEEN AS A SCHOOL OF MEDICINE.

(*From a Correspondent.*)

The (comparatively speaking) small city of Aberdeen until a few years ago presented the anomaly of possessing two distinct Universities and two distinct Schools of Arts, Law, and Medicine; but these have been amalgamated since 1860. The older of the two was the University and King's College of Aberdeen, constituted by a Papal bull in 1494, although probably founded as far back as 1157. When its constitution was fixed in 1494 by Bishop Elphinstone, one of its officers was appointed to be a "Mediciner," and he alone might be a layman. This Mediciner's functions would at first seem rather to have been those of attending to the bodily ailments of the community than of giving instruction; but in later years, when the office came to be filled by men like the Gregorys, who devoted their attention chiefly to natural science as a means of instruction, it became identical with that of Professor of Chemistry. Marischal College was founded at a later date, but was the first to institute anything like a regular School of Medicine, though the earliest origin of such a school may be said in reality to date from the opening of the Infirmary in 1742. In 1789 the students of Medicine who were studying under various private Practitioners in the city of Aberdeen formed themselves into a body which they called the "Medico-Chirurgical Society," and by this a great amount of good was done, the late Sir James McGrigor, long at the head of the Army Medical Department, being one of the chief promoters of the scheme. In 1802 a small anatomical theatre was erected in the court-yard of Marischal College, but no very systematic instruction was given until 1818, when the two colleges united in constituting a complete School of Medicine, the patronage of the lectureships being held jointly and exercised alternately by the two bodies. The site of this school was in Marischal College; but disagreements soon followed, and the authorities of King's College broke up the arrangement, and erected a school for themselves. This occurred in 1839, at which date there were four professorships in Marischal College—viz., those of Medicine, Chemistry, Anatomy, and Surgery, the rest of the teaching staff having no seat in the Senatus Academicus. In the King's College school there was but one Professor, the "Mediciner" before mentioned, the rest of the teaching being chiefly accomplished by lecturers.

This state of things continued until the amalgamation of the two Universities, which, however much opposed as to the Faculties of Arts, was gladly welcomed by those who wished well to the Medical School of Aberdeen. Previous to the date of this union (1860) both teachers and taught had no ordinary difficulties to contend with; there was a want of funds, the classes were small, and the lecturers could not well afford to lay out money on specimens and apparatus. Not that this was left undone; to their praise be it spoken, they spared not the miserable pittance they received for their hard work, in order that the students under them might benefit. But with the union of the two schools a new era dawned—the class-rooms formerly employed were mostly abandoned for larger, airier, more cheerful, and far healthier ones; whilst the united funds of the two Colleges and Government aid enabled them to provide for the proper illustration of the lectures. Another change for the better was the abolition of lectureships and the raising of all the teachers to the same rank as Professors. One great bane of a University having power to grant degrees in Medicine, but possessing no Medical School attached to it, is the tendency to grant such degrees to men who have never resided in *any* University. Fortunately, we may say that this, so far as a Scotch University is concerned, is now almost among the things of the past, the only exception being St. Andrew's which, with certain limitations, is empowered to confer ten such degrees annually. We must confess that degrees were also granted at Aberdeen without any residence; but some years before the junction of the two, Marischal College had ceased to give a degree in Medicine to any one who had not resided six months within the University, and we need hardly say that since 1860 the power of doing otherwise has been entirely withdrawn. By ordinance of the Commissioners appointed to settle the affairs of the new University, all students who had begun to study Medicine at a regular school before 1861 may obtain their degree of M.D. by residing one session in the University, and passing the proper examinations. All, however, who have begun after that date must reside two sessions in a University, one of these being that of Aberdeen, and pass the proper examinations. Owing, however, to a peculiarity in the arrangement of the classes in Aberdeen, we understand that the two sessions may be accomplished in a shorter time than in any other Scottish University, even in the case of those who began their studies after November, 1861. This is a great advantage for those gentlemen who, having spent a certain amount of time in a metropolitan school, are anxious to obtain their Doctorate in the shortest possible period.

But it must not be supposed that, if the regulations as to residence are rendered as easy as possible, the student will have nothing more to do than to go through the requisite number of courses, after which he may safely present himself before his examiners without the slightest danger of being "plucked." Such is very far from being the case. The examination is as stiff as any with which we are acquainted, and certainly no one can append the mystic letters to his name without showing good cause why he should do so.

As now wrought, the course of study is very similar to that adopted in the other Medical schools of the kingdom, but most of the students have a great advantage from the very outset of their career — they have gone through, as a branch of preliminary training, a portion at least of the Arts curriculum, not a few having taken their degree of M.A., implying a course of four years' duration. The benefits derived from the training which turns out so many senior wranglers cannot be overestimated: the students come to the study of Medicine with minds already well used to exertion, and accustomed to intellectual research, and the more distinguished the Arts student is, the greater is his chance of succeeding in Medicine, although it by no means follows that a man who has not distinguished himself in his literary studies will not do so when his attention is directed to purely Professional matters. As in all other Medical schools in Scotland, the curriculum consists of four years' study, the student's attention being in that period directed partly to the theoretical and partly to the practical branches of Medical science; but it is chiefly in the former department that this school excels. We do not say that the teaching in the latter is inferior to what may be obtained elsewhere, but as the Hospital is of comparatively limited resources in the way of practical Surgery and Medicine, every student has not the advantage of learning Surgical dressing as it may be acquired in some of the large metropolitan Hospitals. That the means at their disposal are utilised to their fullest extent the names of Dr. Keith and Professor Pirrie, the two teachers of clinical Surgery, are sufficient guarantees. Again, in the department of practical anatomy, since it was presided over by Professor Struthers, there is an abundant supply of subjects for dissection; and there is always enough of these to enable the work of the class to go on satisfactorily—greater obstacles probably lying in the Professor's peculiar ideas leading him to believe that students best learn anatomy by dissection without the aid of lectures. Other grievances complained of are the want of the old demonstrations in the afternoon, and difficulties in the way of access to the dissecting-rooms. With these exceptions, which

we doubt not will soon be remedied as far as they can be, we have nothing to say of the school that is not in terms of the highest approbation. The number of students being comparatively small (140-150), the classes are never unmanageable, and by frequent examinations, which are the rule about the place, each Professor is enabled to become acquainted with the capabilities and acquirements of each of his pupils—no small advantage. This combination of the tutorial with the lecturing system is, we think, the great secret of the success which attends the labours of the Professors (shown by the high places their pupils take in every competition they enter upon), who, being also subsidised by Government, and having their class expenses paid from the common funds of the University, are thus encouraged to devote more of their time to scholastic duties than are the poorly paid teachers of the south.

Attendance on the lectures, which are delivered daily, is strictly enforced, so that the student, if he pay any attention at all, cannot fail to pick up a great deal of knowledge during the course of five months, which is the time the session lasts. But the extent of this knowledge is further gauged by examinations, usually weekly, when the student is again shown the specimens and diagrams used to illustrate the lectures, and the Professor has an opportunity of correcting any erroneous impressions which may have been left on the minds of his pupils, and of making his meaning clearer to all. The plan has additional advantages, for as the Professors are also examiners for degrees, they have an opportunity of ascertaining exactly what each man who comes before them knows, even before he presents himself for formal examination; and as many hard-working and well-informed men are apt to be flurried on such occasions, the examiner is able to judge more correctly than if the man had come before him for the first time. If, on the other hand, a trifling student give an impression to his teacher that he knows little, but by sheer hard work has been able to make himself well prepared for the passing examination, examiners having nothing to do with the University are appointed to look after his interests. The examinations for degrees are held twice a year, at the end of each session, and, as the subjects are divided into three sets, the students are enabled, by devoting their attention specially to these, to pass far more difficult examinations than by taking them all in a lump, and that they are stiff no one who has gone through them will deny.

In most of the classes prizes are offered for competition among the students, who enter into this with great zest. The plan usually adopted for their award is a very good one: three, four, or more *written* examinations are held during the session, each on a particular branch of the subject taught in the class, and the total value of the marks made by any one student being compared with those of another, the prize is thus decided, and, generally speaking, the individual thus fixed on is the one on whom the prize would be conferred were it given by the votes of his class-fellows.

So much for a general sketch of the mode of instruction adopted in Aberdeen. Were we to enter into the subject at full length, it would greatly exceed our limits; neither can we enter upon the invidious task of saying who is the best *teacher*, where all are pre-eminently good. Suffice it to say, that the University which turned out Arbuthnot, the Gregorys, Fordyce, and, in more recent days, Sir James McGrigor, Sir John Forbes, Sir James Clarke, and Dr. Neil Arnott, is not badly represented by such men as Pirrie and Ogston, whose names are well known to all who cultivate Medical Science.

Dr. Arthur Gamgee has been elected a Fellow of the Royal Society of Edinburgh, and has received a grant from the Royal Society of London for the prosecution of his scientific researches.

RÉSUMÉ OF THE GULSTONIAN LECTURES

by REGINALD SOUTHEY, M.D. Oxon, F.R.C.P.

Resuming his comments on scrofula, Dr. Southey remarked that it attacked three gland tracts in an especial manner, the cervical, the bronchial, and the mesenteric; two it rarely if ever affected—viz., the inguinal and axillary. The glandular tumour which is formed originates by a local irritation, and in it are contained well-marked scrofulous cells, which, however, are extremely perishable. As in the glandular affections of typhoid, the tumour is an enlargement of a normally existing part. When the cervical glands are affected, Dr. Southey remarked that this was always supposed to be owing to *scrofula*, but when the mesenteric and bronchial tracts become affected, then the substance was termed tubercle. When any disease attacks the apex of the lungs, it is immediately supposed to be tubercle; in reality it is often a scrofulous affection, and the so-called tubercles found there are no more than catarrhal concretions in the air-cells of the lung. Why the apex of the lung is so liable to these may be understood by studying its anatomy. The air-cells are larger than in the lower part of the lung, therefore they will probably more readily retain the catarrhal deposit; the bulk of the lung substance, too, is but small compared with the surrounding walls, therefore it will be more liable to be affected by adhesions of the pleura. These and some other causes, of course, interfere with the resolution of the morbid products—a condition naturally aggravated by further impediments offered to the movements of respiration when the chest is badly formed. Altogether, the distinctions between scrofula and tuberculosis are well marked. Scrofula is very chronic in its course, often lasting a lifetime. Tuberculosis is much more speedy. In the one there is but little fever; in the other there is often much, so that it may be taken for typhoid fever. In scrofula the whole system is sluggish; there is no strength of body, impressions are but feebly resisted, and all changes are slow. In tubercle the blood is greatly at fault; the muscles are feeble, dark, and filled with serum; the skin is dry and hot, and there is a distinct formation of new growths. The effect of remedies also marks a difference in scrofula, and extirpation of the glands so as not to affect the system should be adopted; in tubercle the treatment is little more than palliative, iron only determining congestion, the great thing to be avoided—in short, scarcely anything can be done beyond securing euthanasia. To complicate the diagnosis, scrofulous people often become tuberculous, as there is always a tendency to tubercle when the system is weakened. Speaking of tuberculosis, there may be either a congenital proclivity towards it, or it may be acquired, and the acquisition of the disease is better certified as regards tubercle than respecting scrofula. When sudden in its onset, the signs of tubercle may be very puzzling—there may be rigors, high temperature, sudamina, enlarged spleen, foul tongue, and many other marks of fever; but this disease may be distinguished from typhoid in as far as the bowels are usually confined. If ulceration takes place, it is general, not limited to Peyer's patches; the delirium is rarely high, there is little tendency to bed-sores, and there is not that complete prostration seen in fever. Sometimes tuberculosis is an almost epidemic disease, and it then appears to be readily excited by sudden change of habits or by bad hygienic arrangements, but weakly subjects are most prone to it. As tubercle tends to limit its own propagation by causing the early death of its subjects, there must be continually some cause or other of its renewal, seeing that it is gradually extending rather than declining in its ravages.

The first indication of tubercle is a local irritation—Virchow's "*reiz.*" For some sites it has a peculiar proclivity, in others it is rarely, if ever, found; but wherever it is found it tends to spread and to disseminate itself in other organs. As urea is retained in the system towards the end of fevers, this might have something to do with the origin and spread of tubercle; but the matter is altogether uncertain. At all events, there are some therapeutical applications of the above doctrines, especially the desirability of limiting or allaying local irritation in any subject prone to the formation of tubercle, wherever possible, the excision of the part where tubercle is first developed before by its spread it can implicate surrounding organs, and the diminution of general irritability by change of climate to a place where extremes of temperature are at a

minimum. Cold and dry climates may do good in scrofula; in tubercle they can only do harm.

We might sum up by saying that the great end and aim of these lectures was the importance of dissociating scrofula from tuberculosis, in which we think Dr. Southey has very fairly succeeded.

THE CROONIAN LECTURES AT THE ROYAL COLLEGE OF PHYSICIANS.

By Dr. ANDREW CLARK.

The lecturer began by saying that, though the scientific sin chiefly prevalent among us in these days was the reproduction of old ideas under the guise of a new and often specious terminology, we were not free from the opposite sin, which, though honester in character, was not less injurious in its results. This was the repression and concealment of new ideas under the cloak of an antiquated and sometimes absurd phraseology. Neuralgia, rheumatism, gout, epilepsy, apoplexy, and Bright's disease, were adduced as examples of terms involving the most diverse dynamic disturbances or organic states. So it was with the term chronic pulmonary phthisis, which, though comprehending various pathological states of lung, was commonly referred to one or, at most, two anatomical elements. The results of this mode of viewing the subject were shown to be disastrous alike to the science and art of Medicine. The lecturer then enumerated and illustrated the following causes of this confusion :—1. Symptoms of damage to an organ are often more allied to disturbance of function than to the nature of the disturbing cause. 2. Our still imperfect pathological knowledge. 3. The fact that like pathological products are often brought about by unlike causes, and that changes apparently similar to the naked eye are found quite dissimilar when examined by the microscope. 4. The effect of prevailing theories influencing our perceptions to see, and our judgment to require, only what was in unison with them. More accurate views of the pathological anatomy of phthisis were now dawning upon us, and the way to these had been opened by the labours of Addison, Williams, Peacock, Bennett, Wilks, Cotton, Stone, Sutton, and Greenhow. The light which Germany boasted to have thrown upon the changes undergone by the lung in phthisis, Dr. Clark declared to be light borrowed from England and transmitted back to us through a different and less transparent medium. He referred at length to the part which inflammation plays in the destruction of the phthisical lung, and gave the honour of this discovery to Addison of Guy's. Dr. Clark next alluded to the famous "cellular pathology" of Virchow, and endeavoured to prove that what was new, true, and valuable in it had long been anticipated by the genius and foresight of John Goodsir, whom death, with untimely hand, had taken from amongst us. Admitting Virchow to be endowed with a splendid and variously gifted mind, the lecturer averred that his faculties were not, as in a great Physician, so adjusted as to enable him to keep the exercise of imagination within the domain of objective reality—to see truth from every side, and to force it into fruitful application to the necessities of men.

The lecturer then proceeded to show that, in persons dying of chronic phthisis, different states of lung were found, each of which was characterised during life by a more or less distinctly marked group of symptoms. What, then, were these different states of lung found after death? What the group of symptoms by which during life these states were to be recognised? These questions were not yet wholly answered, and it was only by the careful collation and comparison of the results of clinical and pathological inquiry that such problems could be finally solved. Dr. Clark proposed on the present occasion to confine himself to such a description of the pathological states of lung commonly comprehended by the term phthisis as would serve for their distinction, and to avoid not only a very minute account of these states, but also historical and critical examination of others, except in so far as might be necessary to attack a flagrant error or defend a cardinal truth. He proposed to speak chiefly from his personal experience, as in part expressed by his collection of specimens shortly to be placed in the College Museum. He then proceeded to map out the distinctive states of lung occurring in phthisis, and explained his reasons for declining at present to introduce a new nomenclature. After a few clinical sketches of the leading types of phthisis, the lecture concluded with a description and explanation of the table subjoined.

Provisional Arrangement of the Varieties of Chronic Pulmonary Phthisis.

Name.	Chief Anatomical Characters.
1. Tubercular, granular, or specific phthisis.	The true grey granulation : Pigmentary tubercle. Fibrous tubercle. Cellular tubercle ?
2. Scrofulous or epithelial phthisis.	Primitive yellow tubercle : accumulation, cheesy degeneration, and disintegration of epithelium-like cells.
3. Catarrhal or bronchial phthisis.	Ulceration of bronchi, with adjacent fibroid and cellular deposits, and cheesy degeneration of the same.
4. Pneumonic phthisis.	Disintegration of recent or old deposits occurring in vesicular, lobular, or lobar pneumonia—primary or secondary, common or scrofulous.
5. Fibrous phthisis (cirrhosis : chronic or interstitial pneumonia).	Fibroid deposits, with cheesy degeneration of imprisoned portions of lung due to (*a*) mechanical irritation (as in grinders, masons, miners, etc.) ; (*b*) rheumatic inflammation of interlobular tissue ; (*c*) chronic pleurisy ; (*d*) constitutional states, as in granular kidney and liver.
6. Amyloid phthisis.	Circumscribed or diffuse cellular formations infiltrated with amyloid material.
7. Syphilitic phthisis.	Cheesy degeneration of nodules of nucleo-fibrous tissue, and diffuse infiltrations of the same.
8. Hæmorrhagic phthisis.	Cheesy degeneration and disintegration of nodules of extravasated blood.
9. Embolic phthisis (including pyæmic deposits and suppurations).	Cheesy degeneration and disintegration of grey or yellow deposits arising directly or indirectly from pulmonary emboli coming from the liver, lymphatic glands, or veins.

REVIEWS.

The Use of the Laryngoscope in Diseases of the Throat ; with an Appendix on Rhinoscopy. By Morell Mackenzie, M.D. Lond., etc., Assistant-Physician to the London Hospital. Second edition, revised and enlarged. London : Hardwicke. 1866. Pp. 156.

It is always satisfactory to the Profession to find that new, and so-called "special," means of diagnosis and treatment are taken up by men who have a thorough insight into the whole circle of professional knowledge, and who, consequently, are not prone to that constant harping on one string, and abuse of one set of local remedies, which are the alleged vices of specialists. Dr. Morell Mackenzie evidently, like Dr. George Johnson, treats the laryngoscope as an instrument with which every Practitioner may be as familiar as with the stethoscope, and quotes emphatically Dr. Johnson's caution against excess. "I feel it a duty to remark," with Dr. Johnson, "upon the possibility that the larynx may get too much of local treatment. The laryngoscope has brought this organ so completely within our reach that we are all exposed to the temptation of being too meddlesome." Would that that much-suffering organ, the uterus, had received such consideration as these gentlemen bestow on the larynx !

As this is a second edition, we need only say that the work contains eight chapters on laryngoscopy, followed by one on rhinoscopy. The first treats of the history; the second describes the instruments ; the third shows how to use them ; the fourth describes the healthy larynx ; the fifth treats of some accessories of laryngoscopy, and auto-laryngoscopy ; the sixth shows the application of remedies, including galvanism ; the seventh deals with operations, such as scarifications and

removal of tumours; the eighth gives some concluding remarks on manipulation. The work is full of cases and thoroughly well illustrated by wood engravings.

As we read the history, beginning with the experiments of Levret, Bozzini, and Caignard de Latour—then the more deliberate attempts of Babington, Warden, and Avery—and, lastly, the successful efforts of Garcia, Türck, and Czermak,—then if we turn to Dr. Mackenzie's chapter on tumours of the larynx and their extirpation, and note the time when Ehrmann, of Strasbourg, who opened the larynx and extirpated tumours *directly*, was considered to have attained the *ne plus ultra* of laryngeal surgery, we shall be conscious of the great steps made in the last fifteen years and of the folly of pooh-poohing new attempts at physical diagnosis.

In this second edition we find a mode of using direct light for laryngoscopy which seems to be much in vogue in Paris. "A lamp provided with a lens is placed on a table so narrow that the laryngeal mirror can be used by a Practitioner on a patient sitting on the opposite side of the table. A shade screens the light from the observer's eyes, whose face, in this mode of examination, is close to the lamp. In applying remedies, the lamp is between the arms of the Practitioner, who, as it were, embraces it. Dr. Fauvel, of Paris, uses a table about three feet long and one foot broad, in three leaves; the centre leaf, on which a moderator lamp rests, can be screwed up and down to different heights for different patients. Dr. Krishaber, of the same city, employs a simple round table of small dimensions."—P. 43.

We observe that Dr. Mackenzie uses a reflecting mirror, after Czermak's fashion, in front of one of the eyes, and supports it by means of a spectacle frame, from which the upper halves of the eye-piece have been removed. The hole in the centre of the reflector is oblong, with its long axis corresponding to that of the eye. "A hole of this shape allows for the varying distance between the nose and eyes in different people, and for the varying position of the centre of the reflector in its different degrees of inclination."—P. 37. The directions for illumination seem full, and the description of the image in the laryngeal mirror, and its formation, is clear and useful. The instruments are well devised, uniform, and workmanlike. This second edition is evidently a complete work, bearing the stamp of original treatment, and we are glad to see that it is undergoing translation into French.

GENERAL CORRESPONDENCE.

BEEF-TEA, ESSENCE OF BEEF, ETC.

Letter from Dr. Druitt.

[To the Editor of the Medical Times and Gazette.]

Sir,—Five or six years ago (see *Medical Times and Gazette*, 186[illegible], Vol. I., pp. 536 and 587), I called the attention of the Obstetrical Society, and of your readers, to the importance of the liquid essence of beef, or, in other words, the juice of meat, as a partial substitute for brandy in those cases of nervous exhaustion which are benefited by strong stimulants, such as brandy, ammonia, camphor, valerian, and the like. Since that time the liquid essence, especially as manufactured by the Messrs. Brand, has been enormously used by the Profession, and its use is only limited by its price. I have in the same class of cases—viz., nervous exhaustion, despondency, tendency to alcoholic abuse, etc.—also largely used a preparation, which from its excellence, cheapness, and capability of keeping without damage, cannot be too highly spoken of—I mean "Gillon's Essence of Meat." Liebig's extract of meat, as sold by Van Abbott, Hooper, Allan and Co., is also admirable, and needs no praise from me.

The purport of my addressing you now is to call attention to the possibility of obtaining larger and more varied supplies, and of clearly defining the purpose of various preparations.

I see by the *Journal of the Society of Arts* that the Food Committee of that Society have had the good sense to call Dr. Thudichum to their aid, in order to enable them more precisely to distinguish the purposes of various preparations. Thus, "Liebig's Extract," Gillon's beef-tea, and that which I described as the "Essence," really belong to the variety of food called stimulant—*i.e.*, a rapidly acting transient remedy—scarcely satisfying the appetite, rather increasing it, and converting a painful craving neuralgia of the stomach into a pleasurable appetite. And here let me congratulate your readers on the prospect of having this invaluable stimulant, in a very short time, at a great reduction of price. Mr. Whitehead, of Australia, has been in correspondence with me for some years on the best mode of preparing beef-tea for exportation to England. After many trials he has succeeded in manufacturing an extract, each pound of which equals the soluble and sapid contents of 25 lbs. of beef; and this, by means of machinery, he can now sell at 6s. per lb.; half an ounce suffices for one pint of ordinary beef-tea. This is solid, and requires no *pots* to be carried in, which are always a nuisance; it does not harden, as the gelatinous preparations do, but is easily cut and dissolved. Mr. Whitehead has just arrived in England with his latest samples, and would be glad to submit them to any Medical authorities. If this turns out well, we have a great boon; if ill, the loss is his.

Whilst, however, we ought to have extracts or essences of beef, containing the soluble, stimulating, and comforting elements, for the appropriate cases, why should we not also have preparations containing something more nutritive? The very finest solid extract or essence I ever had made represents only 1½ per cent. of the beef; Liebig's extract represents 3⅛, and Whitehead's 4. But there are hosts of cases in which we should be glad of something more substantial; we want flesh and blood really, and not metaphorically; we want preparations embodying those constituents soluble in cold water but coagulated by heat. Mr. Bullock had, or has, a meat preparation of this sort. Dr. Hassall's useful flours of meat also find their place in this category. We want, however, for nutrition more than the 4 per cent.; there is room for preparations with the gelatinous constituents as well as without, and some with the finer parts of the meat embodied in them. I may trespass on your attention again next week on this subject if you allow me. I am, &c.

London, March 12. R. Druitt.

THE NAVAL MEDICAL WARRANT.

[To the Editor of the Medical Times and Gazette.]

Sir,—In last Friday's London *Gazette* I find the names of twelve Surgeons-Major who have been promoted to the rank of Deputy Inspector-General, and the names of three or four Deputy Inspectors-General who have been promoted to the rank of Inspector-General of Army Hospitals.

I very much dislike instituting comparisons between the two branches of the public service, but when I see the number of prizes increased in the one, I feel inclined to ask why the Naval service is not similarly favoured.

As far back as 1840 the Lords Commissioners of the Admiralty deemed it advisable to appoint officers of inspectorial rank, in the capacity of Surgeons, to flag-ships on foreign stations. Now, 5s. a day to a Surgeon in a similar position is considered an equivalent.

Witnesses of position and intelligence declared before Sir Alexander Milne's committee that increase in the inspectorial ranks by the appointment of Deputy Inspectors-General to all Naval Hospitals at home and abroad, and to flag-ships on foreign stations, was absolutely necessary to make the older class of Surgeons contented. Nevertheless, the committee paid no attention to this evidence—their recommendations do not touch it, and the consequence is that discontent prevails, candidates are discouraged, and the Naval Medical Service is at a discount. I am, &c.,

A Staff Surgeon, R.N.

A HEATED DISINFECTING CHAMBER.

Letter from Dr. J. W. Crane.

[To the Editor of the Medical Times and Gazette.]

Sir,—A year ago, while temporarily discharging the duties of Officer of Health in this town during the illness of Mr. Moore, I became strongly impressed with the inadequacy of the usual manner of disinfecting houses where contagious diseases had prevailed, in consequence of the difficulty of applying any really effectual disinfective process to the bed, etc., on which the patient had lain; which, after the house itself had been thoroughly cleansed and deodorised, continued to reek forth its emanations into the air. Mature consideration convinced me that there was no mode of obviating the difficulty so little troublesome, so speedy, and so effectual as exposing the articles in question to a high degree of heat; and, acting on this conviction, I recommended to the Local Board of Health the

erection of a chamber sufficiently lofty and capacious for the object in view, and capable (if required) of being heated to a temperature of 300° Fahrenheit. The Board, having, to their honour, always been distinguished for their zeal in sanitary matters, and solicitous for the adoption of any useful improvement, brought the matter before the Town Council, who assented to the proposal, and requested me to make inquiries and take the necessary steps for carrying the proposal into effect. I at once proceeded to do so, but could not learn that any building of a similar character existed in the kingdom, although I was informed that ovens were in use in several places for the destruction of pediculi and their ova, but that they were incapable of being heated to the degree of temperature which I had proposed. Being thus thrown on my own resources, I obtained the able assistance of the Borough Surveyor, and we finally determined upon a plan of heating which has been perfectly successful. The chamber was erected at a moderate cost, and was opened for public use in November last, and I beg to enclose you the notification of it which the Board of Health has circulated in the town.

I am, &c. J. W. Crane, M.D., etc.

Leicester, February 16.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

Tuesday, March 5, 1867.

John Simon, Esq., President, in the Chair.

Mr. Fairlie Clarke and Dr. Trimmen were elected Fellows of the Society.

Mr. Wood read a report on the tumour of the bladder, which had been referred to him and Mr. Moore at the previous meeting.

Dr. H. Greenhow then proceeded to narrate a case of cancer of one of the supra-renal capsules which had been transmitted to him by Dr. Foster, of Birmingham. The patient, who was 62 years of age, died of pleuro-pneumonia, but there was no good history of the case. The capsule was found to be enormously enlarged, but was non-adherent. Dr. Cayley had examined it, and found it to consist of two portions, an outer and an inner, with a distinct line of demarcation between the two. The inner was soft, and presented unmistakable marks of cancer; but, curiously enough, there was no cancer in any other part of the body. In this respect the case was unique. Dr. Gibb was said to have reported one of this kind, but in the instance recorded by him there was cancer of the liver also. In the present case there was no discoloration of the skin, and none of the symptoms of weakness ordinarily presented in Addison's disease. The specimen was referred to Mr. Hulke and Dr. Dickenson for examination.

Mr. Bryant exhibited a specimen of

NASO-PHARYNGEAL POLYPUS

removed from a boy aged 15, which had originally appeared in the right nostril, but had ultimately occluded both posterior nares, and pushed forward the soft palate. Severe epistaxis had repeatedly occurred, and ultimately there was difficulty experienced in swallowing. The écraseur was employed for its removal, but only a small and weak one could be introduced, and the screw could only be tightened gradually. In five days it came away, but the polypus did not fall off; for a time it appeared to shrivel away, but in nine months the boy was sent back to Hospital as bad as ever. The tumour was again carefully examined, and was found to be attached to the posterior part of the pharynx. On this occasion whipcord was employed for its removal instead of wire as on the former occasion, and again the écraseur came away on the fifth day, but this time the tumour came with it. Mr. Bryant suggested that this might be a case of the kind reported by M. Guérin, where the tumour had two attachments.

Mr. Hulke thought the whole affair might be explained by adhesion taking place on the outside of the tumour as soon as the wire had cut through it, the same result not being possible with the whipcord.

Mr. Bryant objected that the écraseur took the same time in coming away in both instances.

Mr. Wood said that vascular tumours frequently heal after being cut in the way Mr. Bryant had first operated.

Dr. Murchison reported a case of

FIBROID NODULES OF THE LIVER,

distinctly of a non-cancerous nature. The patient, a man aged 67, had been in good health up to six weeks before he came under Dr. Murchison's care. At that time an iron beam had fallen on him, after which he had been unable to work; there had been pain and tenderness about the abdomen, with urgent vomiting. When seen, the case presented the symptoms of cancerous peritonitis. The man died in ten days; the intestines were found matted together, the omentum thickened, and the mucous membrane of the stomach near the pylorus presenting the appearance of enlarged granulations. There was no cancer, and the patient neither by his own account nor by his family history gave any indications of syphilis, although such growths in the liver are usually of a syphilitic nature.

Mr. J. W. Trotter exhibited a specimen of fibrous tumour removed from the great trochanter. These are common in soldiers, and are supposed to be produced by lying on the wooden beds of the guard-room. They become very painful, and the soldiers often ask to have them removed; this removal is followed by no ill-effects, although the wounds rarely heal by the first intention.

Dr. Dyce Duckworth narrated the case of a patient who for 17 years had presented all the aspects of silver poisoning. Death resulted from fatty heart, and on a post-mortem examination the aorta was found to be stained black in certain spots, both internally and externally. Most of the viscera and muscles were also stained. Some twenty years before, the patient had been treated for severe nervous headache, and it was supposed that silver had been then employed as one of the remedies.

Mr. Henry Thompson exhibited, what is very rare now-a-days, two specimens of stone of the bladder terminating in a natural way. A very large one from Mr. Jordan, which exhibited in the same way, as a still larger specimen belonging to Mr. Thompson, almost every marking of the bladder, was taken from an old man who died before he could be operated on. The other, from Norwich, was of small size; it had existed for some time in a boy; ultimately there had been symptoms of urinary infiltration, and with the sloughing mass in the perinæum this stone had been removed. The boy was now well.

Mr. A. Bruce exhibited an interesting series of enlarged thymus glands, removed from subjects above the age of 12 years. One of these, the largest on record, was removed from a boy of 14; it weighed as much as 620 grains. In one case it appeared that the supra-renal capsules were either absent or unusually small.

Dr. H. Weber narrated a case in which the Ancyclostomum duodenale had been markedly associated with tropical anæmia. This association had originally been observed by Griesinger in Egypt, but the specimens subjected came from Bahia. Death had resulted from extreme anæmia, and during its progress no worms had been detected in the excretions. The body when examined showed these worms almost entirely in the duodenum, where they were collected in masses, and where there was considerable extravasation. They were firmly attached to the mucous membrane, and are supposed to live on blood, whence the anæmia. Dr. Weber then gave some account of a disease known in the Brazils as "Ainhum." It affects only negroes and creoles, and begins at the base of the little toe. A line forms, the sulcus becomes deeper and deeper, ultimately the member remains attached only by a pedicle, and when so is often knocked off. There is no great constitutional disturbance, and the sensibility of the part remains. Sometimes the disease may last ten years: it is said to be common in Africa.

Dr. Bazire had seen a good many such cases, only the disease was not limited to one toe; there was also hyperæsthesia followed by anæsthesia. In the Mauritius it was known as dry leprosy.

Mr. Moore had seen a good many cases where there was gradual shortening and finally disappearance of the ultimate phalanges of both fingers and toes. The skin became dry and cracked, but no matter was formed.

Dr. Dickenson exhibited specimens of organs which had undergone amyloid degeneration with and without reagents, as well as specimens of artificial amyloid matter formed by the removal of alkalies from ordinary fibrine.

Dr. Cayley narrated a case of Embolism of the Pulmonary Artery, where emboli existed in other parts of the body. In this case they appeared not to originate from the heart, but rather from the bronchial artery.

OBITUARY.

PROFESSOR GOODSIR.

When a celebrated German Professor, still living, was asked what he had seen during a tour in the North, his answer was —"I have seen Edinburgh and John Goodsir." Few scientific reputations, in the present age of respectable mediocrities, are of a kind to suggest or sustain hero worship. But the position occupied by the late Professor in Scotland was so unapproached by rivals that his loss seems to have divested the anatomical and physiological school of Edinburgh of that which gave it its chief attraction for the student and its chief authority in the scientific world. High as the fame of that School has been raised by the first and second Monros and by such teachers outside the University as Barclay and Knox, it never approached nearer its zenith than when in 1846 it became publicly known that the chair of Anatomy in the University was to be filled by Goodsir. The following sketch of his life is taken from the *Scotsman* of March 11. It is understood to be from the pen of one who knew him well :—

"About five-and-thirty years ago, the class-rooms of our University were attended by a group of young students who have since that time carved for themselves enduring niches in the temple of Fame, one of the most distinguished of whom was John Goodsir, who died on Wednesday last, at the early age of 52.

"Professor Goodsir was born in 1814 at Anstruther. His father and grandfather were well known and much respected Practitioners of Medicine in the east of Fife. From early childhood he displayed great talent; and when little more than a boy, he was sent to the University of St. Andrews, where he passed through the curriculum in Arts. He was then apprenticed to Mr. Nasmyth, the eminent dentist of this city, and during his apprenticeship he attended Medical classes both in the University and extramural schools. He pursued his anatomical studies under Dr. Knox, in whose rooms it was that he made the acquaintance of his friend Edward Forbes. Although he applied himself diligently to acquire a knowledge of all the branches of his Profession, yet from an early period he evinced a peculiar aptitude for anatomical research. The position of his native town on the sea coast had early given him ample opportunities of collecting and examining the various animal forms with which the Firth of Forth is so richly supplied; and he now found amongst his fellow-students many congenial spirits to stimulate and sympathise with his pursuits. Whilst with Mr. Nasmyth, he entered on an investigation into the development and structure of the teeth, which he afterwards published in an elaborate memoir, and was the first to give a consistent account of the various stages through which these important organs pass. This memoir at once stamped him as an observer of great originality and acuteness. Before its publication, however, he had returned to Anstruther to assist his father in practice; and though actively engaged in the arduous duties of a country Doctor, he yet found time for the prosecution of scientific inquiries, and made the first connected series of observations which established the relations between one form of continued fever and a diseased condition of the intestinal glands.

"About this time, the Conservatorship of the museum of the College of Surgeons of Edinburgh became vacant. The aptitude which he exhibited for anatomical investigation, and the skill he possessed in preparing and displaying the most characteristic aspects of animal structure, eminently fitted him to perform its duties; and on application he received the appointment. He now commenced a systematic series of observations into the minute changes which take place in pathological processes, which he communicated to the Profession in a course of lectures delivered at the College of Surgeons in 1842-43, and which he afterwards incorporated in a special volume. In these lectures, he first developed those views respecting the origin of various morbid products from changes in the pre-existing elements of the textures of the body, which have since been amplified by Professor Virchow, of Berlin, and constitute the most fundamental doctrine of modern pathology. But he did not neglect his studies in comparative anatomy; he was an active member of the Wernerian Society, and, in conjunction with Edward Forbes, published descriptions of several animals, new to science, which they had discovered.

"The growing infirmities of Professor Munro rendering the assistance of an able coadjutor necessary for the proper performance of the duties of the Anatomical Chair, Mr. Goodsir was appointed Demonstrator of Anatomy. His enthusiasm and devotion to the work rapidly gathered around him a large class of students; and when, on the resignation of Dr. Munro in 1846, the chair became vacant, he was appointed by the Town Council to the Professorship of Anatomy. Placed now in a position in which his talents had free scope, he not only sedulously devoted himself to anatomical instruction, but dissected and prepared an extensive series of specimens to illustrate the anatomy of the animal kingdom, which he deposited in the Anatomical Museum of the University, and which now constitute its most valuable and beautiful ornaments. Goodsir was an artist; he had a keen sense of the beauty of organic forms; and these preparations remain as a lasting memorial of his skill and powers of manipulation.

"His reputation as a successful and painstaking teacher of anatomy was by this time so well established that many students were attracted to the University; and for several years the attendance at his class amounted each winter session to between 300 and 400. The unremitting attention to the duties of his chair, the additional work which he undertook owing to the illness of his friend and former teacher Professor Jameson, and the labour connected with the prosecution of his own original investigations, at length began to tell, even on his robust frame; and in 1853 he was compelled to withdraw for a year from active work. Although much recruited by rest and Continental travel, it was clear to his friends that his constitution had received a severe shake. On his return, though in his enfeebled state of health Professorial duties necessarily absorbed much of his strength, yet his passion for original research remained; and in 1856 he published a series of memoirs on the constitution of the skeleton, which form an important contribution to anatomical science, and fully established the necessity of combining embryological investigation with comparative anatomy in all our morphological inquiries. The disease from which he suffered slowly took deeper hold on his constitution. At the beginning of this year, he felt constrained to withdraw from active work; and on Wednesday last he quietly passed away. His numerous pupils, many of whom are scattered over the world, will receive the news of his death with heartfelt sorrow; and those of us who have been more closely and intimately associated with him will long feel the gap which his departure has occasioned.

"John Goodsir entered on his scientific career at a time when a new and but little-worked method of inquiry was opened up to the anatomist. The state of perfection to which the compound microscope had been recently brought gave to the investigation of structure a new direction. He early recognised the importance of this instrument as an aid to research. His acute perception, and philosophic grasp of principles, enabled him to detect fundamental features in organic construction, and to develope some of the most important generalisations of modern physiology and pathology. His power of concentration, his great industry, and devotion to science, permitted him to acquire a minute acquaintance with the details of structure throughout the animal series; and one of the great charms of his lectures consisted in the way in which he brought many of these to bear on the elucidation of human anatomy. His success as a teacher, and the influence which he exercised on the minds of his pupils, were largely due to the suggestive nature of his prelections—in proof of which we need only allude to the great number of anatomical theses, thought worthy of publication, which his students have produced. Modest and unassuming in his character, he was always ready to hear and smooth away the difficulties which were experienced by his pupils; and his amiability and childlike simplicity made him deeply beloved. Goodsir's intellect was eminently comprehensive. He was a man of deep convictions, and a philosopher in the full sense of the word. His early training had fitted him to look at the mental and moral aspects of man's nature as well as the physical; and the power and earnestness with which he used to enforce the great doctrine that, in studying the relations of man to the animal kingdom, his moral and religious constitution ought not to be abstracted from his anatomical and physiological, will long live in the recollections of those who heard him. Conscientiousness in the discharge of duty was one of the mainsprings of his character; of him it may truly be said that his life was in his work. His perseverance for so many years in the performance of the duties of his chair, even when contending

daily against bodily infirmity, read to all his students a great lesson; and, in spite of the pain and suffering incident to his malady, he struggled on bravely to the end.

"By his death science has lost a devoted student. He worked at anatomy with a singleness of purpose, an energy and disinterestedness, which few can hope to equal; and though naturally proud of his success as a teacher, and of the number of pupils who thronged his class-room, yet he employed much of the income obtained from this source, not in luxury or personal display, but in furthering the interests of his science. It has been truly said that his name is not unworthy to be placed alongside that of John Hunter; and it adds one more to the roll of illustrious Scotchmen who have advanced the progress of organic science. He died at South Cottage, Wardie, in the same house in which Edward Forbes had breathed his last; and his remains will be conveyed to-day to the Dean Cemetery, to lie in close proximity to those of his early and much-valued friend."

It is to be regretted that a life thus devoted to science has left so few published results. The great excellence of all that Professor Goodsir did write has placed his name above that of most living anatomists; but there can be no doubt that the fruit of many of his profoundest investigations has, by his premature illness and comparatively early death, been lost to the world. The researches on which the cell pathology is based, and the observations on the genesis and growth of the human teeth, only lead to the regret that one who observed so much and so well has left in quantity so little. Latterly it is said that he had been engaged in studying the mathematical forms of the different joints of the human body. Unless the results are left amongst his papers, it is feared that these and other of his researches upon which he spent vast time and labour have perished. The modesty natural to great men was undoubtedly one cause which led him to publish so little. Besides his work on the teeth, he read several papers before the Royal Society, which appeared in their *Transactions*, and he also published some other papers on anatomical and physiological subjects, written whilst he was Conservator of the Museum of the Royal College of Surgeons.

But the work on which the Goodsirs' fame will rest—for we may speak of both brothers as now united in death, as they were in life and work—is the "Anatomical and Pathological Observations," by John and Harry D. Goodsir, published by Macphail, at Edinburgh, in 1845, these "observations" being in many cases a reprint of memoirs and lectures from the *Transactions* of the Royal Society of Edinburgh and other sources. The essay on "Centres of Nutrition" prepares us for Dr. Beale's "germinal matter;" and those on the "Structure and Functions of the Intestinal Villi," on "Absorption and Ulceration," on "Secreting Structures," on the "Serous Membranes," on "Bone," on the "Placenta," and on "Cystic Entozoa," all are so many illustrations of the doctrine that force and change, healthy and diseased, go on in the minute cellular elements of tissues, and not in the blood-vessels, as had been formerly assumed.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 7, 1867:—

Alfred Thomas Roworth, 115, Holborn-hill; Josiah Paull, Camborne, Cornwall; Alexander Collie, London Fever Hospital, N.; William John Rutherford, Shipley, Yorkshire.

The following gentleman also, on the same day, passed his First Examination:—

George Payne, St. Thomas's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

CALDWELL, J. T., M.R.C.S.E., has been appointed House-Surgeon to Chorlton-on-Medlock Dispensary.

EVANS, JOHN HENRY, M.R.C.S.Eng., &c., has been appointed Honorary Curator of the Museum of the Liverpool Royal Infirmary School of Medicine.

LEE, R. J., M.B., has been appointed Physician-in-Ordinary to the Western General Dispensary, Marylebone-road.

M'CARTHY, J., L.R.C.P. Edin., has been appointed one of the Resident Medical Officers to St. Mary's Hospital, Manchester.

MILLER, RICHARD MAY, B.A., M.D. Lond., has been appointed Physician to the South Staffordshire General Hospital, at Wolverhampton.

SLATER, JOHN T., M.D. Glasg., has been appointed Medical Officer and Public Vaccinator for the Thornhill Ward of St. Mary, Islington.

SMITH, C., M.R.C.S.E., has been elected Surgeon to the Halifax Infirmary.

BIRTHS.

ANDREW.—On March 6, at East Loham, Suffolk, the wife of W. W. Andrew, M.B., of a son.

BOYD.—On March 3, at Newcastle-on-Tyne, the wife of Dr. J. Boyd, L.R.C.S.E., of a daughter.

STEEL.—On March 11, at Abergavenny, the wife of Dr. S. H. Steel, of a son.

MARRIAGE.

MARTIN—SWAN.—On January 31, at St. Paul's, Kandy, Ceylon, H. A. Martin, M.D., of St. Austell, Cornwall, to Eleanor Blanche, second daughter of the late J. C. Swan, Esq., of Colombo.

DEATHS.

COUCHER, M. S., M.D. St. And., at Clifton-on-Teme, Worcestershire, on March 6, aged 36.

EVANS, W., Surgeon, at 2, Queen-street, Devonport, on March 3, aged 72.

FAIRHEAD, J., L.S.A., at London-road, Enfield, Middlesex, on March 12, aged 77.

GOODSIR, J. (Professor of Anatomy in the University of Edinburgh), at South Cottage, Wardie, N.B., on March 6, aged 52.

HITCHMAN, T., M.R.C.S.E., of Leamington, on March 3, aged 62.

HUMPHRY, A. (one of the House-Surgeons at St. Bartholomew's Hospital), on March 11, aged 23.

PRICKETT, G. B., M.R.C.S E., at Bampton, Oxon, on March 7, in his 39th year.

SANDWICH, T., M.D., at Beverley, Yorkshire, on March 5, aged 75.

VACANCIES.

CARDIGAN UNION.—Medical Officer.

KENT AND CANTERBURY HOSPITAL.—Physician.

YORK DISPENSARY.—Resident Medical Officer.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Beverley Union.—The Fourth District is vacant; area 14,540; population 1796; salary £26 per annum.

Gower Union.—The Eastern District will be vacant at Lady-day; area 12,752; population 3494; salary £20 per annum.

Rye Union.—The First District is vacant; area 16,786; population 6393; salary £102 per annum. Also the Workhouse; salary £40 per annum.

Thornbury Union.—The Berkeley District is vacant; area 17,706; population 4455; salary £46 per annum. The Charfield and Tortworth District is vacant; area 2819; population 746; salary £12 10s. per annum.

Thorne Union.—The Epworth District is vacant; area 11,386; population 2489; salary £20 per annum.

West Ham Union.—Mr. J. T. Vallance has resigned the Workhouse; salary £140 per annum.

APPOINTMENTS.

Barnet Union.—Josiah Boydell, M.R.C.S.E., M.D. Edin., to the Fifth District.

Belper Union.—George O. Siddall, M.R.C.S.E., L.S.A., to the Alfreton District.

Billericay Union.—George P. Sargent, M.D. St. And., M.R.C.S.E., L.S.A., L.F.P. & S. Glas., to the Wickford District.

Chelmsford Union.—George P. Sargent, M.D. St. And., M.R.C.S.E., L.S.A., L.F.P. & S. Glas., to the Fifth District.

Ecclesall Bierlow Union.—Septimus Arden, M.R.C.S.E., L.S.A., to the Third District.

Medway Union.—Henry Weekes, M.R.C.S.E., L.S.A., to the Gillingham District.

PARACELSUS, who lived in the 15th century, is said to have written 230 works on philosophy, 46 on Medicine and Surgery, and 7 on mathematics.

MEDICAL CHARITIES.—The Hon. Lady Caroline Murray, of Richmond, Surrey, has bequeathed £50 each to the Middlesex, London Fever, and Marylebone Hospitals; and £25 to the Royal Eye Infirmary. This lady has also bequeathed liberal sums to other charities not strictly Medical.

OVARIOTOMY.—At a meeting of the committee of Queen Adelaide's Dispensary, Bethnal-green, held March 7, it was resolved that a room in the new building should be devoted to the above operation, under the care of Mr. Maunder, the Consulting Surgeon.

WE understand that Dr. Struthers, Professor of Anatomy in the University of Aberdeen, late Lecturer on Anatomy, Edinburgh, is a candidate for the Chair of Anatomy in the University of Edinburgh, vacant by the death of Professor Goodsir.

St. John's Hospital for Diseases of the Skin, Leicester-square.—A preliminary course of sixteen lectures on diseases of the skin will be delivered by Dr. Tilbury Fox at the above institution, commencing Tuesday, May 7, and continued thereafter on Tuesdays and Fridays. The course will on this occasion be free to students and Practitioners, and syllabuses may be obtained of the Secretary.

Dr. Gibbon, the Medical Officer of Health for the Holborn district, remarks: "In any future legislation on vaccination, it would, I think, be desirable to reduce the time within which the operation must be performed from three months, as at present, to six weeks. There is no Medical objection to the performance of the operation a week or two after birth, but a very great practical sanitary advantage, especially amongst the uneducated poor."

The Cæsarean Operation.—In his interesting "Table Talk" on the above operation, the celebrated Coleridge states that there are only two things wanting to justify a Surgeon in performing it—First, that he should possess infallible knowledge of his art; and secondly, that he should be infallibly certain that he is infallible.

Double Qualifications.—Conferences continue to be held between the executive of the Royal College of Physicians and the Royal College of Surgeons of London, as to the necessity of requiring all candidates for the diploma of membership of the latter body to undergo an examination also in Medicine, conducted by the examiners of the former College, or, if necessary, by an independent board. It will perhaps be decided to insist on all candidates who shall not have done so passing some Medical examination at other Universities or Colleges recognised by the Medical Council.

Dr. Livingstone.—The following letter appeared in the *Times* of Wednesday:—

"Sir,—Having observed in the *Times* of to-day an account of the meeting of the Royal Geographical Society, held last night at Burlington House, at which there had been an unusually large attendance, attracted by the belief that some additional information would be afforded in reference to the painful rumour of the murder of Dr. Livingstone, I may state, in corroboration of an opinion expressed by the chairman, Sir Henry Rawlinson, to the effect that the story ought not to be accepted without further verification, that I received on March 6 a letter from a Medical friend in practice in Zanzibar, dated January 7, 1867, in which allusion was casually made to Dr. Livingstone, but there was no mention of his death.

"Should you deem this communication worthy of insertion, it is at your disposal.

"I am, Sir, yours respectfully,

"R. B. Gilland, M.D.

"Essex County Asylum, Brentwood, March 12."

Milk and Water.—A landowner at Zug, in Switzerland, has just been convicted of putting water in his milk, and has been condemned to eighteen months' imprisonment, the loss of civil rights, and costs.—*The Grocer.*

Cholera at Port Glasgow.—It may be remembered that at the beginning of the year a sudden outbreak of cholera, resulting in a good many deaths, took place at Port Glasgow. After the lapse of nearly two months the disease has again appeared within the last few days, and four deaths have occurred, the victims being three young persons and an adult. The Medical officers report a considerable prevalence of choleraic diarrhœa. It would seem that in a sanitary point of view certain portions of the town are still in an unsatisfactory state.

Poisoning by Bakers' Ovens.—Professor Nicklès, of Nancy, indicates an unexpected source of poisoning. It seems that certain bakers have found it an economical plan to heat their ovens with old wood-work, so plentiful in this period of demolitions, as well as by old telegraph-posts and railway sleepers. Many of these objects, painted in various colours, or ingested with salts of copper, on incineration give out the metallic oxides which have been employed, and a portion of such oxides combine with the bread. From this source M. Nicklès has detected lead, zinc, and copper in the bread offered for sale.

Dr. Carl Moriz Diesing.—This celebrated helminthologist died at Vienna early in the present year. Born at Cracow in 1800, he repaired to Vienna in 1819, and especially attached himself to the cultivation of natural history. He became the assistant of Jacquin in botany, of Mohr in mineralogy, and of Bremser in zoology, and, under the direction of this last-named *savant*, devoted himself especially to helminthology, in which department he afterwards became the first authority. In 1848, while engaged on his celebrated "Systema Helminthum," he became completely blind. Still, almost to the last he has continued to furnish valuable contributions to his special branch of natural history.

Testimonial to the Medical Officers of Marylebone Workhouse.—A short time since some of the principal inhabitants of the borough, headed by the borough members, assembled in the Board-room, and presented Dr. Randall, the Medical officer of the Workhouse, with a silver candelabrum and two silver salvers, suitably inscribed, and Mr. Fuller, the Assistant Medical officer, with a handsome gold watch, in recognition of their services at the ice accident. The conduct of the master and matron has also received suitable acknowledgment.

Compensation Case.—In an action which came recently before Vice-Chancellor Sir R. Malins, Mr. M'Gregor, a Surgeon-Dentist at Worcester, claimed £5000 for injuries sustained in alighting from a train at Shrub-hill station, between Evesham and Worcester. The part of the line on which the accident occurred had since come into the possession of the Great Western Railway. The Midland Company attributed the accident to the plaintiff's own negligence, but, nevertheless, had paid to him, through their Medical officer, the sum of £150, which, as he alleged, he accepted upon the representation that the injuries were not of the serious character which they afterwards proved to have been. The result was that the Company agreed to pay the plaintiff £3000.

Treatment of Lunatics.—George Lee and John Stoneman, two attendants in the Devon Lunatic Asylum, have been tried at Exeter for ill-treating patients under their charge. They were both acquitted.

Cod-liver Oil.—The commercial reports sent in from time to time to the Foreign Office by our consuls abroad form a most useful element in that vast accumulation of statistical literature which is yearly printed at the national expense for the supply of members of Parliament with waste paper. A recently issued number contains carefully compiled reports on the fisheries of Norway and Iceland, and in an interesting notice in the *Saturday Review* it is stated that the yield of the oil so largely used in medicine varies a good deal from year to year, sometimes 300 livers being sufficient to make a barrel, while at other times as many as 500 are required for that purpose. In 1866 the Loffoden fishery supplied about 26,000 barrels of oil.

Oxalic Acid has been produced synthetically by M. Berthelot, by means of super-oxygenated acetylene placed in contact with permanganate of potash. This transformation is easy and prompt, and in considerable proportion. It is also certain that by causing permanganate of potash to act upon carburets analogous to acetylene, amylene, and ethylene, many other equally interesting syntheses may be produced. This important discovery was announced at the meeting of the Academy of Sciences, at Paris, on the 7th inst.—*Comptes Rendus*, 1867, No. 1.

Prevention of Venereal Diseases.—A Committee of the Harveian Society of London has been formed, to consider the subject of the prevention of venereal diseases, consisting of Dr. J. E. Pollock, President; Dr. Broadbent, Dr. Chapman, Dr. Charles Drysdale, Dr. Tilbury Fox, Dr. Maudsley, Dr. Meredyth, Dr. Menzies, Dr. Semple; Mr. Weeden Cooke, Mr. Curgenven, Mr. Gascoyen, Mr. E. Hart, Mr. J. Lane, Mr. Sedgwick, Mr. Teevan, Mr. H. Thompson; with whom will be associated Mr. Acton, Mr. Holmes Coote, Mr. R. W. Dunn, and Dr. Victor Bazire. It is proposed to investigate the extent of the spread of the contagious diseases commonly called venereal diseases among the population of this country, to discuss the best means for preventing that widely-extended evil, and to report thereupon to the International Congress to be held this year in Paris. Communications and suggestions are to be sent to Dr. Charles Drysdale, 99, Southampton-row, W.C.; J. B. Curgenven, Esq., 11, Craven-hill-gardens, W., Honorary Secretaries to the Society. The first meeting was held on Wednesday night, when it was decided to address the following queries to the Medical officers of the leading Hospitals in town and country:—Question 1. What is the average daily number of venereal cases, both in- and out-patients, treated in the Hospital you are connected with? Question 2. What proportion does this number bear to the whole number of Surgical patients daily treated? Question 3. How many beds for venereal patients are there in your Hospital? The Committee discussed at some length

whether it would be advisable to adopt a police superintendence and visitation of well-known prostitutes, and after ventilating the character of the different systems in force at Malta, Paris, and other places, resolved that it was advisable to recommend some measure similar to the Contagious Diseases Act of 1866 to be discussed at the next meeting.

Medical Society of London.—The anniversary meeting of this Society was held at the London Tavern on Friday, March 8, when Dr. F. W. Headland delivered an able oration before a numerous audience of the Fellows. The silver medal was also awarded to Dr. Cholmeley, with unanimous approbation. The annual dinner then took place—Dr. Hare, the President, occupying the chair, supported by the President of the Royal College of Surgeons, the Master of the Apothecaries' Company, who also represented the General Medical Council, the President of the Royal Medico-Chirurgical Society, and by former Presidents of the Society. Upwards of sixty Fellows were present. The usual loyal and patriotic toasts were drunk with the utmost enthusiasm; that of "The Army, Navy, and Volunteers," being acknowledged by Dr. Day and Mr. Gant, who briefly alluded to their Crimean experience. "The Medical Society of London," proposed by the President, was founded, he remarked, in the year 1773, or 94 years ago. Sir John Pringle was then President of the Royal Society, Sir Joshua Reynolds of the Royal Academy, which was founded four years previously; Sir Astley Cooper was just born, and Jenner just out of his apprenticeship; John Hunter was publishing his researches, and Cullen his "First Lines." Since then many very valuable contributions to Medical literature had been made through the Society. Its financial position was now thoroughly sound, and they possessed freehold as well as personal property, the former having been secured to them more especially by Mr. Hancock, who gave it first contingently, and afterwards in perpetuity. The prospects of the Society were in every way cheerful and hopeful. The toast was drunk with all the honours. "The Medical Council," and "The Examining Bodies," were acknowledged respectively by Mr. Cooper and Mr. Partridge as President of the Royal College of Surgeons. He took occasion to pay a graceful tribute to the Society of Apothecaries for having, as Mr. Cooper had remarked, initiated a preliminary examination in general education, thus leading the way to a great change in that respect which had extended to all other examining bodies. Perhaps, however, it must be acknowledged that the General Medical Council had not been equally successful in their endeavours. The present system of examination was defective, by the numerous examinations which students were compelled to undergo—a great disadvantage and incumbrance—and all examinations should be real and honest tests of the student's acquirements. Having made some apologetic remarks for the College of Surgeons' examinations, in consideration of the difficulty of conducting Surgical examinations in a practical manner, and having highly eulogised the University of London for the progress made in that direction, Mr. Partridge resumed his seat amid great applause. Mr. De Méric, in happy terms, proposed "The Lettsomian Lecturer, Mr. Gay, and the Orator, Dr. Headland;" dwelling especially on the valuable lectures lately delivered before the Society, by the former gentleman, on "Varicose Disease of the Lower Extremities." In Dr. Headland, Medical knowledge and literary attainments were well combined. "The Presidents of the other Medical Societies of London" was duly honoured by Mr. Solly on behalf of the Medico-Chirurgical Society, and Mr. Jackson for the Hunterian Society. The healths of the President, and of the President-elect, Mr. Henry Smith, were very warmly received; and after one or two other toasts by Mr. Hancock and Mr. Henry Lee, the company separated. The meeting may be regarded as a more than usual success, and as testifying to the increasing strength and influence of the Society.

The Epidemiological Society.—At the meeting on Monday night two papers were read—the one by Dr. Nicholson, showing the good effects of vaccination in the island of Antigua in preventing the spread of small-pox; and a second by Dr. Tilbury Fox, on the chief points of interest which have been brought to the surface by the recent Report on Leprosy by the College of Physicians, particularly as to the production of the disease by peculiarities of diet especially, and the influence of hereditary transmission and contagion. He pointed out the curious fact that it is in those places where leprosy is on the increase that the freest intermingling of the leprous and non-leprous part of the community takes place. He then entered fully into the question of hereditary transmission, adducing facts and arguments to show that this mode of propagation was much more potent and frequent than generally supposed; and, lastly, he gave an account of the circumstances of the spread of leprosy in Honolulu, not contained in the Leprosy Report, which Dr. Gavin Milroy observed, if corroborated, must be looked upon as most remarkable and significant. It seems that the disease was imported thither by the Chinese some thirty years ago, and has spread with great rapidity ever since, so that the number of lepers amounts to $3\frac{1}{2}$ per 1000. In this case hereditary transmission fails as an explanation, as also does deterioration in climate or habits of the people, for in every respect of this kind a vast improvement has taken place. The disease has seemed to diffuse itself from a leper living in the island of Dabu, about twenty miles from Honolulu, and one-fourth of the stricken avow contact with lepers as the cause of their disease, the people regarding hospitality as a part of their religion, and encouraging the freest intercommunication. The author remarked upon the absence of pathological observation; the fact that the lepers do not, as a rule, freely mix with those healthy communities amongst whom they dwell, and that, therefore, circumstances are not favourable for contagion to be fairly tested; that it would require contact for a long period, and the introduction into the system of a discharge from a leprous sore, in harmony with modern notions of cell pathology, to transmit the disease; that hereditary taint satisfactorily accounts for the transmission and spread of the disease in a vast majority of cases, but that much more observation is needed to enable us to arrive at a satisfactory conclusion, and such cases as that of Honolulu should make us pause before we finally conclude to encourage free intercourse with lepers.

Cork Medical Protective Association.—The annual meeting of the members of this Association was held on Tuesday, March 5, in the Theatre of the Royal Cork Institution, Dr. Harvey in the chair. The chairman, in opening the proceedings, said that the tenour of the Association's business had not been of a narrow or selfish nature. Their anxiety had been, through the elevation of their own Profession, to render a service to the community at large by seeking as far as they possibly could to improve the education of the Medical man, to improve his station and position, and render him an efficient member of society, and the better calculated for improving the civil, naval, and all the services in which the Medical man may be engaged. The following resolutions were passed:—1. That in the opinion of the meeting the "Medical Acts Amendment Bill" shortly to be introduced into Parliament was seriously defective, inasmuch as it made no provision for an improved and superior system of Medical education, preliminary and professional, or for the official prosecution of unregistered Practitioners or persons illegally assuming Medical titles. 2. That it appeared to the meeting that the several clauses of the Sanitary Act of 1866 applicable to Ireland were sufficient to enable the local authorities to establish and carry out an effective system of supervision of the public health. 3. That they could not but express their regret that in the late enactment which granted a retiring pension to superannuated Poor-law functionaries, the Medical officers should have been excluded. 4. That with their present limited knowledge of the Army and Navy Medical Warrants of 1867, one of which only had as yet been promulgated, and which fell short in some respects of what was looked for, they still hoped that when fully brought into operation they might be such as to increase the efficiency of both services. 5. That the Medical Profession was the only body whose services insurance companies obtained for less than their legitimate remuneration. 6. That the remonstrances so often addressed to the authorities in reference to skilled Medical evidence given in courts of justice being still unattended to, they considered a strong necessity rested on all the associations for continued agitation on the subject. 7. That the meeting had much pleasure in again recognising and acknowledging the able advocacy of the press on all occasions where the interests of the Profession had been involved. The proceedings terminated with a vote of thanks to the chairman.

On the Mortality of the United States.—In the summer of 1860, the eighth census of the United States was taken by upwards of 4000 marshals distributed over the country, and the volume containing the final results and conclusions was published last year in Washington, under the direction of the Secretary of the Interior. The returns relating to population and mortality were given into the hands of Dr.

Edward Jervis, and a very important paper on this particular part of the census was read last week by Mr. Samuel Brown, F.S.S., before the Society of Actuaries, of which the following is an analysis:—The author justly observed that there is no country in which, from a combination of circumstances, a census, if carefully taken, is more likely to afford novel and interesting materials than the United States. The increase of population in the country has been most rapid within a comparatively recent date. During the last seventy years it has risen from 4,000,000 to 31,500,000, suggesting changes in wealth, commerce, and social condition, the study and analysis of which will afford us material for the avoidance and correction of error in the economical governance of our own people. The total population in 1860 was found to be as follows:—White: male, 13,844,000; female, 13,113,000; total, 26,957,000. Coloured: male, 2,217,000; female, 2,226,000; total, 4,443,000. The coloured population was found principally in South Carolina, Georgia, Florida, and Alabama, where they nearly equalled the whites in number, and in Mississippi, Lousiana, Arkansas, and Texas, where they amounted in number to about three-fourths of the whites. The increase of population was very great in all the districts, amounting to 35½ per cent. in the ten years, but especially in the newly settled territories of California, Oregon, New Mexico, &c., where in the last ten years the increase has been 225 per cent. The effect of emigration has been to increase the number of males in the period of mid-life. Departure of the younger part of the native community in search of work, leaving children and parents behind, produces an excessive increase in their number in the districts they leave at the earlier and late periods of life. No less than 5,000,000 foreigners arrived and settled in the United States from 1820-60; of these 2,751,000 came from Great Britain and Ireland, 1,486,000 from Germany, and in the census of 1860 4,132,000 foreigners were living in the country. The returns relative to mortality are very defective; in some cases no deaths are recorded, and it is quite useless to attempt to deduce the rates of mortality as compared with the living population. The general conclusion—necessarily only approximate—shows for all classes a much higher rate of mortality during the ten years 1850-60 under 60 years of age than in England, but a very much smaller rate above that age, so marked, indeed, as to lead to the conviction that it does not represent actual facts, especially as regards the longevity of the blacks. Our readers will join cordially in the hope of Mr. Brown that the next census may be more minutely and carefully taken, and more worthy of the great American nation.

A Mexican Foot Race.—The Chihuahua (Mexican) correspondent of the *New York Herald* sends an account of a recent foot race between four women of the village of Baconia, and four from the village of Sesoguiche, selected by their villages as their fastest runners. The course was round an oblong mountain, and was to be run fourteen times, making a distance of above 100 English miles. The eight women wore a short petticoat. They started at 6·35 in the morning. By the twelfth round all but three had dropped from the track. The betting now ran to the wildest extremes; hoes, ploughs, and other implements, horses, cattle, sheep, pigs, goats, cats, dogs, and whatever else there was of value, changed hands. Two wiry Baconia women were first in, and were received with the loudest shouts of joy by their townspeople. They had finished the race at 8 o'clock in the evening, making the whole distance, 109 miles, in 13 hours and 25 minutes. One of the two Baconia women who won, had given birth to a child ten days before, and prepared herself for the contest by bandaging her breast. The only stops made during the time by the contestants for the prizes were either to take a little water or eat frugally of pinoli—a simple gruel made of parched corn, ground and sweetened with sugar. By the time the race was concluded, nearly every Indian on the ground was drunk.

Superiority of Man over Woman.—It has long been observed that among peoples progessing in civilisation the men are in advance of the women; whilst amongst those which are retrograding, the contrary is the case. Just as, in respect of morals, woman is the conservator of old customs and usages, of traditions, legends, and religion, so in the material world she preserves primitive forms which but slowly yield to the influences of civilisation. We are justified in saying that it is easier to overthrow a government by revolution than alter the arrangements in the kitchen, though their absurdity be abundantly proved. In the same manner woman preserves, in the formation of the head, the earlier stage from which the race or tribe has been developed, or into which it has relapsed. Hence, then, is partly explained the fact that the inequality of the sexes increases with the progress of civilisation. To this must be added the circumstance that the lower the state of culture, the more similar are the occupations of the two sexes. Among the Australians, the Bushmen, and other low races, possessing no fixed habitations, the wife partakes of all her husband's toils, and has in addition the care of the progeny. The sphere of occupation is the same for both sexes, whilst amongst the civilised nations there is a division both in physical and mental labour.—*Lectures on Man*, by Dr. C. Vogt (published by the Anthropological Society).

Ozone and Vegetation.—Dr. Charles Daubeny has contributed to the *Journal of the Chemical Society* a valuable paper containing the results of a long series of experiments on this interesting subject. He considers it time that the question as to the existence of ozone in the atmosphere should be set at rest, since, whilst it is now disputed by some eminent chemists, it is taken for granted by meteorologists, and thus the weather tables are swelled by ozone observations. He assumes that, as a substance, characterised by a peculiar smell and by oxidising properties, can be produced by artificial means, especially by the action of the electric spark through air containing oxygen, ozone must exist in the atmosphere, and is to be detected and measured by reagents. In his paper he gives tables showing the amount of ozone at Torquay for certain months in 1864, 1865, and 1866, with averages; and he gives also a table showing the results of experiments upon the effects of the leaves of fifty-seven species of plants belonging to forty-seven natural families upon Schönbein's iodised paper. In thirteen of these cases, the coloration produced upon the paper introduced into the jar containing the plant was less in degree than that occasioned by light upon the same suspended in the empty jar for the same period; but in thirty-two cases the reverse was observed, the degree of coloration attributable to the plant being sensibly greater. The result of these and other experiments leads Dr. Daubeny to conclude, from its remarkable oxidising properties, and the rapidity with which any organic matter, dead or living, undergoes a slow combustion in its presence, that ozone is an important agent for restoring the atmosphere to its original purity.

Composition and Quality of the Metropolitan Waters in February, 1867.—The following are the returns of the Metropolitan Association of Medical Officers of Health:

Names of Water Companies.	Total Solid Matter per Gallon.	Loss by Ignition.(a)	Oxidisable Organic Matter.(b)	Hardness.	
				Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction	20·29	1·96	1·35	13·0	5·5
West Middlesex	20·09	2·00	1·81	13·0	5·0
Southwark and Vauxhall.	20·00	2·14	1·92	13·0	5·0
Chelsea	20·17	1·75	1·18	13·0	5·0
Lambeth	20·47	1·99	1·61	13·0	5·0
Other Companies.					
Kent	27·21	2·25	0·08	16·5	9·0
New River	21 12	1·76	0·48	13·5	3·5
East London	22·75	2·50	0·80	12·5	5·0
Surface Wells.					
Bishopsgate Church pump	86·66	6·23	0·88	34·0	15·0
Fenchurch-street	85·93	7·23	0·40	16·0	7·0

(a) The loss by ignition represents a variety of volatile matters as well as organic matter, as ammoniacal salts, moisture, and the volatile constituents of nitrates and nitrites.

(b) The oxidisable organic matter is determined by a standard solution of permanganate of potash, the available oxygen of which is to the organic matter as 1 is to 8; and the results are controlled by the examination of the colour of the water when seen through a glass tube two feet in length and two inches in diameter.

Spontaneous generation once more became a subject of discussion at a late meeting of the Academy of Sciences at Paris, when M. Robin presented, in the name of M. A. Donné, an account of some new experiments on the spontaneous generation of infusorial animals and vegetable mould. M. Donné made a small hole in the shells of some eggs sufficient to let a little of the contents flow out, and then placed the eggs in a vase, wedged them up with pieces of broken marble, and poured on them enough boiling water to destroy all the germs, which he said is effected at the temperature of 167° Fahr. The eggs were left in a place subject to temperature varying from 59° to 68°. After some time the eggs were found to be completely decayed and abounding with animalcules and vegetable mould. This, it was said, could only proceed

from spontaneous generation, as the water which surrounded the eggs contained nothing. M. Pasteur, commenting on the note, remarked that M. Donné was mistaken in believing that a temperature of 167° Fahr. is sufficient to destroy atmospheric germs; 230° to 238° is the temperature required, which M. Donné did not realise, and the water he used was evidently not quite boiling, and by breaking the shell of the eggs he introduced germs into it. M. Pasteur asserted that the results obtained by M. Donné were in perfect conformity with those published by himself, but misinterpreted in favour of spontaneous generation, which is still a "chimera."—*Comptes Rendus*, tome lxiii. p. 1072.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

John Locking, M.D.—Under the present circumstances, common fairness requires that we should abstain from the publication of any matter tending to aggravate the defendant's position.

Mr. Matthewson.—Write to the Secretary of the Government Emigration Commissioners, 8, Park-street, Westminster.

Dr. W. G. Carter.—The gentleman referred to must be blinded by the hazy notions of homœopathy; otherwise he could not argue in the way he does.

L.R.C.P. and M.R.C.S., Stepney.—Read the article on "Fees legally claimable by Medical Men," by Mr. F. Seymour Haden, in Smith's "Visiting List." No fee is provided for the attendance at a police court, unless the prisoner be committed for trial; then the magistrate gives the Medical witness a certificate, which he produces to the clerk of arraigns at the assizes or sessions. In any case of doubt, difficulty, or hardship, write to the Home Secretary.

Caput, Birmingham.—The trephine was invented by John Woodall, Surgeon to St. Bartholomew's Hospital, in 1626.

Mr. Harcourt.—The instrument is a modification of one described in old Scultetus' "Armamentarum Chirurgicum."

Dr. O'G., R.N.—The names of gentlemen who have obtained Sir Gilbert Blane's Gold Medal are *not* published in the College Calendar. Consult the *Navy List.*

ibliopole.—Dr. Macmichael was the author of that interesting work, "The Gold-headed Cane." Consult Pettigrew's "Medical Superstitions," and Crofton Croker's "Fairy Legends."

A Metropolitan Surgeon.—The "bone-setters" are *not* extinct. They flourish in certain localities.

Thomas Guy.—Mr. Hilton, the Senior Vice-President, will no doubt be elected President in July next. Mr. Partridge will preside on the occasion to which you allude.

L.S.A., Cornwall.—The trial of the Apothecaries' Society against Bentley was one of debt for penalties for practising as an Apothecary without the proper certificate. Verdict for the Company, for one penalty, £20.

A Student.—The advertisement in another column will give the information.

A Metropolitan Teacher.—Mr. Solly and Sir William Fergusson, the next in order, must bide their time.

Archæologist, Sheffield.—It is stated by Evelyn (vol. i. page 149), that sedan chairs were introduced by Sir Saunders Duncombe, M.D. They are still in use at some metropolitan workhouses for the removal of sick patients.

Mr. John Jackson.—The ancients considered the spleen the seat of mirth, and the liver the organ of love; hence their old proverb, "*Splen ridere facit, cogit amare jecur.*" Heberden died at the age of 92.

"*Lactuca quercina.*"—Great quantities are now imported from France. Galen, who had great faith in the powers of the lettuce, called it the herb of sages, and to guard against sleepless nights sought its influence by eating it at supper. Lobel informs us that an English nobleman, who had long wished for an heir, but in vain, was blessed with a numerous family by leaving off this Malthusian vegetable.

J. H.—1st. The annual election in July next. The retiring members of the Council will be, unless any death vacancy or resignation intervene, Messrs. Hodgson, Skey, and Wormald. 2nd. Forms will be supplied by the Secretary, who will give due notice to all Fellows whose addresses in the United Kingdom appear in the College Calendar. 3rd. A Provincial Fellow will preside at the dinner. Last year Mr. Wormald ably and liberally discharged the duty. There are 1314 Fellows.

Dr. O'Beirne, Plymouth.—Aristotle, De Animâ; cum Averrois Interpretatione. Fol. Paduæ, 1492. This edition from Mantua is very scarce, and is reported by Fournier to be the first Greek and Latin edition printed. It is exhibited in long lines, without folios, signatures, or catch-words. He is said to have written two books on Medicine, and others on Anatomy, which are not obtainable. His general works are referred to three heads—God, Nature, and Man—so says Gillies.

Rochford, Essex.—"An ague in the spring is physic for a king."—*Old Proverb.*

A Staff-Surgeon, R.N.—Sir Gilbert Blane, Bart., was one of the Physicians in ordinary to George III. The present Sir Hugh Seymour Blane is his son. Dr. Maysmor's Medical Baronetage and Knightage will give you the required information.

Autographist.—In his Medical Portrait Gallery, Mr. Pettigrew states that the autograph of Albinus is of great rarity. There is one in the library of the College of Surgeons, and Mr. Stone has ten in his collection. Pettigrew adds that he failed to discover any in the British Museum, or even at Leyden in the University of which Albinus was professor. The *facsimile* published by Mr. Pettigrew was from an interesting letter of the great anatomist to Dr. Nesbitt, author of the "Osteogeny," in the possession of Mr. Stone.

George, of Kennington.—We never heard of this worthy or of his bibliographical labours. Consult Aikin, Haller, and, above all, the inimitable Atkinson, who says of the "Tractatus de Urinis" of Anglicus Richardus, "that poor Richard must needs have a touch at this uric acid; but the juggling art of chemistry now is so delightfully improved that the tricks pass as quick as lightning, and we make one chemical fox draw another from its earth. Well might cunning monks of old make such a fool of St. Januarius. If Sir Humphry Davy turned monk, he would soon frighten all Christendom."

Mr. Lock.—Two of the most voluminous writers on the subject were J. Astruc, who died in 1766 at the age of 82, and Daniel Turner. Portraits of these worthies are obtainable. The former made a great number of valuable contributions on the subject of venereal disease, which, he tells us, was introduced into the French camps at the siege of Naples by Charles VIII., Rex Francorum, about 1496. (a) When Hery, the famous Surgeon (who made a fortune by the cure of the venereal disease), saw the tomb of Charles in the church of St. Denis, he knelt down and honoured it. The chapter which this most interesting author gives on the first origin of lues, and the natural inclination which he evinces to throw it off the French shoulders, will prove entertaining to the reader, and in some measure open his eyes to the real origin of the venereal disease. His work on the "Maladies des Femmes" is also a masterly composition, simple and practical. Atkinson considered his works as very philosophical, full of method and practice—in fact, he was a practical and brilliant man. "Il étoit professeur par goût et par nature." He had also a great turn for mathematics, and was well versed in ancient authors, and in those who treated on his own selection of subjects. There is a portrait of Astruc by C. Monnel, engraved by L. Halbon; he was born in 1684, and died in 1766. Of Daniel Turner there are portraits by M. Richardson and Verelot, engraved by G. Vertue. He was a Physician of some celebrity, says Wadd, although not regularly educated as a Physician, but as a Surgeon. He sent a curious paper to the Royal Society on "Cases of Insects voided by the Urinary Passages." His work on syphilis appeared in 1732.

Lines on Dr. Turner.

Good Dr. Turner is deprived of breath,
And *turn'd* into another world by death.
'Twas a good *turn*, for some, that gave him birth;
And having had his *turn*, he's *turn'd* to earth.

Anatomy of the Foot in Man and Ape.—The following letter, from Professor Halford, of Melbourne, appears in an Australian paper:—

"Sir,—Some time ago your columns contained what doubtless many of your readers considered able dissertations in support of the views of the probable descent of man from the apes. Such views, I maintained, were quite unsupported by anatomical research, however fit for the semi-scientific gossip then everywhere so prevalent. I stood nearly alone in my opinions until the arrival of the skeletons of the gorillas, a description of which by me will be found in the *Transactions of the Royal Society* of last year.

"I have now to inform you that the long-desired work of Professor L. P. Gratiolet and M. Alix has reached this colony. It is dated Paris, 1866, and is entitled 'Recherches sur l'Anatomie du Troglodytes Aubryi; Chimpanzé d'une Espèce Nouvelle.' Gratiolet commenced this work with a view to settle the discussion then going on amongst anatomists, and I feel pleased that what I have said and written on this subject has been confirmed by so eminent an authority. Possibly there may be some of your readers who have taken a real interest in this question. I forward you, therefore, a few extracts from the Professor's work, for comparison with my own prior and independent statements.

"Speaking of the human and simian foot, he says:—

"'Dans les pieds grecs, incontestablement, le deuxième orteil prédominait sur le troisième et les suivants, tandis que dans le singe c'est très-certainement le troisième orteil qui domine. C'est là une différence essentielle; l'anatomie la démontre, l'axe du pied determiné d'après la disposition des muscles interrosseux passant par le deuxième orteil chez l'homme, et par le troisième chez le singe.' Tout démontre ici à la fois une différence de type et d'accommodation.'

"Of the peculiarity of the latissimus dorsi, of the distinctness of species, and of the approximation of both chimpanzee and gorilla to the macaque and baboons, the following extracts tell:—

"'Nous ne terminerions pas la description du grand dorsal, si nous ne

(a) "Dear was the conquest of the *new-found* world,
Whose plague, e'er since, through all the *old* is hurl'd."

So says Fracastorius, by which he makes it coeval with Columbus; but a facetious writer of the last century suggests that it is of much greater antiquity, for "whether with Physicians we call it lues venerea, with 'pothecaries the venereal disease, with ladies the French distemper, or with fine gentlemen by that short name so commonly used in the time of Congreve and Wycherly, I am persuaded that it is as old as the days of Hercules."

parlions pas d'un système accessoire qui fait absolument défaut dans l'homme, mais se trouve dans tous les singes et dans un grand nombre d'animaux mammifères.

"'Nous allons essayer de démontrer ce dont nous sommes depuis longtemps convaincus, que les singes anthropomorphes ont chacun une perfection qui leur est propre, et qui n'a rien de commun avec la perfection humaine.

"'Est-il nécessaire d'insister davantage pour faire comprendre la fausseté de l'hypothèse qui suppose ces singes capables d'une locomotion et d'une station verticales? A la vérité ils peuvent se tenir debout, mais, dans la locomotion, ils sont nécessairement quadrupèdes. L'étude de la face postérieure (of the pelvis) rend plus sensible encore la vérité de notre interprétation. L'absence de fesses, les ischions toujours à découvert, la brièveté du sacrum et du coccyx, la direction de l'anus vers la partie dorsale du corps, la vulve terminale et découverte de tous côtés, et, pour dire en un mot, ces conditions ignobles et sordides de la forme, abaissent le Trog. Aubryi, aussi bien que la Gorilla, au niveau des Macaques et des Cynocephales.'

"I am, Sir, your obedient servant,

"December 6, 1866." "GEORGE B. HALFORD.

MULTIPLE CONGENITAL DEFORMITY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The following case of congenital deformity occurred in the course of my midwifery practice last week, and is chiefly remarkable from the number of parts malformed in one individual:—

The child was born at the eighth month, according to the mother's calculation; but its small size and the position of the navel incline me to think it was only at the seventh month. The presentation was natural, but the quantity of liquor amnii was unusually large. The anterior part of the head was hydrocephalic, the fontanelle extending to the lower third of the frontal bone. There was a spina bifida involving the whole of the lumbar region, which was covered only by a thin membrane, like mucous membrane, permitting the spinal fluid to exude, so that no tumour was formed at the point. The penis was in the condition of hypospadias, and the scrotum was empty. There was a club-foot, talipes varus, in the right limb; and in the left the knee-joint was flexed the wrong way, owing to extreme contraction of the extensor muscles of the thigh, which were imperfectly developed. The child was born alive, and breathed for five or six minutes. The mother was over 40 years of age, and had borne seven children, one of which had hare-lip. I am, &c.

Guildford, March 13. HENRY TAYLOR.

COMMUNICATIONS have been received from—

Dr. R. H. TAYLOR; Mr. E. COLDEN; Dr. G. JOHNSON; Dr. FITZPATRICK; Dr. SNELL; Dr. WILLIAMS; Mr. MATTHEWSON; Dr. GIBBON; Professor LAYCOCK; Dr. MASON; Dr. OGSTON; Dr. R. SOUTHEY; Mr. J. CHATTO; Dr. CRAWFORD; Mr. FURNEAUX JORDAN; Mr. H. TAYLOR.

BOOKS RECEIVED—

Beraud's Atlas of Anatomy, Part X.—Taylor's Address on Medical Missions—Glasgow Medical Journal—Williams's Address—Buchanan's Functions of the Human Body—Statistical Abstract of the Health of the Navy between the 1st of July, 1865, and 30th June, 1866—Report of the Health of Liverpool during the Year 1866, by W. S. Trench, M.D.

NEWSPAPERS RECEIVED—

Daily Review—L'Union Médicale—Sunday Gazette—Gazette Médicale de Paris—Gazette des Hôpitaux—Pall-mall Gazette—Medical Press and Circular.

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 9, 1867.

BIRTHS.

Births of Boys, 1109; Girls, 1044; Total, 2153.
Average of 10 corresponding weeks, 1857-66, 1969·2.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	734	691	1425
Average of the ten years 1857-66	730·2	706·7	1436·9
Average corrected to increased population..	..	..	1580
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,388	..	..	5	1	8	4	1	..
North ..	618,210	8	3	3	5	19	16	4	..
Central	378,058	7	2	3	..	10	5	..	..
East ..	571,158	8	1	7	..	20	9	5	..
South ..	773,175	9	10	9	1	10	9	3	..
Total ..	2,803,989	32	16	27	7	67	43	13	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·774 in.
Mean temperature	35·3
Highest point of thermometer	48·7
Lowest point of thermometer	27·6
Mean dew-point temperature	30·9
General direction of wind	N.E.
Whole amount of rain in the week	0·52

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, March 9, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending Mar. 9.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending Mar. 9.	Temperature of Air (Fahr.). Highest during the Week.	Temperature of Air (Fahr.). Lowest during the Week.	Temperature of Air (Fahr.). Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	2153	1421	1425	48 7	27·6	35·3	0·52	53
Bristol (City) . .	165572	35·3	115	74	177	45·8	25·4	35·6	0·44	44
Birmingham (Boro')	343948	43·9	240	167	152	43·7	21·2	35·1	1·42	143
Liverpool (Borough)	492439	96·4	430	285	312	48·4	29·5	37·0	0·10	10
Manchester (City) .	362823	80·9	285	205	‡206	50·0	24·0	37 5	0·18	18
Salford (Borough) .	115013	22·2	81	58	76	49·8	24·2	36·1	0·30	30
Sheffield (Borough).	225199	9·9	159	119	124	44·6	24·1	34·3	0 79	80
Leeds (Borough) .	232428	10·8	160	118	128	48·8	24·3	36·4	0·58	59
Hull (Borough) .	106740	39·0	88	49	36	..	..	.	..	..
Nwcstl-on-Tyne, do.	124960	23·4	89	66	73	42·0	33·0	36 9	0·96	97
Edinburgh (City) .	176081	39·8	118	85	91	46·7	32·0	37·4	0·50	51
Glasgow (City) .	440979	87·1	341	257	269	48·3	28·5	37·6	0·63	64
Dublin (City and some suburbs) .	319210	32·8	155	†157	187	47·8	32·1	39·0	0·86	87
Total of 13 large Towns . . .	6187764	34·3	4420	3061	3156	50·0	21·2	36·5	0·61	62
					Week ending Mar. 2.	Week ending Mar. 2.				
Vienna (City) . .	(1863) 560000	..	..	..	327	..	..	§ 36·5	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·774 in. The barometrical reading decreased from 30·59 in. at the beginning of the week to 29·20 in. by the end of the week. The general direction of the wind was N.E.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 39·0°.

APPOINTMENTS FOR THE WEEK.

March 16. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.
METROPOLITAN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH, 7½ p.m. Meeting.
ROYAL INSTITUTION, 3 p.m. Professor Frankland, "On Coal Gas."

18. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.
MEDICAL SOCIETY OF LONDON, 8 p.m. Dr. Chapman, "On Epilepsy."
ROYAL COLLEGE OF SURGEONS, 4 p.m. A Lecture, by Professor Huxley.

19. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.
ANTHROPOLOGICAL SOCIETY OF LONDON, 8 p.m. Meeting.
PATHOLOGICAL SOCIETY, 8 p.m. Meeting.
ROYAL INSTITUTION, 3 p.m. Rev. G. Henslow, "On the Practical Study of Botany."

20. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 2 p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.
ROYAL COLLEGE OF SURGEONS, 4 p.m. A Lecture, by Professor Huxley.

21. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.
HARVEIAN SOCIETY OF LONDON, 8 p.m. Mr. I. B. Browne, Jun., "On Anæsthetics in Midwifery." Dr. Chapman, "On Epilepsy."
ROYAL INSTITUTION, 3 p.m. Professor Frankland, "On Coal Gas."

22. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.
ROYAL COLLEGE OF SURGEONS, 4 p.m. A Lecture, by Professor Huxley.
ROYAL INSTITUTION, 8 p.m. Dr. J. Bell Pettigrew, "On the Various Modes of Flight in Relation to Aëronautics."

ORIGINAL LECTURES.

LECTURES ON CATARACT,

AND THE

MODERN OPERATIONS FOR ITS TREATMENT.

DELIVERED AT

King's College, London,

DURING THE SUMMER SESSION, 1866,

By J. SOELBERG WELLS,

Professor of Ophthalmology in King's College, and Ophthalmic Surgeon to King's College Hospital.

LECTURE VII.

GENTLEMEN,—I will now briefly lay before you the principal arguments which can be advanced in favour of, or against, the different operations for senile cataract. In doing this, I shall confine myself to the flap extraction, the scoop operation, and Von Graefe's new modified linear extraction; for the other operations which I have described—viz., those of Mooren, Jacobson, Pagenstecher, and Wecker—are, I think, only indicated in exceptional cases.

There cannot be any doubt that the common flap extraction is the most perfect operation of all, when it turns out perfectly successful. It is nearly free from pain; it does not in the least interfere with the appearance of the eye; the pupil remains central and moveable; the sight is perfect, and is not at all deteriorated and confused by circles of diffusion upon the retina, which are always more or less present when an iridectomy has been performed. It must, however, be confessed that these great advantages are often more than counterbalanced by the considerable dangers which beset the operation. On account of the great size of the flap, there is much risk of the vitality of the cornea becoming impaired, and of its undergoing partial or even diffuse suppuration, which may be accompanied by suppurative iritis or irido-choroiditis. Again, prolapse of the iris is a not unfrequent complication, proving a source not only of great annoyance and irritation, but even of danger to the eye. The after-treatment also demands much care and attention—more, indeed, than can generally be bestowed in an Hospital, more especially in a general one, with no special nurses or ophthalmic wards. Now, in the scoop extraction, these two principal dangers—suppuration of the cornea and prolapse of the iris—are nearly completely eliminated. On account of the position and shape of the incision, suppuration of the cornea, even of limited extent, is rare, and a prolapse of the iris can only be slight, and is confined to the angles of the section. Moreover, chloroform may be administered without any fear. But it must be admitted that iritis, chronic and insidious irido-choroiditis, inflammation of the intra-capsular cells, and secondary cataract, are more common than in flap extraction. I have found the scoop extraction so successful that I have preferred it in general to the flap operation, more especially in Hospital practice, as the patient requires far less careful watching and attendance, and the after treatment is much more simple. The confinement to the bed and house is also shorter. I think it is especially indicated in very feeble, decrepid, nervous, and unmanageable patients, who are impatient of control and confinement; in patients suffering from obstinate and severe cough, or bronchitis; also, if the pupil is adherent, or small and rigid, so that it dilates but imperfectly under the influence of atropine, or if the cataract is complicated with some choroidal or retinal lesion. But it is, without doubt, a more difficult operation than the common flap extraction, and for its successful performance demands a cool, dexterous, and practised operator. I am sometimes asked by Medical Practitioners and students which operation I consider the easiest and safest for an inexperienced operator. I think that, all things considered, the downward flap operation is the easiest, for when the section has been successfully completed, the chief danger and difficulty are past. Whereas, in the scoop extraction it is far different, more especially when the upward operation is performed. The incision has to be followed by the iridectomy, and when this has been safely accomplished and the capsule divided, the most difficult step of all—the removal of the lens by the scoop—still remains. When the Surgeon has operated several times by the lower flap extraction, and has acquired some experience and dexterity, he should proceed to the upward flap operation, the scoop extraction, and Von Graefe's new operation, so that he may be able to draw comparisons between them from his own experience, and adopt the most successful. I think that Von Graefe's operation, if its success proves as eminent in other hands as in his own, will, in all probability, supersede the scoop and flap operations. For it not only offers all the advantages of the former—viz., the administration of chloroform, the linear shape of the incision, involving but a small portion of the cornea, and the iridectomy—but yet one more very important one, that in the great majority of cases the lens may be removed without the aid of any traction instrument. For cases of diabetic cataract, it is, I think, by far the safest operation, for in the flap extraction (even with a preliminary iridectomy) there is always some risk of suppuration of the cornea in these patients, as they are generally in a very feeble state of health. In the scoop extraction there is, moreover, the danger that the introduction of this instrument should set up iritis, for we must remember that in persons suffering from diabetes the iris is exceptionally impatient of irritation and bruising. In order to secure the greatest immunity from this danger, it may even be advisable to make a double iridectomy—viz., upwards and downwards, so as to get a broad vertical pupil, the two opposite portions of the iris being thus completely cut off from each other. The only two points in Von Graefe's operation which demand practice, care, and dexterity are the incision and the removal of the lens. If the section is too small, the delivery of the lens will be difficult and forced, necessitating either considerable pressure upon the eyeball, or the introduction of some form of traction instrument. If, on the other hand, it is too large, and the puncture and counter-puncture lie too far in the sclerotic, there is imminent risk of losing much vitreous humour, even perhaps before the removal of the lens is attempted. Much delicacy and dexterity is also required in coaxing out the lens by pressing upon the sclerotic with the curette (sliding manœuvre). For if this is roughly and clumsily done, the hyaloid will be ruptured, the vitreous will escape, the lens will in all probability be pushed somewhat aside, and a scoop must be passed in to remove it. I have, in my last lecture, mentioned that this pressure upon the sclerotic is to be assisted by a light pressure by the forceps upon the sclerotic just below the cornea, which will greatly facilitate the presentation of the lens in the section. If there is no imperative call for the most perfect acuteness of vision, the section may be made downwards, for this renders the subsequent steps of the operation more easy.

Reclination or Couching.

I only mention this operation to state that, in my opinion, it should be completely abandoned. Although it may appear to be temporarily successful, it has been found that ultimately about 50 per cent. of the eyes have been lost from chronic irido-choroiditis, etc. It is performed in the following manner:—The pupil having been widely dilated by atropine, a curved couching needle, with its convex surface turned upwards, is passed through the sclerotic at the temporal side, a little distance from the cornea, and somewhat below its horizontal diameter. When the needle has penetrated the sclerotic, it is to be turned so as to bring its convex surface parallel to the iris, behind which it is to be carried to the edge of the pupil, and then passed diagonally across to the opposite side of the anterior chamber. When its point has arrived near the inner and upper edge of the pupil, the handle of the instrument is to be lightly tilted upwards between the fingers, and the lens slowly depressed by the concave surface of the needle into the lower and outer portion of the vitreous humour. It should be kept by the needle in this position for a few moments, in order to prevent its reascending. The needle is then to be slightly rotated, in order to disentangle its point, and drawn back to the point of entrance. The operator should wait for a few moments to see if the lens rises up again, in which case the depression is to be repeated.

Division or Solution of Cataract.

This operation is more especially indicated in the cortical cataract of children and of young persons up to the age of 20 or even 25; also in those forms of lamellar cataract in which the opacity is too extensive to allow of much benefit being derived from an artificial pupil. After the age of 35 or 40, the lens is generally too hard to undergo anything but very slow absorption, even after frequent repetitions of the operation; the iris is also more impatient of irritation and pressure, so that the danger of setting up iritis is much increased; and there are other operations which are much to be preferred for cataracts occurring at this time of life. In infants and young

children an operation for cataract should not be unnecessarily postponed, as the presence of the cataract is very apt in infancy to give rise to nystagmus and to that form of amblyopia which is dependent upon non-use of the eyes, and which is similar in character to that so often met with in strabismus.

The object of the operation of division is to lacerate the anterior capsule with a fine needle, so as slightly to break up the surface of the lens and to permit the aqueous humour to come in contact with the lens substance, which, imbibing the fluid, softens, and becomes gradually absorbed. The time required for the absorption varies with the age of the patient and the consistence of the cataract. In infants and young children the lens is often absorbed in from six to ten weeks, and one operation may suffice for this purpose. But in adults it may have to be repeated several times, and in them great care should be taken not to divide the capsule and the lens too freely at one sitting, for this will cause great swelling of the lens substance, or the exit of considerable flakes into the anterior chamber, and either of these causes may set up severe iritis or irido-cyclitis. The same caution is necessary in cases of lamellar cataract, because in these a large portion of the lens is transparent and of normal consistence, and will therefore imbibe much aqueous humour and swell up very considerably.

Prior to the operation the pupil should be widely dilated with atropine. The patient, more especially if a child, should be placed under the influence of chloroform. Infants should be firmly rolled in a blanket or sheet so that their movements may be controlled. The eyelids are to be kept apart with the spring speculum, and the eye fixed with a pair of forceps. A very fine needle is then to be passed somewhat obliquely through the outer and lower quadrant of the cornea, at a point lying well within the dilated pupil, so that the iris may not be touched by the stem of the needle during the breaking up of the lens. The track of the corneal wound must not be too slanting, otherwise its channel will be too long, and the tissue of the cornea will be stretched and bruised during the working of the needle, and this may produce an opacity of the cornea; nor must it be too straight, otherwise the aqueous humour might easily escape. The size and number of the incisions in the capsule must vary with the amount of effect that we desire. If the latter is to be but very slight, a single small horizontal or vertical tear may suffice, or a crucial incision of limited extent may be made. But if we desire a more considerable effect, more especially in the cortical cataract of children, the incisions must be more extensive, or the superficial portion of the lens is to be gently broken up or comminuted by a series of short superficial incisions, which converge towards the centre of the cataract. In infants and young children the needle may be far more freely used than in adults, or in cases of lamellar or partial cataract. In such, it is always safer to repeat the operation, even several times, than to do too much at one sitting. It may be repeated at intervals of five or six weeks, if it is found that the absorption has become arrested or progresses but very slowly; but all irritability and redness of the eye should have disappeared before the needle is again introduced. If the opening in the capsule is too large, or the cataract broken up too freely, the lens will imbibe much aqueous humour, and, swelling up very considerably, will press upon the iris and ciliary body, and may thus set up severe iritis or irido-cyclitis; or if the incisions in the capsule are too extensive, fragments of lens-substance may fall into the anterior chamber, and there set up great irritation.

The needle used for this operation should be very small; its cutting spear-shaped point should only extend to about $\frac{1}{15}$th or $\frac{1}{20}$th of an inch from the end, and the stem should be cylindrical, so that the aqueous humour may be retained throughout the operation. I always use Bowman's fine stop needle (Fig. 19), which fulfils all these indications.

Fig. 19.

The after-treatment is generally very simple. The pupil should be kept widely dilated with atropine, so that the iris cannot be pressed upon by the swollen lens or any flakes that may have fallen into the anterior chamber. A bandage should be worn for the first twenty-four hours, and the patient should be kept in a somewhat darkened room for the first day or two, especially if there is much reaction. Generally, however, this is but slight, the eye only looking flushed, and watering somewhat on exposure to bright light. My friend, Mr. Lawson, has even successfully operated by this method upon some cases of monocular cortical cataract in adults (between the ages of 20 and 30), and treated them throughout as out-patients. These were, however, exceptional cases, in which it was absolutely necessary that the patients should follow their employment. In order to expedite the cure, which is often of consequence in patients from the country, it is a very good plan, after the lens matter has become softened by the admission of the aqueous, to remove the whole cataract by a broad linear incision. In children this may generally be done within a week after the division, and thus the sight may be restored in a few days, whereas, otherwise, many weeks or even months would have elapsed before the cataract would have been entirely absorbed. The same proceeding may be employed in cases of partial cataract, the transparent portion of the lens being made opaque, and softened by the introduction of the needle. This mode of operation has been very successfully practised and much advocated by Mr. Bowman, who also often advantageously employs the suction syringe for the removal of the softened lens after it has been previously broken up by the needle.

If symptoms of irritation and inflammation should set in after the operation of division, and they do not readily yield to antiphlogistics, but increase in severity, and more especially if the tension of the eyeball is augmented, the cataract should be at once removed through a good-sized linear incision, made near the periphery of the cornea with an iridectomy knife. This is also to be done if the capsule has been too freely divided, and the nucleus or considerable portions of lens substance have fallen into the anterior chamber, and are setting up much irritation. If the lens is so firm that it cannot all be readily removed through the linear section, it will be wiser to combine an iridectomy with it, than to endeavour to remove the portions of lens by repeated introductions of the curette into the anterior chamber. An iridectomy is also indicated if the increase of tension has existed for some little time, and if the perception of light and the extent of the field of vision are markedly deteriorated.

Two special forms of inflammation may follow the operation and endanger the safety of the eye. In the one, the inflammation is chiefly plastic or purulent in character. The iritis or irido-cyclitis is accompanied by plastic oxudations behind the iris and into the vitreous humour, leading eventually in all probability to chronic irido-choroiditis and atrophy of the globe. In the other form, the inflammation is of a serous nature, giving rise to an increased secretion of the vitreous humour and an augmentation of the intra-ocular pressure—in a word, to a glaucomatous condition of the eyeball, which will cause irretrievable destruction of the sight if timely relief be not afforded.

As these inflammatory complications are most apt to occur in adults above the age of 15 or 20, more especially if the cataract is only partial or of a lamellar nature, Von Graefe(a) advises that in such cases, or if any posterior synechiæ exist, an upward iridectomy should be made a few weeks before the operation of division. By so doing, plenty of room will be afforded for the swelling up of the lens, and if fragments have fallen into the anterior chamber they will produce far less irritation.

Cranial Types of Man and Woman.—According to Welcker, the female skull is smaller both as regards horizontal circumference and internal capacity, and the weight of the brain corresponds with this. The female skull exhibits, according to Welcker's measurements, the following proportions, assuming the male =100 throughout:—Circumference, =96 6; capacity =89·7; weight of brain, =89·9. The outlines of the female head are rounder; the facial portion of the skull, especially the jaws and the base of the skull, smaller, the latter being especially narrower in the posterior section. The base is at the same time more extended, the sella-angle larger, and there is developed in the female a striking tendency to prognathism as well as dolichocephaly. We may, therefore, say that the type of the female skull approaches in many respects that of the infant, and in a still greater degree that of the lower races; and with this is connected the remarkable circumstance that the difference between the sexes, as regards the cranial cavity, increases with the development of the race, so that the male European excels much more the female than the negro the negress.—*Lectures on Man*, by Dr. C. Vogt, p. 81.

(a) *Archiv für Ophthalmologie*, v. i. 173.

ORIGINAL COMMUNICATIONS.

THE

ANATOMICAL CONDITION OF THE LUNGS AND HEART IN THE COLLAPSE STAGE OF CHOLERA.

By GEORGE JOHNSON, M.D., F.R.C.P.,
Professor of Medicine in King's College.

When a dispute arises respecting a question of anatomical fact, it is desirable to ascertain the probable explanation of diverse views, and then to make fresh observations, avoiding as much as possible, all sources of fallacy. Dr. Edmund Parkes, more than twenty years ago, made some very laborious and exact observations on the condition of the heart and lungs in the collapse stage of cholera. Dr. Goodeve, in the article "Epidemic Cholera" in Dr. Reynolds's "System of Medicine," gives the main points of Dr. Parkes's observations in the following words:—"Dr. Parkes was the first to point out, in his work on Asiatic cholera, the real seats of accumulation of blood. Most persons who have had opportunities of making post-mortem examinations of cholera cases will confirm his statements. It was previously supposed that the lungs and heart were gorged with blood, but he pointed out accurately what was the precise situation of the congestion. He showed that the gorged parts were the vessels of the right side of the heart, and the pulmonary artery in the roots of the lungs, from the right side of the heart to the smaller branches; and that the smaller vessels, the pulmonary capillaries, the pulmonary veins, and the left side of the heart, were nearly empty—in fact, that the blood was not arrested in the capillaries of the lungs, as in ordinary asphyxia, but in the arteries short of them. On section there was free bleeding from the roots of the lungs, but there was little or none in the peripheral parts; they were generally exsanguine." Now, we are told that this is an entire mistake, that the lungs of those who die in the collapse stage of cholera are not anæmic, but congested, and that there is not a disproportionate amount of blood in the right cavities of the heart, and in the pulmonary artery. These contradictory statements must be very perplexing to those who desire to get at the truth of the matter, but have no opportunity to make observations for themselves. Can the discrepancies be explained and reconciled? I believe that they can. I have good reason for my belief that whenever the lungs have been found much congested after death in the collapse of cholera the examination of the body has not been made until several hours after death, during which time much of the blood which, at the moment of death, was largely accumulated in the right side of the heart and in the pulmonary artery has passed onwards into the capillaries of the lungs, and some of it beyond them. The peculiar distribution of blood described in the above extract from Dr. Goodeve is obviously the result of an abrupt arrest of the circulation through the minute branches of the pulmonary artery. The arrest is probably due to the action of a contractile force which ceases with life. After death the purely physical forces tend to restore the equilibrium of pressure, and the distribution of the blood is greatly altered in the course of a few hours. Immediately after death in the collapse stage of cholera, those parts of the vascular system of the lungs which lie beyond the minute pulmonary arteries may be compared with a part of the earth's surface where a sudden fall of the barometer indicates a great diminution of atmospheric pressure. This is quickly followed by a lateral rush of air, by which the equilibrium is restored. So it is with the blood in the pulmonary vessels after death in the collapse stage of cholera.

Dr. Parkes's examinations were made, on an average, 7½ hours after death. The longest time was 22 hours, the shortest under an hour. The average weight of the lungs in 23 Europeans was 26 ounces 6 drachms. The normal weight of the lungs is usually estimated at 42 ounces. The anæmia and the diminished weight of the lung were greatest in those cases which were examined at the shortest interval after death. Thus, two cases were examined within an hour after death. In one the two lungs weighed only 14 ounces, and in the other 16 ounces. Yet in the first of these cases more than 24 ounces of blood "gushed" from the divided roots of the lungs, "and particularly from the pulmonary arteries." It can scarcely be doubted that if this body had been opened 12 hours after death much of that blood would then have found its way into the pulmonary capillaries. The elastic resiliency of the distended pulmonary artery which made the blood suddenly "gush" out of the divided vessels would have sent it on more slowly into the capillaries and veins.

I went lately to St. George's, where Mr. Pick did me the favour to show me his record of post-mortem examinations of cholera cases. Only four cases were examined, three adults and one child. In the three adults there was a direct relation between the amount of blood in the lungs, as indicated by their weight, and the interval between death and the inspection of the body. Thus one man was examined 8½ hours after death; his lungs weighed 27½ ounces. Another man was examined 15 hours after death, and his lungs weighed 30½ ounces. The lungs of another man, 29 hours after death, weighed 40 ounces. It will be seen that in each case the weight of the lungs was less than normal. It is probable that even 8½ hours after death a considerable quantity of blood had passed from the pulmonary arteries into the capillaries, and it is certain that 29 hours after death the weight and appearance of the lungs would afford no index of the condition of those organs at the moment of death.

The pathologist at another of the great Hospitals did me the favour to give me some particulars of his post-mortem examinations of cholera cases. They were 17 in number. The average interval between death and the post-mortem examination was 21·3 hours; the shortest period being 10 hours, the longest 45 hours. In only 3 cases were the lungs weighed. In a man, 18 hours after death, they weighed 30½ ounces; in a woman, 11 hours after death, they weighed 26½ ounces; and in another woman, 12 hours after death, the left lung weighed 10¼ ounces. In each case it will be seen that the lungs were below the normal weight, but in each case it is probable that their weight had been steadily increasing during the period which intervened between death and the examination of the body. It is obvious that in all post-mortem records of cholera cases death in collapse must be distinguished from death during reaction. In the latter class of cases the lungs are very commonly, though not constantly, much congested and increased in weight.

I admit that it is not always possible to examine the body of a cholera patient within a very few hours after death. But the point that I insist upon is this—that when, as in the collapse stage of cholera, the object is to ascertain the exact distribution of blood in the heart's cavities, the great vessels, and the minute tissue of the lung during life and at the moment of death, unless the examination is made within a short period after death, the results must of necessity be inaccurate and delusive. Therefore, when from any cause the inspection cannot be made soon after death, it is better not made at all. The results, at any rate, will not be fairly comparable with those obtained when due attention has been paid to all the circumstances which are requisite to insure scientific accuracy.

The following observation of Harvey's has a direct bearing upon this question:—"I have several times opened the breast and pericardium of a man within two hours after his execution by hanging, and before the colour had totally left the face, and in presence of many witnesses have demonstrated the right auricle of the heart and the lungs distended with blood; the auricle, in particular, of the size of a large man's fist, and so full of blood that it looked as if it would burst. This great distension, however, had disappeared next day, the body having stiffened and become cold, and the blood having made its way through various channels." (Second Disquisition on the Circulation of the Blood, Sydenham Society's translation, p. 127.) It scarcely, I think, admits of a doubt that if this experiment were repeated upon a cholera corpse the result would be the same. If the opportunity should ever occur to me, I will perform the experiment, and publish the result.

Movement of the Population of the World.—Statisticians have calculated that the entire globe having from 1,200,000,000 to 1,300,000,000 inhabitants, there must be about 32,000,000 deaths per annum. At this rate nearly 88,000 persons die daily, more than 3600 per hour, and at least 60 per minute—a human life becoming extinct every second. But the number of births being in excess of this, it may be asserted that during every minute that flies at least seventy human beings are born.—*Journal de la Société de la Statistique*, Fevrier.

SURGICAL INQUIRIES.—No. IV.

ON THE HEREDITARILY SYPHILITIC CHARACTER OF AN INFLAMMATION OF THE BONES HITHERTO REGARDED AS STRUMOUS.

By FURNEAUX JORDAN, F.R.C.S.,
Surgeon to the Queen's Hospital, Professor of Clinical Surgery at Queen's College, Birmingham.

(Concluded from page 275.)

The cases, recorded and unrecorded, may be fairly represented as follows :—

A young adult, male or female, with more or fewer of the following signs of hereditary syphilis—earthily tinted and often pale countenance, singly notched upper incisors and flat or thick bridge of nose, cicatrices at the angles of the mouth, and the history or remains of interstitial keratitis—is attacked between the years 15 or earlier, and 35 or later, with a slow, mostly a very slow, inflammation of the ends of the shafts of the long bones, the articular extremity or epiphysis being usually less involved than the shaft or diaphysis. The disease is not confined to the long bones, but may attack the pelvic, vertebral, and other bones. The affected part becomes the seat of slow enlargement, some intermittent pain and tenderness; occasionally, starting pains are present. The inflammation may not (especially with appropriate treatment) pass beyond the stage of sclerosis, or it may proceed to caries, with suppuration and resulting sinuses. The disease does not terminate in necrosis, although small irregular fragments may be detached. The adjacent joint may not be implicated, or implicated only at a very late period. If the joint should become involved, it is usually in the form of synovitis, subacute or chronic. When the smaller long bones are affected—as the humerus, radius, or ulna—the adjacent joint is implicated sooner. In the knee also, in rare cases, joint symptoms may be the first to attract attention. After a long period the disease slowly disappears, with possibly adherent cicatrices, and possibly thickened synovial membrane. A mild course of mercury, in addition to other remedies, greatly accelerates recovery.

The cases just cited show that an inflammatory disease of the bones is prone to occur in young adults who are the subjects of hereditary syphilis.

The grounds of the inference that hereditary syphilis was present are the following phenomena: — A single notch, slightly or deeply concave, in the cutting edge of the front teeth, especially, but not necessarily, in the upper central incisors, flat or thick bridge of the nose—a condition which is often absent in the less severely marked cases—cicatrices at the angles of the mouth; a more or less earthily tinted skin is a very common symptom. The history of eruptions on the skin and "snuffles" shortly after birth, and of interstitial keratitis before or near puberty, is frequently obtainable. Our knowledge of the indications of hereditary syphilis is mainly due to the admirable researches of Mr. Jonathan Hutchinson. I am fully convinced of their truth.

Those who do not believe that the above signs are indicative of hereditary syphilis, I do not ask to accept the inferences now made. If the phenomena which I have assumed to be indicative of hereditary syphilis, and which, in the recorded cases, are associated with a peculiar disease of the bones, are rejected, a more marvellous conclusion must be accepted—namely, that a new cachexia has been discovered which is not syphilitic, which is certainly not strumous or of any other known character.

The disease of the bones under consideration is essentially a disease of early adult life. It occurs between the ages of 15—possibly 12 or 10—and 35 or 40, or even later. When it occurs in the earlier years, it is probably accelerated in its appearance by injury, usually more or less slight.

The locality of the disease is one of interest, because of its relation to a well-known principle in the development of bone. In the long bones the inflammation commences in the extremity of the diaphysis—that is, on the shaft side of the line of union of the diaphysis and epiphysis. The focus of the inflammatory action is a greater or less distance from the line of union, but it is always in the interior, and probably the centre, of the cancellous tissue. As the inflammatory action extends, it invades both the shaft and the epiphysis; usually the disease is more extensive in the shaft than in the epiphysis; indeed, in some cases the epiphysis is not at all, or very slightly, involved. We shall shortly see the bearing of this important fact on disease of the adjacent joints. One-third of the cases I have recorded show that the disease began in the upper end of the shaft of the femur, or, in other words, in the lower part of the large trochanter. The trochanter was enlarged in all the cases, but the head and neck of the femur were not implicated in any. In other cases, the lower end of the shaft of the femur is the seat of the disease. It is curious to see in some cases considerable enlargement of the lower third of the shaft of the femur suddenly diminishing in size close to the knee-joint. The upper ends of the shafts of the tibia and humerus may be similarly affected, as also the bones entering into the elbow-joint. In by far the greater number of cases which I have seen, the disease has been situated in the long bones. I have recorded one case of osteitis of the upper part of the dorsum of the ilium; in this case the position of the sinus and careful use of the probe lead me to believe that the crest of the ilium, with its separate centre of ossification, is not involved. The young man has a brother (whose case, also, is briefly given) with caries of the left great trochanter of twenty years' duration. Both the brothers are, I am convinced, the subjects of hereditary syphilis. I have seen the lower end of the radius affected; in one case the wrist was implicated. I have also reason to believe that caries of the vertebræ coming on in the adult is mostly, if not always, due to hereditary syphilis.

The osteitis may be so slight as scarcely to attract attention, or it may be so severe as to end in death of a portion of bone by the process of caries. Very frequently the osteitis passes no further than the stage of sclerosis, or increased size, density, and weight of the diseased portion of bone. Should the disease fail to be arrested at this stage, it will proceed to softening, molecular death, or caries. The inflammation does not terminate in necrosis, although in some cases small irregular fragments escape from the sinuses. The existence of sinuses is quite compatible with—indeed, frequent, in cases of merely inflamed bone.

The hereditarily syphilitic osteitis is, as a rule, extremely, in many cases singularly, slow in its progress and protracted in its duration. Thus, for many years there may be simply enlargement of the inflamed portion of bone, with more or less or possibly no pain and tenderness. After suppuration sets in, sinuses may remain open for many months or many years. In one case the sinuses remained open for eleven, in another for upwards of twenty years. Not only may the disease be very chronic, it may be very slight. I am quite sure that many cases come to Hospital out-patient rooms complaining of some stiffness of a wrist, or elbow, or ankle, or a larger joint, with perhaps impaired motion either of extension, or flexion, or rotation, in which cases there may be scarcely any or no pain and tenderness, but in which careful examination will almost always discover enlargement of one of the bones of the affected joint, and indications of hereditary syphilis. A few years ago I was requested by a Medical friend to examine the upper extremity of a man who had very slowly lost the power of supination of the forearm. There was no loss of muscular contractility; there was no disease of the elbow-joint. On very minutely comparing the elbow of the affected with that of the sound side, I detected enlargement of the head of the radius, and that firm pressure here elicited tenderness. A young lady found the power of extension of the elbow becoming slowly but more and more impaired; the inner condyle and the trochlea and adjacent portion of the shaft of the humerus were enlarged. I had not, when I saw these cases, arrived at the conclusion contained in this paper; if I were to see them now, I do not doubt I should find clear traces of hereditary syphilis.

The relation of hereditarily syphilitic osteitis to joint disease is of great practical importance. In numerous cases the adjacent joint is not involved in disease. This may be affirmed of nearly all the cases of trochanteric disease. A large proportion of the recorded cases were in this locality, or, strictly speaking, in the shaft and lower part of the trochanter, and in none was the hip-joint diseased. When the lower portion of the shaft of the femur is affected, the knee-joint frequently escapes; the same may be said of the cases in which the upper extremity of the shaft of the tibia is diseased. In one recorded case there were cicatrices (the remains of protracted osteitis) adherent to both femur and tibia scarcely more than an inch from the joint, yet the joint itself was perfectly free from disease. In other cases, after protracted osseous disease, the knee becomes at length the seat of synovial inflammation, which is commonly of a chronic,

but occasionally of a subacute, character. In rare cases (as in Mrs. B.'s) the symptoms of osseous disease are so slight, or the epiphysis so much more quickly involved, that synovitis may be the first symptom to attract the attention of the patient and the Surgeon. When the smaller bones of the upper extremity are the seat of disease, the joint structures are more readily implicated. The epiphyses here are so much smaller that inflammation more easily extends through them to the joint structures. In this way disease of the wrist, elbow, shoulder, and less frequently the ankle and knee, are found associated with the signs of hereditary syphilis. In strumous joint diseases, which are mostly in children, the hip and knee are the most frequently affected, and the hip very much more than the knee. In cases of the hereditarily syphilitic osteitis of adults, where the joint symptoms are the first to attract attention, the phenomena are widely different from those of strumous articular disease, as I shall shortly attempt to show.

The indications of the hereditarily syphilitic taint, like those of all other diathetic conditions, are of varying degrees of intensity and number. They may be slightly or strongly marked; they may be few or many in number. I do not hesitate to say that there is no diathesis which has so clearly recognisable features as the hereditarily syphilitic. It is true that these are sometimes very slightly marked, or even doubtful in character, and it is very probable that diseases are often due to hereditary syphilis in cases where it is difficult or impossible to discover the evidences of the constitutional taint. Single symptoms have traditionally little value, but in hereditary syphilis there are single symptoms of quite unmistakable import. A singly notched upper incisor of the permanent teeth, or an interstitial keratitis near puberty, would singly suffice to denote the presence of hereditary syphilis. I am also confident that it will be seen, in time, that a slow osteitis occurring within the epiphyses in young adults is in itself a sufficient sign of hereditary syphilis. If in nineteen cases we observe, in combination with certain traces of hereditary syphilis, a peculiar disease of the bones—a disease peculiar in locality, peculiar in the age of the sufferer, peculiar in its history, peculiar in its pathology, peculiar in its duration, and peculiar in its relation to the joints—and a twentieth case presented itself in which the peculiar bone disease was present, but in which the indications of hereditary syphilis were doubtfully marked, we should not hesitate to say that hereditary syphilis was as certainly present in the twentieth as in the previous nineteen cases.

It is scarcely necessary to draw attention to the discrimination of the hereditarily syphilitic osteitis from chronic rheumatic arthritis, or from the more acute and earlier conditions of necrosis, idiopathic or traumatic, or from the node of acquired or hereditary syphilis. It is desirable, however, to point out the features which distinguish the disease under consideration from strumous diseases of bone. In some cases, especially when the shaft has been unusually affected, the disease has been regarded as necrosis, an error always detected if operative measures are resorted to. Much more frequently strumous inflammation and strumous caries have been supposed to be present. The precise relations to, nay, the possible identity with, struma of the different manifestations in different generations of hereditary syphilis have yet to be ascertained. Struma is the unknown wilderness of Surgery. Every writer gives a different account of its extent and features. From time to time a bolder, or possibly a more discontented, observer explores a portion of the domain, gives it definite characters and boundaries, and recovers it from the unknown and mysterious to the comparatively known and intelligible. Interstitial keratitis was called strumous till Mr. Hutchinson pointed out distinct characters which separated it from the waste of struma; thus the list of strumous diseases diminishes. Whether a marked condition which can properly be called struma will eventually be left to Surgery, future research only can determine. In the cases I have described there were unmistakable marks of hereditary syphilis, and none of the so-called struma. The age was not that of struma, it was later. The portion of bone affected was not that usually nvolved in struma. Although strumous caries is chronic, hereditarily syphilitic osteitis is infinitely more so. Joint symptoms are primary, or early, or severe in scrofula; they are late, mild, or absent in the hereditarily syphilitic disease.

Another indication of the hereditarily syphilitic nature of the disease under consideration is the marked benefit which follows the use of mercury. In many of the recorded cases the rate of progress was singularly more favourable under the influence of a mild mercurial course. I am in the habit of prescribing one-twentieth or one-sixteenth of a grain of bichloride of mercury, or one-fourth or one-sixth of a grain of calomel, so arranging the dose as to maintain only the slightest possible influence on the edge of the gum. With the mercury I usually combine a small quantity of Dover's powder or other opiate. In my experience the iodide of potassium has appeared greatly inferior to the preparations of mercury. Complete and prolonged rest to the inflamed bone is absolutely indispensable in all cases. Pressure and counter-irritation may frequently be resorted to with benefit.

NOTES ON CERTAIN

METEOROLOGICAL PHENOMENA IN CONNEXION WITH CHOLERA AND OTHER DISEASES.

By A. LEITH ADAMS, M.B.,
22nd Regiment.

(Concluded from page 276.)

THE so-called "cholera mist" described by Mr. Glaisher in the *Times* of August 7, and seen also by Mr. Lowe at Nottingham and other competent observers, induces me to record the following memoranda made at different times and in various countries.

As early as 1849 I had my attention forcibly directed to the subject of atmospheric phenomena in connexion with cholera, from having heard of the black cloud which observers stated hung over Kurrachee, in Scinde, before and during the sudden and frightful visitation of the disease in the 8th Regiment some years previously. At the period above stated, epidemic cholera raged among the troops stationed at Poonah, where I was quartered. I then noted the following meteorological state:—"A grey or bluish-grey mist lying over the country, and ascending for some distance above the tops of the tallest trees. The density of this mist was variable—at times like a thin vein of light blue; at others, a regular and unmistakable dense grey-coloured haze, perfectly distinct from the vapour fog or the gloom occasioned by smoke; sometimes visible from daylight to noon, and often in cloudy weather throughout the entire day." These were the only remarkable appearances presented by the atmosphere to the naked eye. It struck me as a strange and singular phenomenon at the time, and the shades of colour and densities as only different degrees of intensity of one condition. A few months afterwards I noticed exactly the same appearances at Kurrachee during another serious visitation of cholera, which, by the way, I must remark, was clearly imported that year from the Deccan to Scinde by the regiment to which I was then attached. During the five following years exactly the same appearances were noted by me in the North-Western Provinces of India, and on one occasion in the middle of the deserts of Scinde when no cholera was raging in the neighbourhood—at least within hundreds of miles. The phenomena turned out to be a regular condition of the atmosphere, consisting of a haze or mist, sometimes of a grey colour, at others bluish; at one time faint, at others intense, and often capable of being overlooked by casual observers. The "faint bloom which is seen on the surface of recent varnished paintings," as pointed out by Mr. Lowe in connexion with his observations on the haze seen by him lately in England, gives a very good idea of the most transparent varieties observed by me in India and elsewhere. In its intensity it constitutes the well-known "day haze," visible in almost all hot climates irrespective of dryness or moisture. Its uppermost limits are never very clearly defined, unless the observer stations himself on a commanding height, when it appears like a slightly murky cloud stretching over the country below him. I looked for it in midsummer when travelling on the table-lands of Thibet at elevations from 14,000 to 17,000 feet above the level of the sea, but not once during the three months I remained in these elevated plains was anything of the kind observed; on the contrary, the atmosphere was clearer than I had ever seen it before, although the heat in secluded valleys was frequently intense. The real nature of this haze does not appear to me to have been clearly explained; its presence, equally in rainless as well as in damp regions, would seem to indicate that something more than watery vapour enters into its composition,

I have often noticed that a thunderstorm will dissipate the mist, and likewise rain, if accompanied by a strong wind. It returns, however, very soon afterwards.

I was at Scutari in the autumn of 1855, when the German Legion arrived from England; they had lost several men from cholera on the voyage, and again afforded another example of the then generally unaccepted doctrine of the transmission of cholera by human intercourse, for the disease soon spread among the troops in the vicinity of the fresh arrivals, and was only subjugated by vigorous measures had recourse to by the military and Medical authorities. Here, as previously, I beheld the same haze almost daily before, during, and for several weeks after the disease had left the station. Finally, this haze was observed in Malta during the four non-epidemic years preceding the serious cholera visitation of 1865. On the latter occasion my attention was particularly directed to it with reference to other meteorological conditions. The ozone readings for 1865, as computed at the observatory on the roof of the Military Hospital, Valetta, gave even a higher ratio than during the same months of the previous summer. The barometer, however, as usual during cholera years, was remarkable for its persistent high range. This, I must state, however, obtained also during certain summers when the public health was good. At all events, the temperatures of the hot months in 1837, 1850, and 1865 (the great cholera years), were alike characterised by unusual dryness and sudden and remarkably high rises of temperature at and for a short time previous to the outbreak. This was clearly pointed out by accurate observers, and I noted the same with reference to the epidemic of 1865. It was not apparent, however, that these years showed any marked prevalence of calms or close atmosphere; on the contrary, the prevailing winds of 1865 seemed rather in excess as compared with the summer and autumn of 1864. In vain I looked for the benign influence of the winds as a means of removing the stagnant air in the narrow lanes where the disease was raging, but neither during the rise nor decline of the cholera did they seem to exercise any marked effect on its progress, for the three days that the mortality reached its maximum the wind blew strong from the S.W., and was succeeded by calms and a fall in the number of attacks, which increased again for several days when the wind was blowing powerfully from the N.W. It seemed that the epidemic was made up of a succession of rises and falls apparently uninfluenced by any particular winds as long as the thermometer maintained its persistent high standard. I was in the habit of observing the haze daily from an elevated position which commanded a view of the entire group of the Maltese islands, but could not discern any peculiarities in its appearance different from what I had observed on former occasions. It is usually absent in the islands in winter, when the air is preternaturally clear and transparent. The S.E., or sirocco, is invariably accompanied by a haze apparently in no ways different from what has been described. In its greatest intensity it constitutes the "black siroc," a bluish-grey haze accompanied by a strong S.E. wind, possibly the *plumbeus Auster* of Horace. The influence of this wind on persons in health has no doubt been a good deal exaggerated by writers. Its disagreeable effects are more apparent in autumn, when it prevails especially during September, and sometimes for the two following months, when it occasions a feeling of lassitude and inertness, accompanied by increased perspiration, headache, and often irritable boils, and the sensation as if the body was covered with syrup. Some lymphatic and nervous constitutions seem to enjoy it, when the robust and sanguine temperament feels depressed. Slight ailments affecting the stomach are usually aggravated, but as a rule phthisical patients feel more comfortable then than usual. The urine and perspiration have a peculiar acid smell. Meat soon decomposes; iron readily oxidises; dough requires less leaven than at any other time. Insect life is more abundant, as displayed in increased annoyance from mosquitoes and flies, &c. All ulcers heal badly, and the convalescence from fever is markedly slow. This wind, although unpleasant in Malta and Sicily, is welcomed on the northern shores of the Mediterranean, where none of these untoward effects are apparent. I have, moreover, often observed sirocco clouds that had been drifting northwards for several days return again southwards, from a sudden change of wind, without any of their unpleasant consequences, indicating that it may lose its deleterious influence as it proceeds northwards. The influence of the sirocco on ophthalmia is worthy of notice. At the beginning of September this disease assumes an epidemic form, keeping pace in its extent with an unusual severity or decadence of the wind. It is chiefly confined to children in the form of simple catarrhal conjunctivitis in eyes previously healthy, but often also it attacks persons predisposed to the disease, from the presence of grey granulations or the well-known vesicular bodies on the palpebral conjunctiva. The natives of Malta vulgarly ascribe the ophthalmia to some imaginary influence produced by the pomegranate, which ripens about the beginning of September. This, however, may have been only a general way of fixing the season at which the disease makes its appearance, and, from ignorance, eventually came to be regarded as a cause; at all events, the poorer classes seldom seek Medical aid, looking on the affection as a matter of course at or about the autumnal equinox. It is said the Mahomedans of Egypt never think a pretty child safe from the "evil eye" unless it is on the point of losing its own from ophthalmia; but in Malta there are not a few of the humbler classes who do not dread the "magical" influence of this nondescript demon less than the superstitious Moslem.

The murky white clouds of the sirocco continue moving northwards in autumn, until they are at length observed to bank up on the horizon, often accompanied, in the evening, with electric discharges, when suddenly the wind may cease and be followed by a dead calm, when the clouds are deposited in the shape of dense fogs. I remarked especially, on the 23rd and 25th of August, 1865, when the cholera at Malta was on the wane, two of the thickest fogs I had ever seen; when, as the sun rose, the vapour clouds drifted away with the smoke of the cities, and settled for hours in dark masses on the sea southwards, with an intervening haze which covered the islands like a thin veil. By many these fogs were thought to act as purifiers of the atmosphere, and betoken a speedy departure of the cholera. It was so; but, as I have said, the disease had been declining beforehand, and possibly, if the fogs occurred immediately before the outbreak, it is just as likely they would have got the credit of bringing it.

Again, from the commencement of the epidemic in June up to the 1st of September there had been no rain, when a shower took place, followed by a slight decrease in the night temperature, and a marked fall in the number of cholera cases; but they increased again soon afterwards, until, finally, towards the end of the month, a second heavy fall of rain and sudden cool weather brought about a marked improvement in the public health, when cholera disappeared as a wide-spread epidemic, lingering only in situations most favourable for its growth and continuance.

The dry, scorching S.W. wind (happily not frequent) is more dreaded by the natives of the central and eastern portions of the Mediterranean area than even the sirocco; sometimes, during a prevalence of this wind, a sudden blast of heated air has been observed in the island of Malta. On the 19th of September, 1863, one of these hot currents passed over the islands at 5½ p.m., when the wind was S.S.W., and the weather very hot and cloudy. The sensation it produced on those who experienced its influence was a feeling of sudden oppression of breathing, as if the respiration had been temporarily arrested, accompanied by a succession of puffs of heated air, as from a furnace, or like the parching gusts of the "samiel" of Egypt and land winds of India. It lasted only for a few minutes, during which the thermometer in the Palace Observatory, Valetta, rose from 79° to 82° Fahr. in the shade, when it fell immediately afterwards to the former figure. I ascertained that this wave or stratum of hot air was felt at Gono on the same afternoon and in other parts of the island, so that it took in at least their entire length and breadth—about twenty-nine by seven miles. The cotton plant on slopes had its leaves blighted, but this is not a rare occurrence after any high wind in autumn.

New Brunswick, North America.

Analogy between the Egg and Grain.—The existence of a starchy substance in the yolk of the egg has been reported to the Academy of Sciences at Paris by M. Dareste. The form is that of microscopic granules in considerable numbers, which become blue by the action of iodine, and their structure reminded him of that of vegetable fecula. These granules no doubt perform an important part in the development of the embryo, for they disappear as it proceeds. M. Dareste cannot as yet affirm their chemical character, but he has no doubt of the establishment of another analogy between the egg and grain.—*Comptes Rendus*, tome lxiii. p. 1145.

ON HYDATIDIFORM DEGENERATION OF THE FŒTUS.

By JOHN K. SPENDER, M.B. Lond.,
Surgeon to the Eastern Dispensary, Bath.

A RECENT contributor to the *Medical Times and Gazette* (Mr. Ley, of South Molton) solicits information on this rather rare degeneration of the fœtal structures. He relates a noteworthy case, and the following is an outline of another case which came under my observation a few years ago :—

On Sunday afternoon, June 21, 1863, I was asked to visit a young married woman supposed to be in labour at the full term, whose Medical attendant (Mr. Chilton) was otherwise engaged at the time she required his services. On visiting her I found that a copious flooding was going on, and a vaginal examination led me to imagine that I had to deal with an ordinary illustration of placenta prævia. I plugged the vagina with the best material at hand, ordered the patient an ample supply of nourishment, and promised to call again in an hour. Within that time I was again summoned, and found that the renewal of the flooding had forced out the plug ; but a fresh examination did not lead me to alter my diagnosis, and I handed the case over to Mr. Chilton at this moment as an undoubted example of placental presentation. I was obliged to leave altogether, in order to attend an urgent Medical case, but I gave a warning of danger to the husband before departing from the house.

At ten o'clock the same night I learnt that the woman was dead. I went down to the house once more, and there the following particulars were told me :—Soon after I left in the afternoon Mr. Chilton discovered that the case was not one of placenta prævia, and that there was about it something altogether unusual. He was unable to arrest the flooding, and therefore he sought the help of a highly skilled obstetric friend. To empty the uterus of its contents, whatever they were, was a clear necessity, and with much labour this was accomplished. A large chamber-vessel was filled with hydatidiform substance, which was kept for my inspection. Death appeared to have resulted from shock and from the exhaustion produced by loss of blood. Everything was done for the patient that obstetric science could devise.

It is possible that if this woman had been examined in the last month of pregnancy with special reference to hydatidiform degeneration of the ovum, a refined diagnosis might have announced the fact. The principles of this diagnosis are well given in Dr. Tyler Smith's text-book of midwifery, but any Practitioner may be forgiven for being unprepared for a pathological emergency which is happily so rare.

Bath.

CHOLERA IN ITALY.

By G. MACKENZIE BACON, M.D.

THANKS to the statistics furnished by the Government, we are able to trace the late epidemic of cholera in Italy with great accuracy as regards its extent and severity, though not as to the treatment adopted. As such information is a matter of general interest, I subjoin an outline of the principal facts given by the Government report, dated December 20, 1866, for the benefit of English readers.

Cholera first appeared in Italy at Ancona on July 8, 1865, and lasted till February, 1866, when it subsided till May 9 following, and then extended throughout the country till the month of October. After that date it lingered on in much smaller limits till December, when it was considered quite at an end.

During the first of these periods the number of persons attacked was 21,520, and the deaths amounted to 10,975, or 51·4 per cent. Thirty-four of the Italian "provinces" were invaded by the epidemic, and 357 of the "comuni," a word which indicates a municipal division, and may be taken as equivalent to a separate town or village, many of which may be very near one another of course.

During the second period, 49 provinces were involved and 540 comuni, the number of cases reaching 23,244, and the deaths to 13,470, or nearly 58 per cent.

During the first period the towns on the eastern coast of South Italy suffered the most severely—viz., Ancona, Bari, Lecce, as well as Naples, and Foggia; while the North was less affected, such as Cuneo, Alessandria, etc. ; but in the second epidemic it was felt most at Cuneo, as well as Genoa, and also at Naples, Palermo, and Catania, but not along the Adriatic coast.

The following is a list of the principal districts affected, and of the number of cases and of deaths, from which it will be seen how unequally the mortality was distributed. For instance, at Barletta, out of 757 cases, only 45 escaped, while at Torre del Greco (a dirty suburb of Naples, where most of the maccaroni is made) the deaths were but 22 per cent. It is to be regretted there is no information given in explanation of such facts.

First Period.—Naples, 3529 cases, and 2076 deaths, or 58 per cent. ; Ancona, 2346 cases, and 1349 deaths, or 57 per cent. ; Foggia, 1989 cases, and 1044 deaths, or 52 per cent. ; Barletta, 757 cases, and 712 deaths, or 94 per cent. ; Naples, suburbs—viz., Torre del Greco, 630 cases, and 140 deaths, or 22 per cent. ; S. G. a Teduccio, 614 cases, and 290 deaths, or 47 per cent. ; and Ponticelli, 254 cases, and 116 deaths, or 45 per cent. ; Brindisi, 488 cases, and 311 deaths, or 69 per cent. ; Manduria, 479 cases, and 248 deaths, or 51 per cent. ; Sinigaglia, 424 cases, and 165 deaths, or 38 per cent. ; and Lucera, 479 cases, and 302 deaths, or 63 per cent.

Second Period.—Naples, 4517 cases, and 3286 deaths, or 72 per cent. ; its suburbs, viz., Torre del Greco, 892 cases, and 412 deaths, or 46 per cent. ; Torre Annunziata, 990 cases, and 561 deaths, or 56 per cent. ; and Castellamare, 245 cases, and 138 deaths, or 56 per cent. ; Palermo, 3758 cases, and 3190 deaths, or 85 per cent. ; Genoa, 1004 cases, and 649 deaths, or 64 per cent. ; Alcarno, 665 cases, and 466 deaths, or 70 per cent. ; S. Elia a Pianasi, 644 cases, and 128 deaths, or 19 per cent. ; Cuneo, 293 cases, and 254 deaths, or 86 per cent. ; Aderno, 292 cases, and 247 deaths, or 84 per cent. ; and Scafati, 214 cases, and 77 deaths, or 35 per cent.

From inquiries I made in Naples lately, I gathered that the treatment adopted was as various and useless as in London, and that the chief sanitary precautions taken were a rigid quarantine at the seaports, isolation of the cases, and the use of disinfectants. No one who has been in Italy needs to be told how difficult any attempt at cleanliness is in that country

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0

Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

Terms of Subscription for India, £1 15s. per annum.

The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.

Post-office Orders and Drafts on Army or Navy Agents, should be made in favour of Mr. JAMES LUCAS, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d.	A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d.	A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, MARCH 23, 1867.

THE COST OF DISEASE.

IN the remarks which we made last week upon the endeavour of Sir J. C. Jervoise to elicit from the Government an opinion adverse to the publication of facts and theories relating to the diffusion of epidemic disease unless they were supported by absolute demonstration, we showed the necessity of counting the cost of such visitations as cholera and its congeners. In the suffering and distress caused by the disruption of family ties, we have an element insusceptible of reduction to any pecuniary value whatever. Bereavement has two aspects, of which one is purely mental, and the other strictly commercial. It is this latter view which needs to be illustrated so forcibly that public opinion may be led to perceive that, as a mere question of pounds, shillings, and pence, prevention is econo-

mically preferable to cure; that it would most probably pay better in the end to give the sanitarians *carte blanche* in their plans of improvement than to go on patching up a bad system until an epidemic comes, and then have to put up with excessive expenditure as well as grievous loss of life.

Dr. Trench, in his recent report on the health of Liverpool, has given one illustration of the pecuniary loss entailed by preventible disease. Between January 1, 1862, and the end of December, 1865, typhus destroyed in Liverpool 6146 persons, of whom 3319 were from 20 to 50 years of age. Estimating ten attacks for every death, Dr. Trench assumes that at least 33,190 persons suffered a loss of income during sickness and convalescence (averaging six weeks for each patient) amounting to £149,355, reckoning 2s. 6d. per man as the lowest probable rate of wages. This, of course, represents only one item of direct loss, and is subsidiary to the cost entailed on the municipality for the maintenance of the families of "the parents, props, and bread-winners," struck down by the disease.

The report of the Newcastle-on-Tyne Public Health Committee contains very interesting information relative to the pecuniary loss sustained by the community in that town as the result of typhus and typhoid fever epidemics. From 1863 to 1866 the Board of Guardians expended on the treatment of cases at the Fever Hospital £1686 8s. 6d., and on funerals £212 10s. The epidemic destroyed in the four years 224 persons above 20 years of age, mostly earning weekly wages, and upon whom families were dependent. For every death there were at least five attacks, so that there would have been 1120 adult males laid aside from doing work for an average period of nine weeks; and, estimating their average earnings at £1 per week, the loss of wages alone would amount to upwards of £10,000. The total number of deaths during the epidemic of typhus from 1863 to 1866 is 820, but any estimate of the money loss to the community by this aggregate of deaths would be necessarily based on so many assumptions as to render it an unsafe guide.

1541 cases of fever were reported in the Medical officers' books during the four years; and, estimating the weekly relief given whilst the disease was in progress at £1 per head, the cost of this relief would be £1540. Then there are 134 widows, and 340 fatherless children, left chargeable by the death of their husbands and fathers, entailing an annual charge of £1846, which, assuming it to continue payable for five years, will amount to £9230. Moreover, there are 28 orphans who for many years will be chargeable to the Relief Fund. From these general data, the cost to the community of the typhus epidemic in the four years is roughly estimated at £20,000. As a further illustration of the cost of such diseases, it is stated that, during a previous epidemic of typhus in Newcastle, the number of persons receiving relief increased nearly 1000, and the expenditure increased by £3400, in one year. Again, during the second cholera visitation, the cost of out-door relief rose to £21,826, as compared with a previous cost of £15,948.

The foregoing particulars refer to epidemics, but of the extravagant waste which a high death-rate in ordinary times entails we learn something from the Newcastle report:—

"From £13,000 to £15,000 per annum must be regarded as the amount which disease and death levy upon us in the shape of poor-rate, and one-third of that must be placed to the account of zymotic disease; many constitutional diseases must, however, be traced up to their origin in zymotics, especially among the poor. Phthisis, for example, we find exceedingly fatal among the classes who receive parochial relief, and often the seeds of this terrible malady are laid in an attack of fever, or in the overcrowding and wretchedness which are its conditions and concomitants. In the regular course of the Poor-law administration in this Union, not less than £7000 per year might be saved by giving the people who live in our unhealthy districts more light, more air, and more comfortable homes."

Facts such as these may well cause us to wonder how on earth it is that we are content to go on year after year bearing an extravagant loss of life—which means money also—in our great towns and cities. The marvel is, that the working classes, who are the initial sufferers, have not long since discovered that electoral privileges are only of secondary importance compared with the need of such a reform in their own personal habits and modes of life as would remove the opprobrium which now rests upon vast numbers of them—that they are altogether indifferent to cleanliness and decency.

If Mr. Beales and Mr. Potter would use the influence they possess in this direction, they would do more to "elevate the working man" than years of mere political agitation will ever effect. Sanitary reform should be the result of co-operation between the public authorities and the people: at present it is very much a one-sided affair.

REPORTS OF LONDON MEDICAL OFFICERS OF HEALTH.

One cannot help feeling a certain measure of vexation, on perusing the very able and comprehensive report of Dr. Trench on the health of Liverpool in 1866, that in very many respects it is next to impossible to institute any accurate comparison between the sanitary condition of the population in that city and that of the people of London. Liverpool in the past year has experienced a mortality exceptionally high, and Dr. Trench, in discussing its causes, enters very minutely into details, which show that the unhealthiness of the borough is due in part to indigence and poverty, and in part to evils which are essentially preventible. Well, in London we have likewise had a year of very high mortality, and we should like to know how much of the abnormal death-rate is due to poverty and destitution, and what to neglect of sanitary measures.

We have no hesitation in believing that to an impure water supply much of the disease and death which occurred in the eastern districts of London may properly be ascribed. But, as Dr. Trench's report shows, and as we have long felt, the death-rate of a city depends on a variety of circumstances which lie rather deeper than ordinary investigations ever fathom, but which must be taken into account if we would get nearer than a rough approximative conclusion as to the salubrity of any urban population. There are, for instance, the widely divergent elements of locality and social condition. Not only different parts of a city, but different streets in a district, oftentimes show the utmost dissimilarity in their death-rate. It is in the observation of these minute, but vastly important, details that the Medical Officer of Health has an opportunity which is out of the compass of those whose duty it is to deal with the broad outlines only of the public health. The general subject of the average mortality in districts has been worked very abundantly, and, no doubt, excellent results have been brought about by the comparison of one district with another in this respect. But we are convinced that more good than has even yet been accomplished remains to be secured by studying the laws of mortality as affected by social condition. Until the lowest classes of the population are educated up to a rational perception of the advantages of cleanliness, sanitary reform must progress with slow and tedious steps, and it should be the object of Medical statists to reiterate this fact until it be universally accepted. To this end we would impress on the London Health Officers the importance of so classifying the localities in their districts as to enable them in their reports to show the effect of poverty and squalor, as compared with wealth and comfort, on the death-rate.

Dr. Ballard in Islington, and the Medical Officers of Health for St. George, Hanover-square, adopt this distinction between the wealthy and poor parts of their districts, and we should like to see so good an example followed by every Health Officer.

And this brings us to a point on which we entertain a strong opinion that something should be done. At the present time every Health Officer issues his annual report on the health of his district, in whatever size, shape, or method of arrangement may accord with the fancy of his employers; and as scarcely any two reports are alike in the nature of the information they contain, it is difficult, if not impossible, to collate them so as to get a complete view for the whole of London. Many of these reports contain matter exceedingly valuable to the student of the laws of life and death, but their isolated character deprives them of a value which they would have if the Health Officers could agree upon certain general principles of arrangement to be observed uniformly in all the reports, retaining of course the same freedom of individual treatment as is now enjoyed. Supposing it were possible, for instance, to have all the reports of a uniform size so as to admit of their being bound together—a veritable sanitary history of London for each year—can anybody doubt that their value to the statist, to the Medical Profession, and the public would be immensely enhanced? We might even go further, and say that if the Health Officers could agree among themselves to appoint either one of their number, or some one possessing the necessary ability outside their circle, to perform the functions of editorial supervision, and thus insure the record of observations being made so as to admit of legitimate comparison between different parts of the metropolis, that would be a still greater public advantage.

None but those who have endeavoured to define the true relative position of London and other large cities in respect of the sanitary condition of their populations can fully comprehend the saving of time, patience, and thought which would follow on the adoption of such a system as we have indicated.

We commend this matter to the serious consideration of the London Medical Officers of Health. If we want to ascertain aught about the sanitary condition of Liverpool, the nature, causes, and course of its most fatal diseases, and their habitats, we can find all these points within the compass of any one of Dr. Trench's annual reports. But what about London? There are, as we have said, the reports of the respective Health Officers, each for his own district; but it is not always easy to obtain them all, nor are they compiled so as to facilitate the collation of their contents. True, there are the Registrar-General's weekly returns, which are summarised at the end of each year; but, without derogating from the usefulness of these official publications, there are a number of particulars not mentioned in them, which belong exclusively to the province of the Health Officer, and not to the Registrar at all, and these cannot be obtained except from the Health Officer's return.

Our gravamen, then, reduced to fewest words, comes to this:—There is a mass of valuable information recorded in London every year which, for want of proper compilation, collation, and publication in a complete form, is virtually lost sight of. This ought not to be.

THE HEALTH OF THE NAVY.(a)

Few things connected with the Medical Service of the Navy are at present more satisfactory than the health of the men. It is often said, and with some truth, that on shore the self-sacrificing philanthropy of the Medical Profession in inaugurating and enforcing sanitary reforms has been rewarded by a notable decrease of patients, and consequently of fees. A more even-handed justice prevails afloat. Every means put in force for better ventilation between decks or other sanitary improvement must, if successful, be a clear gain both to the Doctor and to the ship's company—to the former in time and labour, and to the latter in health. Meanwhile, the pay, such as it is, goes on as regularly in the healthy ship as in the foul. We can, therefore, for once congratulate our friends in the service on the satisfactory account rendered in the last Blue Book on the Health of the Navy, and we only wish that the fall in death-rate and invaliding which it records had been signalised by a just measure of reward to the class of officers to whom the improvement is mainly due.

One point of general as well as Professional interest on which some light is thrown by the report before us, is the influence of recent changes in naval architecture on the health of the seamen. Are our iron-clads likely to resist the darts of Apollo as well as it is to be hoped they will shot and shell, or is there anything in their structure which may render them peculiarly liable to become the seats of epidemic disease? This question cannot yet be answered in the affirmative, but the experience of the year 1865-6 is at least encouraging. From Midsummer to Midsummer the ratio of cases in armour-clad vessels was lower than in any other class of sea-going vessels, with the exception of the second-rates. The ratio of invaliding was also low, and the only class of vessel in which the death-rate was lower was the first-rate, of which, however, only one was in commission. The report of the year 1864-65 on the sanitary condition of the new ships was not equally favourable. On board two of the iron-clads—the *Royal Oak* and the *Prince Consort*—a high sick-rate had prevailed. This was attributed to the absence of natural light, and to imperfect ventilation on the mess decks, and these defects were remedied. It still, however, appears that the *Royal Oak* has remained the unhealthiest of this class of vessels in the service. The report from the Mediterranean in the present Blue-book states that her crew have suffered severely from diarrhœa and enteric fever. We notice, *en passant*, that the vexed question of the contagiousness of the latter presents little doubt to the writer of the report, who tells us that the fever was contracted at Malta, where it is endemic during the hot months, and "was probably continued by communication of the infected with the healthy." But we should fear that the sanitary improvements made in the *Royal Oak* have not been sufficient, for we see that after an outbreak of fever of an urgent type in 1866, it was found advisable to remove 130 men from the lower to the main deck, after which only one case of fever made its appearance.

We must wait until next year before we learn the effect produced by the Contagious Diseases Act on the health of the home ports. We are glad, however, to learn, on the authority of Dr. Mackay, that up to the present time the extended powers conferred by the Act, particularly in those localities in which the means for carrying them out are most ample, appear to have had a decidedly beneficial influence in diminishing the spread of disease.

From the West Coast of Africa we have the usual tale of European sacrifice. Yellow fever, which had prevailed on shore, was communicated to four of the ships of the squadron. The report in each case affords strong evidence of the communicability of the fever. In the case, for instance, of the *Bristol*—one of the four ships affected—the fever was brought from the *Isis*, the receiving ship, where it already prevailed, by a working party from the *Bristol* who were sent on board her. Again, in the case of the *Archer* the fever was contracted at Loando, two men labouring under the disease being brought on board. The hammock of one of them was placed in the steerage near the gunroom. All the gunroom officers were attacked, and four died; the only other officer who died was the Assistant-Surgeon, who was in constant attendance on the sick until his own illness set in. But the mass of evidence in favour of the communicability of yellow fever is year by year increasing, and we believe that a large proportion of our readers will have very little hesitation in accepting the conclusion of the writer of the report from the West African station, who writes, in reference to the *Isis*:—"There can be little question that the existence of the fever poison in that

(a) Statistical Abstract of the Health of the Navy from the 1st day of July, 1865, to the 30th day of June, 1866.—*Blue Book.*

vessel depended neither on the locality nor on the water used in the ship . . . . but on a specific poison previously emanating from the bodies of fever patients on board."

If Dr. Livingstone be correct in stating that syphilis does not gain ground amongst the natives of South Africa, an argument would arise for placing Bechuanhas and Caffres anthropologically at a greater distance from ourselves than Chinese and Japanese. Syphilitic disease seems to flourish at Yokohama—in fact, venereal cases furnished the larger proportion of the sick list on board the ships stationed there. Amongst the natives of Hindostan the experience of the Army Surgeons has proved that this class of disease takes as deep root amongst the population as at home. But the ethnological relationship of the Hindoo to the European is much nearer than that of the Japanese; and the existence of a large amount of syphilitic disease amongst the latter is curious in an anthropological as well as a Medical aspect.

As we have already hinted, this report shows the health of the Navy in an exceptionally healthy light. The average ratio of mortality for the whole of our naval force during the last ten years has been 15·5 per 1000. During the year from Midsummer 1865 to Midsummer 1866 the death ratio was only 10·5, the total number of deaths being 535. Of these 404 were the result of various forms of disease, and 131 of wounds, injuries, and drowning. The death-rate from disease alone was only about 8 per 1000. We should like to see these statistics compared with those of the merchant service, and with those of the navies of other maritime powers.

THE WEEK.

H.R.H. THE PRINCESS OF WALES.

We are glad to be able to say that the condition of her Royal Highness is becoming more satisfactory. The remains of the disease are now localised in the knee-joint, but the swelling and pain are diminishing. Dr. Farre has discontinued his attendance, and there is every reason to hope that the recovery from the local symptoms, if not rapid, will be complete.

THE LATE PROMOTIONS AND APPOINTMENTS TO THE MOST HONOURABLE ORDER OF THE BATH.

The various articles which have appeared of late in the public and Medical journals have not been without their influence upon the powers that be. The Army Medical Department has not had anything to complain of as to the bestowal of honorary distinctions on its members; but it was quite different with the Navy. There was only one C.B. in their Medical Department a little while ago. We may, however, now congratulate our Naval brethren. The right thing has been done at last, and the Naval Doctors can no longer point to their department as a large and important branch of the service, the members of which were to enjoy no honorary distinctions of any kind. By the *Gazette* of the 15th instant, we find that Dr. Deas, C.B., is now Sir David Deas, K.C.B., while some of our Naval brethren have been made Companions of the same Order. The same *Gazette* contains the names of several members of the British and Indian Army Medical Services, who have had similar distinctions conferred on them.

THE OBSTETRICAL SOCIETY AND MR. BAKER BROWN.

The documents, or "published matters," which form the basis of the action of the Council of the Obstetrical Society, and of their notification to the Fellows of the propriety of removing Mr. Baker Brown from the Society, are now in the hands of the Fellows. The fact that they are marked "private and confidential" requires that they should be treated with decent silence. They require neither elucidation nor comment—they tell their own tale. All have appeared in type, and have been "published," and are well known to the Profession; the earliest in date and the most comprehensive is a reprint from the *Medical Times and Gazette* of 1864, vol. i. page 616.

THE LATE PROMOTIONS IN THE ARMY MEDICAL DEPARTMENT.

The late *Gazette* has produced a good deal of discussion among the members of the Army Medical Department. This is only what might have been anticipated. The practice of selection must give rise to some dissatisfaction so long as human nature remains what it is. All that the authorities can do is to bring sound judgment and a strong sense of justice to the work. In the present state of the Army Medical Service it is to be desired, above all things, that these selections should be most carefully and honestly made. It must not be forgotten, however, that the authorities had little or no field for the exercise of their power of selection for the Indian appointments, because a previous service in India of some duration was a necessary qualification for promotion to those appointments. Sir James Gibson has virtually retired from the direction of his department, and the late *Gazette* was, we believe, almost the last of his official acts. That Dr. Logan will be his successor, there can be little doubt. He brings great experience to the task, and he may be said to be the choice of the department. His predecessor's direction has certainly been an unfortunate one, but we believe that, if his judgment and independence of Horse Guards' influence had equalled his honesty of motive, the service would have been more popular than it is. The Profession, both in the army and outside it, is looking forward with renewed hopes to a new head and a new warrant. There is no way in which Dr. Logan can so well sustain his reputation, and retain the esteem and kind feeling with which he appears to be regarded, as by showing himself above all those petty influences and intrigues which are only too apt to grow up around, and to hem in, even the best man in office. The surest method for obtaining the respect of the Horse Guards, War Office, and the public is by placing men of rank, experience, and ability in positions of responsibility.

There ought to be no more honourable or responsible position than that of an Army Medical Officer, and we hope soon to see the Profession regard it in that light.

POOR-LAW SALARIES.

We learn from Chapel-en-le-Frith what may be done by Poor-law Medical officers on their own behalf. At that place Mr. John Bennett was Medical officer for a district and the workhouse, in respect of each of which he received a salary of £25 per annum. He resigned these appointments "on account of inadequacy of salary." We now understand that the guardians have had no alternative but to enter into a fresh contract with Mr. Bennett. That the course adopted by him was the right and manly course, is shown by the fact that the salaries now to be paid him are £40 for the district, and £40 for the workhouse. "Heaven helps those who help themselves," and we recommend this case and the above statement of its results to Poor-law Medical officers who believe themselves under-paid.

THE CHARGE AGAINST THE MEDICAL OFFICER FOR THE WOKING DISTRICT.

The charge against Dr. Tofts, to which we lately drew attention, was investigated last week by Dr. Edward Smith on the part of the Poor-law Board. It will be remembered that Dr. Tofts was charged with neglecting a man named Collyer, a carter, who had been run over, and who died in consequence from rupture of the bladder. Dr. Tofts visited the man within two or three hours of being sent for, and saw him daily until his death, except on one day, during which the Doctor was engaged at a midwifery case. Dr. Tofts asserts that from the first he looked on the case as one of rupture of the bladder, and therefore hopeless. We really do not see that any blame attaches to him in the matter. Of course it would have been better if Dr. Tofts had sent a Medical man to see Collyer on the day on which he was

detained at the midwifery case; but Professional help is not so easily obtained in the country as in London, and it appears that the gentleman who assists Dr. Tofts resides at three miles' distance. We feel, however, that the case is perfectly safe in the hands of the gentleman who investigated it for the Poor-law Board, and we hope that his inquiry will enable him to clear Dr. Tofts from what the evidence leads us to think has been a vexatious and unfounded charge.

THE ORDER OF THE BATH AND THE MEDICAL PROFESSION.

The *London Gazette* of March 15 announces that Inspector-General of Hospitals and Fleets David Deas, M.D., C.B., has been promoted to be an Ordinary Member of the Military Division of the Second Class or Knights Commanders of the most honourable Order of the Bath; and that Inspector-General of Hospitals Arthur Anderson, M.D.; Inspector-General of Hospitals and Fleets John Davidson, M.D.; Deputy Inspector-General of Hospitals and Fleets William Richard Edwin Smart, M.D.; Deputy Inspector-General of Hospitals Thomas Longmore; Deputy Inspector-General of Hospitals William Rutherford, M.D.; Deputy Inspector-General of Hospitals and Fleets Henry Jones Domville, M.D.; Staff-Surgeon James Jenkins, M.D., R.N.; Surgeon-Major John Bowhill, M.D., Bengal Army; Staff Surgeon-Major Thomas Esmonde White, M.D., late 65th Regiment, have been made Companions of the said Order. It will be seen that a step has been made to remove a grievance to which we have frequently called attention, and to withdraw the slight which has hitherto been put upon the Naval Medical service by the exclusion of Surgeons under the rank of D.I.G. from the Companionship of the Order. Staff-Surgeon James Jenkins, R.N., who, however, is serving as Surgeon to the Plymouth division of Royal Marines, is the first Surgeon of his rank who has received the honour of C.B. We should have been glad to have seen that more justice than this small instalment had been done to the Naval Medical service, especially as the number of Army Medical Officers of the same rank who are decorated is on the increase.

THE CHOLERA IN LIVERPOOL.

Dr. Trench has just made public an elaborate report on the health of Liverpool during the year 1866. Its details as to the cholera epidemic are of the highest interest. As will be recollected, cholera first appeared in the port of Liverpool on board certain emigrant ships which had been obliged by the disease to turn back; but it did not then extend to the city. The explosion of the epidemic is curiously connected with the debauchery of an Irish wake on a person who had probably died from cholera; and from this centre the disease seems to have spread by direct contagion, which the state of the courts in the neighbourhood was but too well suited to increase. In this outbreak nothing can be clearer, from Dr. Trench's report, than the influence of direct contagion from the dejecta of the diseased. This is seen in the prevalence of cholera in those neighbourhoods where sanitary arrangements were most deficient and privies were common to several dwellings. The influence of water is remarkable by its absence, but this only shows that the spread of cholera may be brought about by more than one agency. Dr. Trench insists on the necessity of direct contact with the sick or their excreta for the propagation of the disease, and points out that even where the character of the poison has become altered by fermentation, there, except individuals live in almost constant and direct contact with its effluvia, they usually escape its effects. Mere visitors invariably escaped. As Dr. Trench very properly remarks, because one theory of cholera causation by impure water has been brought forward and successfully illustrated, that is no reason for our concluding impure water to be the only means of spreading the disease, and overlooking every other. The practical corollary from the whole bearing of Dr. Trench's valuable report is the importance of overlooking no source of infection, and of guarding against all as far as is possible.

MORTALITY OF INFANTS.

We commend the following common-sense remarks—from the last excellent report of the Medical Officer of Health for Barnsley, Mr. M. T. Sadler—to general notice:—

"As infantile mortality is the greatest in manufacturing towns, there are grounds for believing that one cause of this excess arises from women with young families working in mills and other workshops. When this is the case, it is next to an impossibility that their children should be properly attended to. I may again allude to the highly injurious and often fatal effects of very small doses of laudanum given to young children in what are called soothing preparations. I have lately read of one large mill-owner greatly reducing the number of deaths of infants of married women working in mills by making arrangements that no woman shall resume her work until six weeks after her confinement. If six weeks' proper attention of mothers to their children saves so many lives, what would a continued proper attention do?"

THE CONTAGIOUS DISEASES BILL.

The speech made by Lord H. Lennox in the House of Commons on the 15th inst., when he introduced the Navy Estimates, contains some gratifying information respecting the working of this Act. It is agreed on all hands that it has been productive of great benefit. At Plymouth, Sheerness, Woolwich, and Chatham, the results are good; and when the authorities have procured additional accommodation at Portsmouth we may expect a similar report. It is at Plymouth that the powers of the Act have been most fully tested, and the results which have been obtained there are most encouraging. The disease has been greatly modified in its character, and the number of patients has been reduced from $7\frac{3}{4}$ per cent. to $2\frac{1}{4}$. We have already stated in our previous articles on this subject that the intention of the Act was in some measure defeated at Portsmouth on account of the insufficient accommodation. We are glad to learn that this is being remedied as far as practicable. Before long we hope to hear that all the diseased women known to the police are undergoing hospital treatment. We have ascertained that the number of these cases admitted into the Naval and Military Hospitals in Portsmouth is showing a steady diminution. The War Office intends very soon to open Hospitals at Aldershott and the Curragh for the treatment of infected women. We have gleaned a few practical lessons which may prove interesting. At Plymouth it has been found that many of the cases of phagedænic and unhealthy syphilitic ulceration have yielded to mercury, where tonics, stimulants, and local caustics had been previously used in vain. Moreover, it is not at all uncommon to find patients suffering from a combination of venereal diseases, or different manifestations of the same disease, at one and the same time. We have in these facts a ready explanation of the difficulties which occasionally beset the diagnosis of the venereal diseases of the male. When a woman has gonorrhœa, and manifestations of primary or secondary syphilitic disease combined with it, or the last-named, with soft venereal ulcers, it is not surprising that her paramours should occasionally exhibit in their persons the various products of different poisons. Surgeons are evidently alive to the belief that the contagious properties of syphilis are not limited to one stage only, as was once supposed, and that uterine and vaginal discharges are very common manifestations of the syphilitic poison. We begin to see, too, our way to an explanation of the occurrence of such things as mixed chancres—twofold inoculations—and those syphilitic urethral discharges which simulate gonorrhœa. We regard this measure as one of the most important and wisest pieces of legislation which have ever appeared. The results, manifestly imperfect as they are at present, are sufficient to have aroused the attention of the public and the Profession. The Harveian

*

Society has appointed a Committee to obtain information as to the extent of the prevalence of these diseases, and the means which exist in our civil Hospitals for their treatment. We hope that the working of this Bill will be extended to other places in process of time, and the Committee are doing good service to the community by their inquiry.

PYÆMIA IN THE LONDON HOSPITAL.

The following remarks on pyæmia in the London Hospital, extracted from Mr. Liddle's report on the sanitary condition of the Whitechapel district, are worthy of the fullest consideration by all concerned in the treatment of large numbers of sick, and in the management of Hospitals :—

"Deaths from pyæmia are of frequent occurrence in the London Hospital. In the last volume of Clinical Lectures and Reports published in 1866, and prepared by the Medical and Surgical staff of the Hospital, it appears that in twenty cases of amputation of the thigh, seven died from pyæmia, and two more deaths are recorded from the same disease after other operations. The frequency of this disease is a matter which calls for the serious attention, not only of the Medical staff, but also of the governing body of the Hospital. As this disease, when occurring in Hospitals, is generally supposed to be caused by some defect in the sanitary arrangements of those institutions, I take leave to urge the consideration of this important matter upon all the parties interested in the welfare of the sick admitted within their walls. I am certain, from my personal knowledge of the members of the Medical staff and of the Committee of the London Hospital, that all are actuated by the most humane feelings to those poor persons who are entrusted to their care, and that everything that can be suggested by the Medical officers to improve the sanitary condition of the Hospital, so as to diminish the amount of mortality from any cause, will be readily carried out by the Committee. In order to accomplish this object, it would be desirable that a report be prepared by the whole Medical staff, assisted by the Lecturer on Chemistry, pointing out where sanitary defects exist, and in what manner they can be remedied, and lay the joint report before the Committee of the Hospital.

"It is no argument in favour of the sanitary arrangements of this institution to say that pyæmia exists in other Hospitals, for this only proves that these Hospitals also are defective in their sanitary arrangements, if such be the cause of the disease, while it forcibly suggests that all institutions set apart for the treatment of the sick and wounded, where pyæmia is of frequent occurrence, demand the strictest investigation into their general sanitary condition. It has hitherto been a rule, in ventilating public buildings, to let the architect have his own way, and the opinions of Medical men, who are most competent to advise upon this matter, are seldom asked, and still more rarely acted upon. Hence the frequent mistakes that are made in the ventilation of public buildings."

FROM ABROAD.—INJECTION OF TUMOURS WITH PEPSINE—DISTRIBUTION OF THE PRIZES AT THE ACADÉMIE DES SCIENCES.

Professor Thiersch, of Erlangen, has been for some time engaged in trying the effects of the injection of medicinal agents into the substance of tumours. He first employed a solution of nitrate of silver, and then a very dilute solution of hydrochloric acid; and latterly he has been trying, together with Professor Nussbaum, of Munich, the effects of pepsine on hard fleshy tumours. As the amount of success he has met with is likely to engage many to pursue the practice, Professor Buchner, in one of the recent numbers of his *Repertorium*, gives directions for preparing the pepsine to be so employed, as he says the dry pepsine met with in the shops is, for the most part, a worthless preparation for the object now in view. But a very active fluid, in which pepsine exists in its natural mixture, may be prepared in the following manner :—An entirely fresh, and, if possible, warm, pig's stomach is to be rinsed out with water, without too forcibly removing the adherent mucus. The glands secreting the rennet are placed at the fundus of the organ, this portion being easily recognised by its darker colour and greater thickness. Stripping off the mucous membrane from the muscular layer, the fundus is laid upon a table or board with the submucous surface downwards, and, being fixed at one end by the left hand covered with a piece of linen, it is scraped with long sweeps and firm pressure by means of a blunt knife. The entire glandular substance must not be scraped away, because too much connective tissue gets mixed with it; but the fundus of the stomach of an adult pig will yield about an ounce of scrapings. These are rubbed with 5 oz. of distilled water during five minutes, and then digested for a quarter of an hour at a temperature of 30° R. A drop or two of muriatic acid is added, and the mixture, strained first through coarse, and then through fine linen, after being allowed to stand awhile to precipitate the cells and nuclei, becomes a nearly clear fluid fit for use. Whenever it exhibits any pellicle or the slightest putrid smell, it is no longer fit for use. The scrapings from the glands may also be dried, without loss of efficacy, by spreading them on a glass plate, and exposing them to a temperature not exceeding 40° R. Four parts of fresh scraping will yield one of dried, more or less; and an efficacious mixture may be made by adding 2 drachms of the dried scraping to 5 oz. of water, with two drops of muriatic acid, rubbing it well together, digesting it at a temperature of 30° R., and straining. Prof. Nussbaum states that such a mixture acts as efficaciously as the pepsine-fluid obtained from the fresh stomach; and the dried mass may be kept a long time in a closed bottle without undergoing decomposition.

Among the prizes distributed at the anniversary of the Académie des Sciences, held last week, the following related to Medicine :—1. The Montyon Statistical Prize was decreed to M. Brochard for his memoir on the Mortality of Nurse-Children in France, honourable mention being made of M. Parchappe's Reports on Central Prisons, M. Lefort's work on the Maternities of Europe, and M. Girard de Cailleux's Statistical Account of the Auxerre Lunatic Asylum. 2. Three Montyon Prizes in Medicine and Surgery of 2500 fr., were adjudged—viz., to M. Béraud for his Atlas of Topographical Anatomy, to M. Anger for his Iconographical Treatise on Surgical Diseases, and to M. Marey for his Researches on the Nature of Contraction in Muscles and Animal Life. Honourable Mentions were also decreed to MM. Laborde for his Ramolissement of the Brain, Sappey for his researches on the Structure of Fibrous and Fibro-cartilaginous Parts, Voisin for researches on Curare, Demarquay for his essay on Medical Pneumatology, Labordette for his Laryngeal Speculum, Bouchut for his work on the Diagnosis of Nervous Diseases by the Ophthalmoscope, Empis for his work on *Granulie*, Fournié for his work on the Physiology of the Voice, Cahen for his memoir on the Treatment of Cholera by Arsenic, Lemaire for his work on Phenic Acid, Gimbert for his memoir on the Structure of Arteries, and Polaillon for his study of the Structure of the Peripheric Nervous Ganglions. 3. The Grand Prize in Surgery, 20,000 fr. in value—subject, the Preservation of Limbs by the Preservation of the Periosteum—has been equally divided between MM. Ollier and Sédillot. 4. The Bréant Prize of 100,000 fr., for a remedy for the Cholera, has not been adjudged, but a recompense of 2000 fr. has been given to MM. Legros and Goujon for their Researches on the Transmission of Cholera, and one of 1200 fr. to Professor Thiersch for his experiments on the Production of Cholera in Animals by Choleraic Dejections, while a recompense of 800 fr. each, with Honourable Mentions, are also adjudged to MM. Baudrimont for researches on the Blood and Dejections in Cholera, and Worms and Lindsay for researches on the Agents of the Transmission of Cholera. 5. The Cuvier Prize is adjudged to Professor von Baer for his numerous researches in Embryology and Zoology. 6. The Jecker Prize has been decreed to M. Cahours for his recent works in Chemistry. 7. The Godard Prize is adjudged to MM. Martin and Léger for their researches on the Anatomy and Pathology of the Secretory Apparatus of the External Genital Organs of

Woman. 8. The Savigny Prize has been adjudged to M. Vaillant for his researches made on Annelides and Mollusca in the Bay of Suez. 9. The Desmazierès Prize has been adjudged to M. Roze for three memoirs on Cryptogamic Botany. The Thore Entomological Prize has been adjudged to M. Fabre for his observations on the Hypermetamorphosis and Habits of the Méloïdes.

PARLIAMENTARY.—GREENWICH HOSPITAL—INCREASED PAY FOR NAVAL MEDICAL OFFICERS—THE METROPOLITAN POOR BILL—FLOGGING IN THE ARMY—THE CRIMINAL LUNATICS BILL—FEMALE FRANCHISE.

On Thursday, March 14, in the House of Commons,

Sir C. Bright asked whether, as a portion of Greenwich Hospital had been granted to the Seamen's Hospital Society for seamen of the mercantile marine, the Government would also grant a portion of the unoccupied space, upon the same conditions, for a public Hospital for the reception of sick and diseased persons belonging to the borough of Greenwich.

Mr. Du Cane said it was perfectly true that the Government had sanctioned a loan of a portion of the unoccupied part of the Hospital to the Seamen's Hospital Society, the Government, however, reserving the power to resume it if, in the event of a naval war breaking out or any other contingency, the accommodation was needed in the interest of the seamen of the Royal Navy. It was thought that the mercantile marine had a strong claim for some further direct share in the benefits of Greenwich Hospital, to the funds of which it had largely contributed. The Government, however, were unable to admit a claim put forth by a portion of the commnnity which had no direct connexion with Greenwich Hospital, and which had never contributed to its resources. To divert any portion of Greenwich Hospital to such a purpose would be to sanction the application of the building to purposes directly contrary to the intentions of its founders, and would materially enhance the difficulty which might arise if on any contingency the Government should think it necessary to regain possession of the unoccupied portion in the interest of the Royal Navy. He could therefore hold out no hope that the Government would ever be likely to sanction any appropriation of the building for sick persons belonging to the borough of Greenwich.

In moving the Navy Estimates, Lord H. Lennox adverted to the increased pay of the Medical officers, and to the expenditure for the new Hospital at Plymouth for a certain class of contagious diseases.

The Metropolitan Poor Bill was read a third time, and passed amidst cheers.

On Friday,

A discussion on flogging in the army was raised by Mr. Otway, who moved a resolution declaring the punishment to be unnecessary in time of peace, advancing in a lengthy speech the usual arguments—that it is inhuman and degrading, that it is unnecessary for the maintenance of discipline, that it has no reforming influence, and that it checks recruiting.

Major Anson, in seconding the motion, gave some statistics of military offences, showing that the lash has no deterrent effect, and suggested the experiment of suspending the punishment for a twelvemonth by general order.

Mr. Mowbray resisted the motion, as a revolution in the discipline of the army for which no sufficient reason had been given. He went at length into the military returns to show that the punishment was inflicted for fewer offences than formerly, that fewer men were flogged, and that the number of lashes was much fewer; and, while pointing out the inconvenience and impossibility of applying a general rule of abolition to all the stations of the British army, he assured the House that the Commander-in-Chief and the military authorities were anxious to use the punishment within the narrowest limits. As to the brutality of the punishment, he argued, by referring to the numerous crimes to which it had been applied by recent legislation, that public opinion was not revolted by it.

Captain Vivian's objection to the punishment was that its degrading character lowered the soldier's calling in the eyes of the rest of the community, for he admitted that it was now very mildly applied, so mildly as to have lost its deterrent effect. Most commanding officers would gladly dispense with corporal punishment if they had greater facilities for getting rid of bad characters.

Colonel Herbert defended flogging as the only efficacious punishment which could be inflicted in many cases, and as saving us from the necessity of a sterner code like that of the French Army. He deprecated the motion as an injurious interference with the discipline of the army.

Mr. B. Osborne replied that interference with discipline was the stereotyped cry by which all motions of this sort were resisted, and strenuously supported the resolution, as it was by the House of Commons alone that all important army reforms had been initiated.

The motion was supported by Captain Grosvenor and opposed by Sir C. Russell.

Sir J. Pakington pointed out that under the regulations of 1861—which were about to be incorporated with the Articles of War—no man could be flogged except for gross and repeated offences, and that the English military code was really more merciful than the French, Prussian, Austrian, or even the United States' codes. The Commander-in-Chief and the Adjutant-General were of opinion that it would be fraught with danger to part with this remnant of corporal punishment, and he was bound, therefore, to oppose the motion.

General Peel insisted that the retention of this punishment was necessary for the maintenance of discipline in an army enlisted as ours was—that it was a protection for the good men, and that if it were abolished in time of peace it could not be retained for war.

Mr. Whitbread urged that the abolition of flogging would be a great assistance to recruiting.

After some further discussion, in which Colonel North, Captain Hayter, and Mr. D. Bromley joined, the motion was carried by a majority of 1—108 to 107.

On Monday, in the House of Commons, the Criminal Lunatics Bill passed through committee.

On Monday, Sir John Pakington gave notice that it was the intention of the Government to insert the usual clause in the Mutiny Bill, in order to obtain a more deliberate expression of opinion from the House on the subject of flogging in the army.

The Criminal Lunatics Bill passed through Committee.

On Tuesday, in the House of Lords, the Metropolitan Poor Bill was read a second time.

Mr. Mill gave notice that, "in committee on the Representation of the People Bill, he would move that in Clauses 4, 5, and 6, the word "man" be omitted, and the word "person" be inserted. (Laughter and cheers.)

THE CROONIAN LECTURES.

By DR. ANDREW CLARK.

Abstract of Lecture II.

The lecturer began by saying that the "grey granulation," plus the secondary local effects induced by it, constituted the complex state of lung characteristic of true tubercular phthisis. These effects were pneumonia, fibrous degeneration, fatty usure, and emphysema. By one or other, or several combined, the destruction of the tubercular lung was effected. There was no such thing as tubercular infiltration; the various forms of what was so designated were nothing more than the products of two different species of pneumonia. By itself, the grey granulation never killed. As we could avert its secondary effects, so could we retard the progress of the local disease and prolong the patient's life.

In describing the microscopic characters of the pulmonary "grey granulation," as seen *in situ*, Dr. Clark dwelt upon its correspondence to a vascular territory, its occasional capsulation by fibrous tissue, the appearance of a matrix suggestive of exudation, the presence of black pigment, the remarkable condition of the neighbouring lymphatics and blood-vessels, and the existence in the adjacent alveoli of proliferating cell-forms different from anything composing the granulation, and averred that no theory of the structural origin of tubercle could be satisfactory which did not account for these things.

Dr. Clark next enumerated the elementary structural constituents of tubercle, and laid great stress on the presence of three different sorts of corpuscular or nucleus-like particles resembling the nuclei of epithelium connective tissue and vessel, and on the comparative absence of fully formed cells, the number of which held a direct relation to the youth of the

patient and the rapidity of the process of evolution. He then discussed at length the various theories by which the origin of the structural forms of the granulation was sought to be accounted for. To the exudation theory he objected that structural forms were found before any appearance of exudation; to Lebert's theory, that similar structural forms (though not in the same combinations or conditions) were found in non-tubercular products; to the epithelial theory, that the granulation arose often in parts where no epithelium was present—that in the young pulmonary granulation cells were absent, and that the epithelium-like cells existing in such numbers in the adjacent alveoli gave birth, not to a grey granulation, but to a cheesy deposit; and to Virchow's theory of the origin of the granulation in the exclusively endogenous proliferation of connective-tissue corpuscles, he objected on the score of error and inadequacy, but held that the theory embodied sufficient truth to form a cardinal element in another hypothesis.

Dr. Clark ascribed the structural origin of the granulation to the multiplication by division of the nuclear elements of all the tissues involved (but mainly of the lymphatics and blood-vessels), followed by exudation, and occurring within the limits of an ultimate vascular territory. In the pulmonary alveoli he considered the order of local events to be as follows:—Rapid desquamation of epithelium (assuming its existence), with liberation of nuclei; proliferation of *intercapillary nuclei*, and of the nuclei of the lymphatics and blood-vessels; differentiation of vascular walls back to point where terminal artery splits into capillaries; appearance of matrix by exudation sometimes filling up the parts, like wax which has been poured when melted into a mould; occasional extravasation of blood; not unfrequently the development of a rude fibroid tissue around the granulation, which ceases to grow when it has fully occupied a vascular territory.

Dr. Clark considered that this order of events was set a-going by the transference to the part, through the medium of the blood, of an organic irritant operating under certain collateral conditions, such as a certain constitutional state—deficient vascular distension and imperfect expansion of lung.

Dr. Clark, before discussing the intimate nature of tubercle and its artificial induction by inoculation, venous injections, and the like, proceeded to consider the secondary local effects induced by the grey granulation.

Pneumonia was the chief agent of destruction in the phthisical lung. There were two forms of it—one, the rarer, in which the products of it were composed of particles like the colourless corpuscles of the blood; the other, the commoner, composed chiefly of epithelium-like cells in a state of active endogenous growth. The moleculo-fatty degeneration of these products constituted what was called tubercular infiltration; and their suppurative disintegration the abscesses of the phthisical lung.

Dr. Clark then discussed the reasons of the non-absorption of these secondary pneumonic deposits, and showed by various considerations that they must be chiefly local. He referred the persistence of these products to their epithelial character, and to obliteration of adjacent blood-vessels and lymphatics. There were two forms of fibrous degeneration—one in which the tissue was well developed and abundantly nucleated; the other in which it was imperfectly developed. The particular form was determined by the habits, occupation, or constitution of the patient. Cases in which this degeneration took the lead were very slow in their progress, and extended over years.

The fibrous degeneration began around the granulation, or in the areolar tissue of neighbouring bronchi or blood-vessels, and from thence stole in upon the lung, often leaving out islets of alveoli which underwent cheesy degeneration and looked like yellow tubercles. Fatty usure was next described as indicated by the presence in the intertubercular portions of lung of white cream-like deposits of the size and form of caraway seeds. It consisted of the transformation of accumulated epithelium-like cells into various-sized droplets of fluid fat, and usually issued in emphysema. The emphysema around tubercles Dr. Clark declared to be not dynamic, or mechanical, but static, or pathological. He did not deny the existence of a mere compensatory or mechanical emphysema, but declared his conviction, based upon experiment, that the majority of cases of emphysema were due to local structural changes in the alveoli which he described.

In his next lecture, Dr. Clark proposed to consider the intimate nature of the grey granulation as illustrated by experiments upon animals.

REVIEWS.

Die Anwendung der Galvanokaustik im Innern des Kehlkopfs und Schlundkopfs, nebst einer kurzen Anleitung zur Laryngoskopie und Rhinoskopie. Von Dr. Rudolph Voltolini. Wien. 1867.

The Application of the Galvanic Cautery to the Interior of the Larynx and Pharynx, with a Short Introduction to Laryngoscopy and Rhinoscopy. By Dr. Rudolph Voltolini. Vienna. 1867.

It was a growth in the larynx to which Professor Middeldorpff first applied his then new galvano-caustic invention, and the application was perfectly successful. The patient was a clergyman, who was hoarse for many years and unable to preach, but who immediately after the operation, which was performed in the presence of a large auditory, began to speak with a clear and loud voice. At that time we were not yet acquainted with laryngoscopy. We have seen many and important operations performed by the galvanic current in the expert hands of Middeldorpff, and in cavities—as in the larynx, uterus, etc.—it deserves very often the preference before the knife, particularly for its capability of reducing hæmorrhage to the lowest possible degree. But it must be borne in mind—and Professor Middeldorpff puts stress on this point—that the possessor of a galvano-caustic apparatus is not yet furnished with the means of operating by the same. A thorough knowledge of the principal laws of galvanism, the acquaintance with the strength of the current requisite for a particular operation—in short, the study of the galvano-caustic apparatus—is indispensable for the successful handling of it.

In respect to the application of the current for purposes of operating in the larynx and pharynx, the pamphlet of Dr. Voltolini gives sufficient instruction. It consists of three sections—the first containing a minute description and illustration of the galvano-caustic battery and instruments, and their application; the second the directions for laryngoscopy and rhinoscopy; and the third, the description of such cases as have been treated by means of the galvano-caustic wire.

Dr. Voltolini gives nothing but his own experience, and abstains from all discussion of undecided questions. The author ranks amongst the most renowned laryngoscopists of the Continent, and therefore we need not say that his pamphlet contains a great amount of instruction.

FOREIGN CORRESPONDENCE.

FRANCE.

Paris, March 20.

The annual distribution of prizes at the Academy of Sciences took place on the 11th inst. The Medical Profession came in for even a larger share of rewards than usual, and, without attempting to give here a list of names, the bare enumeration of which would hardly prove interesting to your readers, I will briefly analyse some of the more important papers produced on this occasion.

The great statistical prize was obtained by Dr. Brochard, for his researches on the mortality of nurse-children in provincial districts. The subject is one which has deservedly attracted great attention of late; for since the number of births is rapidly diminishing in this country, it is of the highest importance that of the children born as large a proportion as possible should attain manhood. An active superintendence would evidently improve the state of things in this respect; for while the number of deaths among children sent out by the *grand bureau* does not exceed 17 per cent. on account of the careful inspection of the Medical officers appointed for that purpose by the Central Administration, the mortality rises to 42 per cent. in the *petits bureaux*, where no such check exists. It is probable that legal measures will shortly be taken in order to suppress the evil practices which interfere with one of the most vital interests of the nation.

Among the numerous essays on the subject of cholera which the Academy has had to examine, the most interesting are those of Drs. Legros and Goujon, who have performed some curious experiments on the transmission of this disease to the lower animals. They have shown that by injecting into the veins of a dog, or introducing into its stomach, the serum of blood drawn from choleraic patients, or the liquid obtained by filter-

ing their dejections, symptoms similar to those exhibited by the human subject are produced—viz., vomiting and purging, cyanosis and general refrigeration, arrest of the circulation, and finally death within the space of a few hours. The organic poison contained in these fluids appears to be closely allied to ordinary ferments, for the same results were obtained by merely injecting yeast into the veins. It was further ascertained that putrid substances, and various other morbid poisons, when thrown into the blood, do not bring on any of the symptoms of cholera, although, of course, their action is equally fatal. It may be proper to remind your readers that Dr. Legros was one of the two House-Surgeons who were decorated by the Emperor for their admirable behaviour during the epidemic of 1865.

The most important prize which the Academy has to dispose of is that of Surgery, amounting to £800. The subject proposed was "The Preservation of Bones by the Preservation of the Periosteum." The jury has given a singular proof of its impartiality by dividing the prize between the supporters of two diametrically opposite opinions. Dr. Sédillot maintains that the periosteum does not possess the property of reproducing the subjacent bone, but that the layers of sound tissue which lie under its internal surface are the real agents of the new formation. Dr. Ollier, on the contrary, considers the periosteum as being exclusively endowed with the regenerative power; and instead of scooping out the diseased bone so as to preserve its outer layers, he boldly removes it in its total extent, and trusts entirely to the fibrous sheath for the reproduction of the subjacent tissue. From the decision of the Academy we may perhaps infer that both views are correct, and that each of them embraces a part of the truth, if not the whole.

While the Academy of Sciences was busy with the distribution of prizes, the Academy of Medicine was preparing for the election of two new members. The principal candidates were Drs. Nonat, Vigla, Chauffard, and Hérard. The first election came off to day, and Dr. Vigla was nominated by a small majority. It is generally believed that the next successful candidate will be Dr. Chauffard.

The numerous strangers who are preparing to visit the Exhibition of 1867 will be no doubt highly gratified to hear that a Medical staff has been organised for the express purpose of doing duty within the building, and giving assistance to any persons who may accidentally require it. They will also be pleased to learn that Professor Gosselin, one of the most eminent Surgeons, has been appointed to superintend the Medical service; that seven Hospital Physicians and Surgeons have been nominated as principals, each of them having four other Physicians under his orders; and that their personal security will be carefully provided for by unremitting Medical attendance. But they will perhaps be surprised to learn at how moderate an expense this very desirable result has been attained. The administrators have liberally allotted the sum of 25 fr. (£1) per diem, to reward the services of the whole Medical staff! I am happy to say that the gentlemen appointed have declined to receive any emolument for their trouble, and have placed themselves gratuitously at the disposal of the public. It is, however, our duty to point out the mean and sordid spirit in which officials of all classes constantly act towards the Profession in France, as if, by constantly affecting to despise its members, they could succeed in bringing them down to their own level.

Great attention has lately been attracted by a new anæsthetic agent, which is, however, by no means a new substance, so far as our chemical and physiological knowledge is concerned. I allude to the protoxide of nitrogen, which, according to some authorities, is less dangerous and better adapted to produce insensibility than any other preparation hitherto employed. The contrary opinion has been expressed by several distinguished physiologists. In a letter addressed to M. Chevreul, Professor Hermann states, as the result of his personal experiments, that the inhalation of the protoxide of nitrogen produces a state of dyspnœa, which, although seen by the assistants, remains unperceived by the patient himself on account of the anæsthesia which accompanies it. On the whole, the sensation is not unpleasant, but the inhalation of unmixed protoxide of nitrogen is excessively dangerous, and rapidly produces asphyxia. When mixed with oxygen the danger is avoided, but the anæsthetic effects are considerably diminished. Such are the views of the Professor, who certainly deserves that degree of credit which can never be refused to those who have tried similar experiments upon themselves.

Another physiologist, Dr. Krishaber, of Paris, entirely coincides in opinion with the Professor. He states that the protoxide of nitrogen, when pure, invariably produces death within a very short period of time, and that it cannot be safely employed in operations which last more than four minutes. Its mode of action is capricious, and certain patients appear to sink unexpectedly under a species of intoxication without exhibiting those symptoms of asphyxia which, in most cases, precede death. In short, this new anæsthetic is a most dangerous one, in Dr. Krishaber's opinion, on account of its irregularity, and it cannot be rationally expected to supersede chloroform.

It is singular, at all events, that so many experiments should have been tried half a century ago with this substance without leading to the discovery of Surgical anæsthesia—one of the most invaluable acquisitions of modern science.

GENERAL CORRESPONDENCE.

"GRATUITOUS MEDICAL SERVICE."

Letter from Dr. Septimus Gibbon.

[To the Editor of the Medical Times and Gazette.]

Sir,—Mr. Radcliffe is correct in stating that the copy of his circular which I sent you was imperfect to the extent of not containing his private address. The error arose from my losing the original, and using a copy which was made by my servant for a Professional friend. However, there was no substituted address, for that of "Privy Council Office" was stamped on the paper and printed on the envelope. The seal of the office, as well as the style and wording of the document, led most, if not all, the recipients to believe that it was official. The enclosed correspondence, which is that Mr. Radcliffe alludes to in his communication to you, and which he has permitted me to publish, leads one to infer that even Mr. Radcliffe himself regarded the circular as semi-, if not quite, official.

The investigation of cholera is of such paramount importance to the public that the circular ought assuredly to have been official, and I believe that it would have been nothing more than just and politic to have paid for full answers to its requisitions. Had a like demand been made on a barrister's, solicitor's, or engineer's time and professional experience, it would have been paid for as a matter of course.

Thanks to the Medical press, every respectable assurance company now pays for Medical opinions and information, and I see no valid reason why Government should not do so likewise.

I have received letters from some of my co-Officers of Health reflecting on the conduct of Mr. Radcliffe in this matter, and I regret that he thinks I did so too in the paragraph of my letter in your impression of the 2nd inst., which spoke of "others making bricks" to order, for which they well remunerated. The allusion I intended was to the Medical Department of the Privy Council, which receives from £10,000 to £15,000 of the public money annually, and not to Mr. Radcliffe, of whose remuneration I know nothing. I look upon Mr. Radcliffe as an agent in the matter, and it would be manifestly unjust to hold the agent responsible for the actions and customs of his principal. At the time of receiving instructions to prepare a report on cholera, it seems that he also received the stationery, the seal, and the other credentials of the Medical Department of the Privy Council, in order that he might the better levy contributions from the Medical Officers of Health and, perhaps, other Professional gentlemen.

If a shabby insurance company were to direct one of its clerks to obtain privately and gratuitously Medical reports on the health of its customers, surely we ought not to blame the clerk "for seeking to obtain information in a left-handed surreptitious manner," as my correspondent terms it.

I am, &c.

Septimus Gibbon, M.B. Cantab.

13, Finsbury-square, E.C., March 12.

(Copy.)

13, Finsbury-square, E.C., Feb. 21, 1867.

Dear Sir,—To answer your inquiries in a satisfactory manner would involve more time than I am able to give gratuitously to the public. I have sent your circular to the *Medical Times and Gazette*, with a line expressing the opinion that public work of this description ought to be paid for. As far as you

personally and privately are concerned, I should only be too happy to render you any assistance in my power, but this I look upon as work and service for the general public. There are several reports made by me to my Board of Works on the subject of the cholera epidemic, which, as public documents, are at your service, and, should you wish it, I will have them copied for you. My Board has not printed any of them, or I would have sent you copies.

Yours very truly,

J. N. Radcliffe, Esq. SEPTIMUS GIBBON.

70, Guilford-street, Russell-square, W.C.,
Feb. 22, 1867.

Dear Sir,—I have to thank you for your note. I regret that you do not feel at liberty to give me the information I sought for the reason alleged. Although I am sensible of your kindness in separating me, as far as I myself am concerned, from the public question which you conceive arises out of my note, I cannot avail myself of your offer to have made for me, on personal grounds, copies of papers which might contain information I am desirous of obtaining for an official report. In respect to the questions contained in my note to you, I must state that I carefully limited them to subjects which I believed would have come immediately under your notice as a Medical Officer of Health, and would have involved little time or trouble in answering. If I had thought otherwise, I certainly should not have addressed the questions to you or to any other Medical Officer of Health.

Faithfully yours,

Dr. Gibbon. J. N. RADCLIFFE.

*** We print the foregoing correspondence, as it gives Dr. Gibbon an opportunity of refuting what he conceives is a charge against him; and now the matter must drop.

ANCIENT BRITISH SKULLS.

LETTER FROM MR. C. CARTER BLAKE.

[To the Editor of the Medical Times and Gazette.]

SIR,—Dr. Thurnam, in his letter in last week's *Medical Times and Gazette*, appears in some manner to have departed from the axiomatic form in which his conclusions were originally enunciated. In his published memoir he laid it down as a "sort of axiom," *de omni et nullo*, "long barrows, long skulls; round barrows, round or short skulls; dolichotaphic barrows, dolichocephalic crania; brachytaphic barrows, brachycephalic crania" (p. 158). He now admits "the existence of some facts which show an admixture of the two types of skull, long and short, in the circular barrows." He had vaguely foreshadowed this admission on the 128th page of his memoir when he said, "As regards the later barrows, it is evident that, unless the earlier race had been suddenly exterminated by the succeeding one, a mixture of interments and a mixture of the two types were to have been expected."

The Blandford barrows are undoubtedly round or "brachytaphic." According to Dr. Thurnam's theory, they should have afforded "brachycephalic" crania, or else a "mixture of the two types." So far from this being the case, six out of the nine are mecistocephalic, averaging from ·66 to ·70, one is mecocephalic (·72), one is subbrachycephalic (79), and one is eurycephalic (·81). The skulls termed by Mr. Shipp Nos. 1 and 8 are, perhaps, of less antiquity than the others. I give Dr. Thurnam the benefit of this doubt, and concede to him the skull 8 (·66) and the skull 1 (·81). I then find that the seven skulls for the Blandford round barrows afford a lower cephalic index than the twenty-five skulls measured by Dr. Thurnam from his dolichotaphic barrows, the figures being ·70 and ·71 respectively. This result could never have been foreseen if Dr. Thurnam's "sort of axiom" had been accurate. Either this axiom must be abandoned, or else the facts must be ignored. Dr. Thurnam has cited the illustrious authorities of my friend Dr. Broca, and Professor Huxley, in favour of his conclusions. It may be an ungracious task to oppose one *argumentum ad verecundiam* with another, but we must not forget that M. Pruner Bey and Dr. Barnard Davis hold views which are irreconcilable with those of Dr. Thurnam. I can only trust that further investigations may elucidate the question; at the same time that I venture to protest against closing up for ever the science of anthropology within the limits of Dr. Thurnam's "sort of axiom."

I am, &c.

March 9. C. CARTER BLAKE.

THE CHOLERA AT JERSEY.

LETTER FROM DR. KITCHENER.

[To the Editor of the Medical Times and Gazette.]

SIR,—I am instructed by the Medical Board of Jersey to request you to publish in the next number of your journal the following remarks on the cholera in Jersey:—

Asiatic cholera, which was prevailing extensively at certain neighbouring parts of the French coast, showed itself in this island on the 6th ult.

The disease was declared to be Asiatic cholera by all those Medical men who chose to visit and examine the cases. Only one of their number, as far as I am aware, expressed any doubt as to the nature of the disease, and that opinion was based on an exceedingly limited sphere of observation. Surgeon-Major De Lisle (P.M.O. in Jersey), and Dr. Gordon, 69th Regiment (now Deputy Inspector-General of Hospitals, Bengal), both of whom have had great experience of cholera in other climates, although at first hesitating, soon fully confirmed the diagnosis of the very large majority of their Medical brethren.

A Medical Board was formed, one duty of which was to frame and keep a record of cases. No case of "bilious fever"(?) was admitted into this list, and the Board declined to admit several other cases of disease which were reported to them under various names.

No distinction was made between cholera and choleraic diarrhœa, these affections being considered as different forms of the same disease. They were reported to the public as "Return of Cases of Choleraic Disease in Jersey, from ——— to ———." 142 such cases were enrolled, 60 of which proved fatal. No diarrhœa was present in the island previous to February 6.

The symptoms of the disease have been, with some variations—Vomiting and purging of great quantities of fluid of the consistence and appearance of rice-water; suppression of urine; great thirst; pulselessness; cold tongue—viz., temp. 78° to 82°; cramps in abdomen and extremities; blueness of extremities; weak voice; puckered skin; collapse, and death, as a rule, within twenty-four hours—in many cases much quicker.

I am, &c.

THOMAS KITCHENER, M.D.,

Jersey, March 18. Secretary of the Medical Board.

SHORT CLINICAL THERMOMETER.

LETTER FROM DR. T. CLIFFORD ALLBUTT.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you give me a little space in an early number of your journal to say a few words more about the short clinical thermometer? Mr. Reynolds has had so large a demand for them that it would be impossible for him to address each one of his correspondents severally. I wish first to say that I believe the thermometers now issued will be found accurate. When Mr. Reynolds was supplying them by half-dozens only, each one was tested before it went out, and although every care is still taken, still some may escape without being tested. If so, I hope that none but accurate instruments have escaped. On the whole, I am glad to say, the instruments have been carefully made. I suggested that instruments should be tried with flat bulbs, and again with curved ends, but we find in practice that such thermometers are jerky and inaccurate, so that any convenience of adaptation is neutralised by the inaccuracy. Why this should be I cannot tell. My more especial object in now writing to you, however, is to say that I have requested Mr. Reynolds to provide a larger number of maximum thermometers. These little instruments may be placed in the axilla and left there for five minutes, and then read when removed. In a dark room this is a great advantage; moreover, patients are sometimes fat, so that a short instrument is concealed.

The bulbs of these instruments have also been made a little less capacious, and they are therefore more sensitive—I suppose because the action takes place upon a smaller mass of mercury. Indeed, so accurate do I find these registering thermometers, that I see no reason why all should not be made with maximum registers. One gets so enslaved by routine that it was not until it was suggested to me by my friend Mr. Jones, of Woodbridge, that I was bold enough to ask why all clinical thermometers are not made self-registering. Nothing is lost in accuracy, and very much is gained in con-

venience and eyesight. Mr. Reynolds's short ones are made on Phillips's principle, and tested by an instrument verified at Kew. The great demand for our little instruments shows how valuable the researches of Dr. Davy, Dr. Aitkin, and Dr. Ringer are seen to be by the Medical Profession, and I must say once more that I feel my share in clinical thermometry to be so small that I am almost ashamed to see myself prominently brought forward in the matter at all. I am, &c.

Leeds, March 19. T. Clifford Allbutt.

ASKESIS.

Letter from Dr. Henry MacCormac.

[To the Editor of the Medical Times and Gazette.]

Sir,—The Christian philosophy tells us to resist temptation, but that of the Porch advised evasion. It is best, perhaps, to combine the two—to resist when we must, to fly when we can. It is from the Greek word *askesis* that the English ascetics, but much altered in meaning, is derived. The word ἀσκεῖν simply meant to exercise, to perform an effort, any bodily effort, in the direction of training. From bodily effort to mental the transition was easy. But to return. The ancients considered that the proper method of dealing with temptation was the practice of ascetics—not what moderns mean by the term, such as excessive self-denial, or, as the monks had it, starvation, bloodletting, vigils, stripes, but the vigilant discharge of active duty in such a direction that if it did not entirely rout, it at least turned the flanks of the enemy. This you in as many words advert to, if you do not expressly name, in your truly admirable leader of the 9th. The Greeks made combined mental and bodily effort—the half-time system, in fact—to a far greater extent than we do, the essential of education. If we permit recreation or alternate bodily effort at all in education, it is in a manner by stealth and by the way. There are boys' schools in which sedentary occupation is pursued throughout the long cheerless day. There are girls' schools in which an hour's walk, "weather permitting," is the only out-door recreation tolerated in the four-and-twenty hours. To this abominable system I would ascribe in great measure the evils to which you have so well adverted. Education should be hygienic. The manner of it ought to be mainly changed. The body must be recognised—treated, in fact, as an institution. It is found in mills and factories on what is termed the half-time system—that is to say, where half the time is given to work and half to teaching—that the young learned as much as when all the time was devoted to books. We ignore the "vile body," as fools and fanatics call it, and the vile body takes its revenge accordingly. Drive out nature with a fork, and back she comes again. Outdoor and indoor labour, effort, and training, in a pure atmosphere and in an environment of perfect cleanliness and cheerfulness, must be coupled with "adequate" mental culture. This is the only sure and certain way of getting rid of a morbid and unwholesome introspection, whether in individuals or in the masses. I visited not long ago a school on a noble foundation. I walked through the playground, peeped into the school, and then I visited the dormitories. A room of large proportions had been cribbed and cabined, so that each boy slept in a sort of cell. The windows had not been kept open by night. They were not open by day. The boy who accompanied me, a fine-looking manly lad otherwise, was the colour of a sheet of whity-brown paper. These boys, I said to the head-master, ought to sleep in open spaces, not in cribs. Their windows ought to be pulled down by night; they should have a daily tepid bath from head to foot; they ought to have a run in the open air before breakfast, before dinner, and before supper. The head-master's reply was not satisfactory. His practice was still less so. He evidently thought that Greek iambics and suchlike rubbish—I merely call it rubbish at the cost—were preferable to all my innovations.

We do not find that the sailor combating the tempest, or the soldier in the battle charge, the miner or quarryman hewing out the ore, the labourer at the plough, or—but these illustrations will suffice—is troubled with "aberrations of the sexual instinct." These only visit the idle, the indolent, all those, in fine, who do not practise a rational asceticism—the askesis of the ancients—with regard to body and soul. But how are people to do so who have not been brought up to it? The task is often difficult at best. It must, indeed, be the work of education, of early training. Our compound nature—the body, in fine—must no longer be ignored, but provided for, cultured, beautified, and perfected. The present state of things is dreadful. Almost unprotected, the multitude are handed over to dirt, disorder, and disease. Everywhere the vilest appeals are made to the lowest portions of man's animal nature. Bribed newspapers swarm with indecent advertisements. Infamous placards, or books as infamous, as a correspondent of the *Pall Mall Gazette*, February 6, states, are thrust into people's hands at railway stations or elsewhere. Everything is done to minister to a diseased and unwholesome pruriency. Foreigners are on the watch for us with implements of abomination—I know not how else to term them—when we venture abroad. They form part of the stock in trade of instrument makers at home. A second Juvenal would be needed to describe our streets after nightfall, the hideous prevalence of infanticide, the shameless ravages of disease.

The body must be rehabilitated. Universal education, as now proposed by Jean Macé in France, must be extended to the masses. Yes, it is to education, to training, that we are to look. There is the remedy, or nowhere, for the various diseased and morbid conditions of body and soul that now afflict us. Epidemic disease, insanity, pauperism, vice, are merely other names for faulty and deficient training. The Medical Profession itself is not entirely immaculate. Its members need education, training, far higher, more extensive, than any which, as a rule, they now receive. The abominable and quite unnecessary mutilation termed clitoridectomy, and continual and needless poking with specula into the recesses of the female organism, are merely outcrops of the general malady which you have so well characterised. It is training, and training only, combined with those loftier efforts of which training is the sure and certain precursor, that developes man's higher faculties, renders him in truth a fellow-worker and associate with the Divine Being who has sent us here. I am, &c.

Henry MacCormac, M.D.

7, Fisherwick-place, Belfast, February 12.

AN OUTBREAK OF SCURVY.

Letter from Mr. E. M. Wrench.

[To the Editor of the Medical Times and Gazette.]

Sir,—In connexion with the interesting articles regarding the health of the merchant navy and the prevention of scurvy, which have lately appeared in your pages, I beg to offer a few remarks on my experience of that disease. I sailed from Calcutta to England in Medical charge of 388 men, about one-third of which belonged to my own regiment, whilst the remainder were men from half the regiments then in Bengal whose periods of service had expired.

The ship (which was under 1000 tons) was overcrowded, and the main deck so cumbered with boats, cattle pens, and houses, that it was impossible for all the troops to parade on it at the same time.

The provisions were bad, and the lime-juice deficient, so that for the last week of the voyage none was served out, but scurvy broke out five weeks before this happened, and during the last six weeks of the voyage—that is, between the 85th and 128th days—53 cases were admitted into Hospital, of which 16 had hæmorrhage from the alimentary canal, 23 had ecchymosed ulcers or petechiæ, often with œdema, and the remainder spongy gums and rheumatism. Many more had spongy gums, but were not admitted into Hospital. Now it is very remarkable with regard to this outbreak—

Firstly—That it occurred whilst the men were all getting the regulation allowance of lime-juice, mixed with their grog daily, and a ration of preserved potatoes twice a week.

Secondly—That it attacked the different classes of troops in very different proportions, for of the 388 men 117 belonged to the 12th Royal Lancers. Most of these had been in the Crimea, and afterwards four years in India, where they had been much exposed during the mutiny, and these suffered much from dysentery at the commencement of the voyage. 172 were time-expired men from her Majesty's regiments serving in India. Most of them had been ten years in the army, half of which had been spent in India. 50 were pensioners from the old Company's army, who had been from twenty to forty years in India, and were the weather-worn ruins of a vast host who had succumbed to the scorching sun and drenching rains of Hindostan. 49 were men belonging to the old Company's army who refused to be transferred to the Queen's army. Few of them had been more than a year in India, and most of them

were under twenty-five years of age. Of the 117 belonging to the 12th Lancers 4 had scurvy, or 3·4 per cent.; of the 172 discharged from her Majesty's army 22 had scurvy, or 12·8 per cent.; of the 50 pensioners from the Company's army 11 had scurvy, or 22·0 per cent.; of the 49 discharged from the Company's army 15 had scurvy, or 30·6 per cent. All these men had been the same time at sea, and all lived upon the same food (except the Lancers, who, in addition to the authorised diet, had been supplied, at my suggestion—out of the Regimental Canteen Fund—with a few extra potatoes and raisins at the commencement of the voyage, and with a ration of treacle once a week afterwards). How, then, can the great difference in which the different detachments were attacked be accounted for? Chiefly, I think, by their different degrees of exercise and cleanliness. The Lancers, no doubt, had more antiscorbutic food, but they did nearly all the military work on board, and also helped to work the ship. They were the most under discipline, and, if anything, were rather overworked. They were attacked at the rate of 3·4 per cent., all slight cases. The time-expired men of her Majesty's army did some duties and were clean and well behaved; they had 12·8 per cent. attacked. The pensioners from the Company's army did no duty, and were very little on deck. They had 22 per cent. attacked. The men who refused to serve the Queen were under no discipline, were badly clad, having lost their uniforms, were idle and filthy, and seldom came on deck, except when obliged. They had 30·6 per cent. attacked.

From these facts I maintain that scurvy is at least influenced, if not caused, by other hygienic conditions besides food, and that exercise of body and mind will often prevent it. Indeed, I was so convinced of this that when it broke out I recommended that all the men should be forced on deck for several hours during the day, the officers giving up the poop to them; and from that time, though we were several weeks longer at sea, the disease made no great progress. It is also worthy of remark that, though the crew had been twice the time at sea, and were worse fed, having only half the quantity of lime-juice given to the troops, they entirely escaped scurvy.

In conclusion, I would remark that I think our appetites are often the best chemists; and from the fact of the great popularity of the treacle before mentioned, and from the unusual craving for preserves which I myself and most other officers experienced when living on salt rations in the Crimea in 1854, I think these articles are valuable antiscorbutics. They are certainly less liable to disagree with the bowels than the very suspicious and often putrid pickles usually supplied to troops coming from India, and tend to lubricate the mouth and aid the deglutition of the hard sea biscuit, of which men with bad teeth seldom eat their full allowance.

I am, &c. E. Mason Wrench,
Late Assistant-Surgeon 12th Royal Lancers.

Park Lodge, Baslow, near Chatsworth.

FAVOURABLE TERMINATION OF A CASE OF OVARIAN DROPSY WITHOUT OPERATION, WITH SUGGESTIONS AS TO ITS TREATMENT.

Letter from Dr. George Crawford.

[To the Editor of the Medical Times and Gazette.]

Sir,—The following case is so pregnant with instruction to the Medical Profession at large, that were I to withhold giving it publicity I should not be doing my duty as one of its members:—

Mrs. H., aged 64, the subject of the following remarks, and the mother of a large family, had always enjoyed good health till about three years ago. At that time she observed a slight swelling taking place in the lower part of her abdomen, on the right side. Having caused her no pain, the only inconvenience arose from its bulk and occasional gastric disorder; consequently she gave it no attention for two years, till I was called in about twelve months ago. The swelling had rapidly increased for some months previously, and had now become very painful. I examined her and found her very much enlarged, resembling a person about the seventh or eighth month of utero-gestation; but, as she had ceased to menstruate for twenty years, it left no doubt in my mind as to the disease being any other than ovarian. The tumour occupied very much the middle line, and fluctuation was distinctly felt. Great pain was complained of at a point about two inches to the right of the umbilicus, and the skin at that place was much inflamed, and apparently adhered to the structures beneath.

As a means of relieving this pain I ordered hot linseed-meal poultices to be constantly applied, at the same time giving her a mixture of infusion of digitalis, acetate of potash, and iodide of potassium, there being a considerable amount of œdematous swelling in the lower extremities. The pain was immediately relieved, and also the swelling in the legs. The tumour did not perceptibly increase for the next three or four weeks, but as she was chiefly in bed she could not judge so well of its size as when she was walking about. At the end of this time a small opening that would admit a common probe occurred on the part, which was inflamed and adhering to the structures beneath, when a considerable quantity of yellowish fluid was discharged from it, along with a number of very minute hydatids. This fluid continued gradually to escape for a number of weeks until the tumour was almost gone; indeed, the only indication left of its existence was a thickened doughy feeling in the right iliac region, extending to the opening where the fluid escaped. After she was up and apparently as well as ever, the small opening healed over, but the swelling slowly returned. A few more poultices were applied, and the fluid began to escape as before.

I saw her a short time since, and she told me that when it stops discharging for a week or two, all she has to do is to apply more poultices, and the discharge is renewed. Several folds of cloth placed over the opening to dry up the discharge, which is now very trifling, and a bandage tightly applied to keep up a considerable degree of pressure, is all she is doing for it, and her health is now as good as ever—at least she has no inconvenience from it.

From the facts of the case narrated above, it will be seen that the opening whereby the fluid was discharged took place spontaneously, that the cyst in all likelihood was unilocular, that adhesion of its walls must, to a certain extent, have taken place, that the opening has been nearly permanent, that it gives exit to the fluid as it is secreted within the cyst, that the disease is checked, the swelling removed, and the patient able to attend to her duties as before.

Now, I am of opinion, when the distension is great and the fluctuation is more distinctly felt at one spot than at another, that if inflammation were induced, by pressure or otherwise, to insure adhesion of the abdominal wall to that of the cyst, and a small opening made, not with the view of emptying the cyst of its contents at once, but more with the intention of allowing it to drain by degrees, and at the same time a bandage to be tightly applied to exert a considerable amount of pressure over the tumour, and the opening prevented from closing, many cases might be treated in this way, and the patients, if not entirely cured, might be much relieved, and be able to spend the remainder of their lives with more ease and comfort, and freed from the grave consequences of undergoing the operation of ovariotomy, which is at all times accompanied with so much hazard and danger to life, or the tumour be prevented from pressing on some vital organ, and destroying the patient in that way. I am, &c.

Port Glasgow, Feb. 25. George Crawford, M.D.

THE PHARMACOPŒIA.

[To the Editor of the Medical Times and Gazette.]

Sir,—Might not the Pharmacopœia Committee give us a Syrupus Glycyrrhizæ? No sweet covers nauseous drugs so much as the liquorice. This syrup is in many of the foreign Pharmacopœias—Beasley gives a formula for it—and most of our leading druggists in large towns keep such a syrup.

As we have a dried carbonate of soda, why not let us have a dried sulphate of soda, since that salt has been restored to the Pharmacopœia? And why not a dried sulphate of magnesia? The latter, I believe, is kept by the druggists; it is useful from its concentrated form, and, when sent out in powder, is not known as the vulgar affair—Epsom salts.

I am somewhat old-fashioned, and inclined to follow in the path of our fathers, and hence I miss the tincture of the black hellebore and the compound tincture of aloes. Accepting, as I do, Dr. Brown-Séquard's views as to the existence of a reflex uterine paraplegia, I beg to say I believe I have cured more cases of that form of disease—to say nothing of ordinary amenorrhœa—by the combination of the tinctura melampodii and the tinctura sacra, than any one ever did by belladonna, or ergot, or strychnine.

Why two aloetic pills? Are Socotrine and Barbadoes aloes

so different in composition, doses, or effects? I need not, however, say

"How happy could I be with either
Were t'other dear charmer away,"

for I use neither the one nor the other pill, but that veritable aloes and mastic compound—the old and still best aloetic pill—which John Fernelius gives in his Pharmacopœia. And why a compound extract of colocynth and a compound colocynth pill, except to add to the bulk of the book and bother the druggist and prescriber, seeing both formulæ are very nearly the same? If the oxalate of cerium gets a place, with some other "things of a day," in the new edition, because recommended by some great and fashionable authority as a remedy for vomiting—which, by the bye, it never proved in any case of pregnancy or otherwise when prescribed by me or my Medical acquaintances—I most humbly think that the pulvis aloes cum canellâ ought to have been restored to the Pharmacopœia, for I have heard many an old lady say that her stomach and bowels were much comforted and assisted by a pinch of *hicory picory*. Hippocrates, I think, says something to the effect that one should not be ashamed to learn from the vulgar if thereby we can benefit the sick.

But I do not wish to say a word against the Pharmacopœia Committee; they have done well, marvellously well, in this new edition; but before another one comes out, some ten or twenty years hence, the jealousies of national colleges will be dead and buried, and the correction of pet national formulæ will eventuate in a well-harmonised and universally acceptable Pharmacopœia. I am, &c. Omega.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, March 12, 1867.

Mr. Solly, President, in the Chair.

On reading the minutes of the annual general meeting, Mr. Charles Hawkins objected that an ordinary meeting had no power to confirm the minutes of a special one. Mr. Pollock also adopted this view. The Chairman stated that as there was no express law on this subject he must be guided by precedent, and the minutes of the annual meeting stood signed by the Chairman of the ordinary meeting next following since 1861. Mr. Moore held that the minutes required signature for certainty in case of future reference. Mr. French suggested that they might do without any signature. Dr. Pitman said that the President might not be present at the annual meeting, and might be therefore ignorant of what had taken place there. Ultimately it was put to the vote whether the President should sign these minutes or not, when the motion was carried by a large majority.

Mr. Thomas Bryant related a case of

INTERNAL STRANGULATION OF THE BOWEL BY A BAND, ASSOCIATED WITH A REDUCIBLE HERNIA, SUCCESSFULLY TREATED BY OPERATION—WITH REMARKS.

The case was one to which the author was called on December 31, 1866, by Dr. Wilkinson, of Sydenham. It was that of a gentleman, aged 51, who had been ill for several days with symptoms of intestinal obstruction. The patient had been the subject of an inguinal hernia on the right side for twenty-five years, for which he had worn a truss; during that period the bowel had come down on several occasions, but it had only given pain on one—some six months previously. On the morning of December 28, during the exertion of dragging up a tree, the hernia partially descended, but it was at once readily returned on the application of the hand; vomiting, however, soon appeared, and pain situated on the right side of the umbilicus. These symptoms continuing on the 29th and 30th, and increasing in severity, Dr. Wilkinson was sent for. A careful examination was then made, but no hernia was found; there was a large opening into the abdomen, but no swelling nor pain even on deep pressure being made. On December 31 (the third day), the symptoms becoming more severe, and vomiting being fæcal, Dr. Wilkinson, who saw the necessity for an operation, called in the assistance of the author. The seat of the hernia was then examined, but no indications of anything wrong in these parts could be made out, yet marked symptoms of intestinal strangulation existed: the pain in the abdomen was very severe; it was situated to the right of the umbilicus, and paroxysmal. Under these circumstances an exploratory operation in the region of the hernia was proposed, and power given by the patient to do whatever might be deemed the best. Chloroform was given, and the ring of the direct inguinal hernia exposed; no signs, however, of any strangulation of the bowel by the parts concerned in the hernia could be made out. A piece of omentum existed in the hernia sac, but no bowel. The finger could also be readily passed into the abdomen, and the neck of the sac was perfectly free. The bowel which came into view was, however, clearly strangulated, for it was of a bright cherry colour, and œdematous. Under these circumstances the ring was enlarged upwards and the strangulated bowel drawn down; the finger of the author's right hand was then passed along the bowel, used as a guide, upwards into the abdomen towards the point of fixed pain. When it had been passed as far as it could go, and as much traction had been put upon the bowel as was deemed justifiable, a tight band was clearly felt. The abdominal incision was then enlarged, and the band, which was made tense by the finger, was carefully divided by a pair of scissors passed into the belly, its points being well pressed into the pulpy portion of the finger till the band was reached. The wound was then closed. On the third day the bowels acted naturally, and a rapid convalescence followed. The author then made some few remarks upon the case, stating that it must be looked upon as one of strangulation of the bowel by a band, and that the hernia had nothing whatever to do with the symptoms. He then passed on to consider the points in the case with reference to the diagnosis, and related the particulars of a similar case which took place in his practice six years previously, in which such an operation as he had performed was proposed, but abandoned, and the patient died unrelieved. An analogy between the successful and fatal cases was then drawn, and the special practical points dwelt upon, the author concluding by stating that he was disposed to believe that in many cases of intestinal obstruction, when the symptoms are marked, and pain fixed and paroxysmal, whether with or without a hernia, relief might often be afforded by an operation where they are now left to die; and he expressed a hope that the cases he had brought before the notice of the Society would do something towards the attainment of that end.

Mr. J. Wood could not exactly understand Mr. Bryant when speaking of the abdominal ring in a case of direct inguinal hernia, and he would also like to know the extent and direction of the incision made by Mr. Bryant. He had seen four or five such cases, and had operated on two himself, but none of them had turned out favourably. In one of his cases there was a hernia, in the other there was not, and he had opened the abdomen in the linea alba, which he thought was preferable when the operation bore no relation to a hernia. In his last case the constricting band was easily found towards the end of the mesentery, divided, and the wound secured; half an hour after there was a copious motion of the bowels, but the patient only lived twenty-four hours, death resulting from peritonitis. If performed early enough, good results might be anticipated from the operation.

Mr. Bryant explained that by the ring he meant the opening into the abdomen, and that his incision extended upwards for two inches.

Mr. Power said that Surgeons did not operate more frequently in such cases because they feared to find intussusception. An old woman was admitted as a patient into Westminster Hospital; she had felt something give way in her abdomen, and she presented a swelling in her groin, which, however, turned out to be an inflamed gland. She had stercoraceous vomiting, lasting six days, and all the other symptoms of hernia; all, however, disappeared with the passing of a sloughed piece of bowel, and she finally recovered. Exploratory operations in such cases as that just mentioned were injudicious.

Mr. Moore remembered a case which had occurred many years ago—the patient had a hernia, which was reduced, yet he did not improve, but died. On examination, a band was found close behind the ring, which had strangulated the bowel previous to entering the sac, so that the sac had been filled with strangulated gut. The nature of the band was of importance, as a piece of bowel might by pressure ultimately assume the aspect of a fibrous band. In one case where an aperture existed in the mesentery, a portion of the ileum had assumed

such an appearance at the spot where pressure had been longest exerted.

Mr. Maunder congratulated Mr. Bryant on the successful issue of his case, and stated that some three years ago one somewhat similar had occurred at the London Hospital. The patient was seen on the eighth day, and then had an inguinal hernia on the left side and a swelling in the right groin, but it was evident that neither of these had anything to do with the symptoms. An accumulation of fæces in the rectum was removed, and an opium suppository given. In the morning Mr. Luke considered an exploratory operation justifiable, which was accordingly performed. Dark-coloured serum escaped from the peritoneum, and the constricting band was found in the right iliac region. It was divided, but the man died in seven hours. Around the band a kind of volvulus had formed. Exploratory operations were, he thought, to be guided by the site of the pain.

Mr. Callender thought that it should be borne in mind that all cases *cannot* be successful. At St. Bartholomew's he had seen many of these; one was a very bad case, where the ordinary operation for strangulated hernia had been performed without giving relief. After death it was found that there was a hole in the omentum, through which the bowel passed, and by which it was strangulated. In the case of a woman suffering from femoral hernia, it was found after death that the bad symptoms were produced by a portion of the jejunum passing through an orifice in the mesentery so far up as to be out of reach. In a case which occurred in the practice of Mr. Laurence, when the hernial sac was opened, only omentum was found. After death it was seen that a portion of this extended from the stomach to the sac, and that the bowels had become twisted round the cord or column thus formed. A still more complex state of matters was revealed on the post-mortem examination of another man; here, as before, there was a column of omentum round which the bowel twisted, but in this case both bowel and omentum appeared to be strangulated. As to cutting the epigastric artery, he thought that of small importance, as it could readily be secured.

The President thought Surgeons were too chary in operating in such cases, but ovariotomy had taught them that the parts could be interfered with at no great risk. In one case where strangulation had been produced by jumping out of a window, a band had been found pressing on the small intestine. He regretted not having operated.

Mr. Bryant, in reply, stated that the bands usually extended towards the promontory of the sacrum, and the pain was usually on one side only. He would like to know more about these bands. When seen during life, they looked very different from what they appeared after death. Most of the cases brought up against him were too far gone before operation, and the Surgeon should recollect that, at all events, the patient cannot be in worse plight after the operation than before. The great rules as to diagnosis he considered to be the sudden, acute, and paroxysmal nature of the symptoms, and the pain being limited to one spot.

MEDICAL SOCIETY OF LONDON.

Monday, March 18.

The new President, Mr. Henry Smith, took the chair this evening, and delivered an address, of which the substance was as follows:—

He felt it a very pleasing duty to thank the Fellows of the Society for having elected him to the chair, and he did so not as a mere matter of form, but with sincerity, and under the conviction that the honour conferred upon him was a mark of the favourable opinion of the Fellows at large; and he knew of no greater pleasure in his career than to possess the good will and esteem of the Profession, and especially of those in it to whom his character and actions were well known. He could not forget, moreover, that the Medical Society of London had enjoyed a great reputation for its usefulness, and for the numbers of eminent men who had from time to time been in its ranks; and although the Society had had its vicissitudes, he was glad to find that it was now in a prosperous condition. He referred to the many excellent researches which had been originated at this Society in the form of the Lettsomian Lectures, which had subsequently been published, and had attained deserved repute. He also referred to the utility of the Society, especially for younger members of the Profession, as it was essentially a practical Society, and no opposition was placed in the way of any Fellow, however young, who wished to bring forward his views on any subject. He strongly urged the younger members of the Profession especially to join its ranks, and, as a practical illustration of its benefit, he might appropriately, now he had been elected to the chair, state his own history in connexion with it. The first act in his own professional career was to join this Society, and he had been an active and interested member ever since: he had here made and cemented many friendships, had greatly increased his professional knowledge, and had been able, either in the form of papers or of lectures, to bring before the Profession his own thoughts and observations on various matters of practical Surgery, which had subsequently been extended, and had been the means of forwarding his professional career. "Therefore," said he, in conclusion, "I have a right to think well of this Society; and when I look upon the long list of eminent men who have filled this chair, I cannot but feel a strong incentive to make myself worthy of them, worthy of you, and worthy of the honourable position to which you, gentlemen, in your kindness have elected me, and the duties of which I will fulfil to the utmost of my power."

PHARMACEUTICAL SOCIETY.

March 6, 1867.

Dr. John Harley presented a paper entitled,

GENERAL OBSERVATIONS ON THE PREPARATIONS OF CONIUM AND THE EXTRACTION OF CONIA.

The author having called attention to the conclusion to be derived from his previous experiments with the Tinctura conii fructus P.B., and the Tinctura conii P.L., communicated to the *Pharmaceutical Journal*,(a) January and February, 1867, proceeded to show that the dried leaves of conium maculatum contain but a mere trace of conia. He described a process by which conia may be obtained without the usual operation of distillation with caustic potash. By making comparative experiments with the two processes, he was able to state that the one employed by him was the more productive. In the ordinary process the conia appears to undergo several changes. One of the products of its decomposition, and apparently a new body, was placed upon the table, together with the results of several operations for the extraction of conia. As a general consequence of his investigations, Dr. Harley condemned the use of any part of the dried plant in medicine, and did so, he observed, without hesitation, since, from experiments upon himself and others, he was able to show that the Succus conii of the British Pharmacopœia is in all respects a most efficient preparation, and one which possesses in a powerful degree the poisonous properties of hemlock. He described the following effects of the succus, prepared by Mr. C. F. Buckle, of 77, Gray's Inn-road, upon himself:—"December 10, at 11.30 a.m. I took f.ʒij. with a little water and remained quiet. No effect followed. 11th, at 10.30 a.m., took f.ʒiij. Three-quarters of an hour afterwards a heavy clogging sensation in the heels was suddenly experienced. This effect became very decided, and was clearly due to direct impairment of muscular power. On putting a foot upon the scraper at the Hospital door, the other leg felt almost too weak to support the body. Unusual exertion was required to effect the movements of the body, and it seemed to me that they were heavily and clumsily performed. Giddiness was induced by looking at a blazing fire at the distant end of the ward, and this appeared to be due to want of power in the muscular apparatus of the eye to fix the gaze firmly enough upon the shifting flames to enable me to get a good definition of them. The real explanation of the phenomenon was furnished by the next experiment. Two hours and a half after taking the drug the effects had totally passed off, and I walked away briskly a distance of two miles. The maximum effect was apparent one hour and a quarter after taking the dose. 17th, at 10.45 a.m., I took ʒvss. of the succus. Three-quarters of an hour afterwards disorder of vision suddenly came on. It was a feeling of giddiness induced by shifting the eyes from one object to another. So long as the eyes were fixed upon an object, the capacity of vision for, and the definition of, the minutest objects were

(a) In these communications Dr. Harley has shown that the preparations alluded to may be administered with impunity in f.ʒij. doses, and that the only apparent effects which follow are those resulting from the action of so large a quantity of alcohol.

unimpaired, but the instant the eyes were directed to another object, all was haze and confusion, and in order to remove these effects it was necessary to arrest the eyes upon a given object, and there retain them with fixed gaze. It was clear to me that the adjusting muscular apparatus of the eye was enfeebled, and that its contractions were so sluggishly performed that they could no longer keep pace with those of the external muscles of the eye. At 11.45 this derangement of the muscular apparatus of the eye was much increased, and the implication of the third nerve was still further indicated by great dilatation of the pupils and approaching paralysis of the levator palpebræ muscles. It now required considerable effort to raise the eyelids, and a general muscular lethargy rapidly spread over the body. At 12 noon I first felt weakness in the legs, especially apparent in the hamstring muscles. At this time I was cold, pale, and tottering, and afraid to retain the sitting posture lest the muscular lethargy should get the better of me and result in general paralysis; I therefore walked about and tested the strength of my tottering legs. The mind remained perfectly clear and calm, and the brain active, while the body seemed heavy and well-nigh asleep. There was, in fact, a direct diminution of power in all the voluntary muscles, almost amounting to paralysis, and of all the motor nerves the third was the earliest and most deeply affected. At one time it required the greatest effort to raise the eyelids. On the first sudden approach of the above-mentioned effects, the action of the heart was, most probably from a feeling of alarm, considerably excited, and the pulse was small; tranquil action, however, was restored in a few minutes, and the pulse attained a natural and regular action, numbering 68. At 2 p.m. all effect of the conium had passed off, and the rest of the day was employed in active mental and bodily occupations." The author stated that he was still employed in the investigation of the medicinal value of the ordinary extract of conium and of a succus and extract of the fresh root; that, so far as his inquiries went, he found the extract—even that which was most carefully prepared from the powerful succus employed in the above-described experiments—contained but a trace of conia, and appeared to be destitute of active properties in ordinary doses. Having distinguished the useful from the useless preparations of conium, the author concluded with expressing a hope that the latter would be excluded from the Materia Medica, and that Practitioners would rely upon the succus alone, which, in the smallness of the dose, in almost complete absence of taste and odour, and in potency and certainty of action, combines all the requisites of a useful and valuable medicine.

NEW BOOKS, WITH SHORT CRITIQUES.

Marwar: the Land of Death. By W. J. Moore, Surgeon, Joudpore Political Agency. Pamphlet.

*** This description of a district lying towards the extreme north-west of our Indian dominions is of the highest interest, especially in the account of the diseases prevalent there. These seem to be ophthalmia, skin diseases, malarious fevers (for which Mr. Moore is accustomed to use quinine by subcutaneous injection), enlarged spleen, occasional epidemics of cholera, maggots in the nose and ear, Guinea worm, Madura foot, and especially small-pox. One question we would ask—Why do authors writing on Indian subjects persist in making use of terms altogether unknown to their stay-at-home brethren?

An Inquiry into the Truth of the Opinions generally entertained regarding Malaria. By the same Author. Pamphlet.

*** In this pamphlet Mr. Moore reviews the various opinions now prevalent as to the nature and origin of malarious fevers. From his own experience in India and elsewhere, he concludes that the source is to be found in bad water rather than in impure air.

Sphygmographic Observations of the Pulse in Typhus. By Thomas S. Wrigley Grimshaw, A.B., M.B., etc., Physician to the Cork-street Hospital, Dublin. Dublin: Falconer. Pamphlet. Reprint.

*** Dr. Southey Warter met his death while applying the sphygmograph to the pulse of typhus, and his uncompleted work is now taken up by Dr. Grimshaw. Probably, however, as the instrument does not convey as much to the mind as the skilled finger does, and as its application is not always easy, its application as an indication of treatment in fever will be but rarely had recourse to. Nevertheless, as a contribution of an exact nature towards our knowledge of the complex state called typhus, we are greatly obliged to Dr. Grimshaw for it.

Contributions to the History of Blood Corpuscles. By Dr. J. G. Van der Lith. Translated from the *Nederlandsch Archief* by Dr. W. D. Moore. Pamphlet. Reprint.

*** The exact history of blood corpuscles, although hitherto extensively studied, is yet far from well known. The present contribution to their history is worthy of attention, as it strives to give the origin and nature of the solid constituents of that diffluent tissue we call the blood.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 14, 1867:—

Charles Arthur Bush (St. Bartholomew's Hospital), Park-street, Bath; Alfred John Freeman (St. Thomas's Hospital), Southsea, Hants; Alfred Trubshaw (Liverpool Hospital), Royal Infirmary, Liverpool.

The following gentleman also, on the same day, passed his First Examination:—

John William Pinder, Middlesex Hospital.

APPOINTMENT.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

WALKER, ALFRED, M.R.C.S.E., has been appointed House-Surgeon to the London Hospital.

BIRTHS.

BEDWELL.—On March 11, at Warneford House, Leamington, the wife of Dr. H. Bedwell, F.R.C.S., of a daughter.

DILL.—On March 13, at 19, Regency-square, Brighton, the wife of Dr. Dill of a daughter.

FLOWER.—On March 19, at 39, Lincoln's-inn-fields, the wife of W. H Flower, Esq., F.R.C.S., of a daughter.

GORDON.—On March 11, at the Royal Dockyard, Portsmouth, the wife of Dr. L. Gordon, of a daughter.

HUNTER.—On March 14, at Dartford, Kent, the wife of R. H. Hunter M.R.C.S., of a daughter.

MURPHY.—On March 17, at Willesden, the wife of J. B. Murphy, M.D., of a daughter.

POWLES.—On March 13, at 2, Victoria-terrace, Hackney Wick, the wife of W. Powles, M.R.C.S.E., of a son.

MARRIAGES.

MAY—PATERSON.—On March 14, at St. Thomas's Church, Woolwich, Dr. W. May to Grace Campbell, fourth daughter of the late Lieut.-General T. Paterson, R.A.

RIX—MARSACK.—March 14, at St. Luke's Chapel, Cathedral, Norwich, W. H. Rix, F.R.C.S., of Tunbridge Wells, to Rosalie Jane, daughter of the late G. H. Marsack, Esq.

STEWART—GROSJEAN.—On March 16, at St George's, Campden-hill, H. C. Stewart, M.R.C.S., Bengal Civil Service, to Harriette Elizabeth, eldest daughter of P. F. J. Grosjean, Esq., Sheffield-gardens, Kensington. No cards.

DEATHS.

ADDISON, W. J., Surgeon, of Brampton, near Carlisle, on March 17, aged 31.

COLSTON, PETER, at Husbands Bosworth, Leicestershire, for many years District Medical Officer of the Market Harborough Union, on March 17, aged 57.

DARBY, W. (late Superintending Surgeon Cawnpore Division Bengal Establishment), at 17, Maddox-street, on March 10, in his 77th year.

DAVIES, J. R., M.R.C.S.E., L.S.A., M.B., of Birmingham, on March 3.

DOLMAN, J. T., M.D., at Souldern House, Banbury, Oxon., on March 15, aged 55.

EMMERSON, R., M.R.C.S.E., at Sandwich (for many years magistrate for the borough), on March 17, aged 83.

FARR, JOSEPH, Surgeon, at Dunstable, Beds, on March 15, aged 74.

RAINBOW, F. (House-Surgeon St. Thomas's Hospital), at Fransham Lodge, Lower Norwood, on March 14, aged 21.

VACANCIES.

ARDWICK AND ANCOATS DISPENSARY.—House-Surgeon.

CITY OF LONDON LUNATIC ASYLUM.—Assistant Medical Officer.

KING'S COLLEGE HOSPITAL.—Two Assistant-Surgeons; one Assistant-Physician.

OPHTHALMIC HOSPITAL, SOUTHWARK.—Assistant-Surgeon.

SUFFOLK GENERAL HOSPITAL.—Physician.

TORBAY INFIRMARY AND DISPENSARY.—Dispenser.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

East Retford Union.—Dr. Fanning has resigned the Dunham District; area 7001; population 1338; salary £15 per annum.

Great Ouseburn Union.—Mr. S. Nelson, Jun., has resigned the Accomb District; area 8235; population 2048; salary £25 per annum.

Wincanton Union.—Mr. C. Jey has resigned the Queen Camel District; area 8133; population 2433; salary £44 per annum.

Witney Union.—The Second Bampton District is vacant; area 10,520; population 2702; salary £72 per annum.

APPOINTMENTS.

Chorlton Union.—Samuel Woodcock, L.R.C.P. Edin., M.R.C.S. Edin., L.S.A., to the First Hulme District.

Haverfordwest Union.—Thomas H. Rowe, M.R.C.S.E., L.S.A., to the Haverfordwest District and the Workhouse.

Portsea Island Union.—Walter Hardin, L.K. and Q. Coll. Phys. Irel., M.R.C.S.E., L.M., to the Portsmouth District.

Sir M. Lopes has headed a movement for a Children's Hospital at Plymouth with a donation of £100.

We are informed that Mr. Philip Harper has resigned his appointment as Surgeon to the London Surgical Home.

The Treasurer of Guy's Hospital has issued cards of invitation to a *conversazione* on Thursday, March 28.

Royal College of Surgeons in Ireland. — Dr. Archibald Jacob, F.R.C.S.I., has been elected a member of the Council of the College in the room of his father, resigned.

A few days ago the lady-in-waiting of the Grand Duchess Mary of Russia, the Countess Tolstoy, swallowed a sharp bit of the bone of a bird. Profuse hæmorrhage followed, from which she died.

An Object for the Queen's Bounty.—On Sunday last, the wife of William Stone, 4, New-road, Burley's-lane, gave birth to three children—two girls and a boy, all of whom, we hear, are doing well under the care of Dr. Nuttall.—*Leicester Chronicle.*

William Turner, M.B., Demonstrator of Anatomy in the University of Edinburgh, and one of the Examiners in Anatomy in the University of London, is a candidate for the Chair of Anatomy in the University of Edinburgh, vacant by the death of Professor Goodsir.

A bill is before the Legislature of Jamaica for imposing licences upon trades, professions, and occupations. The licence to practise as a duly qualified Physician or Surgeon in any town is to be £5.

If the Reform Bill now before Parliament become law, all graduates of any University in the United Kingdom, and all Medical Practioners registered under the Medical Act, will be admitted to the franchise. The University of London will also return a member. These certainly, even if there be none other, are good points in the measure.

Death of M. Boudin.—The devotees to statistical and anthropological studies will much regret to hear of the death of this elaborate investigator. Occupying a high position in military Medicine in France, and the author of a standard work on Medical Geography, his contributions to the various scientific and Medical periodicals on every branch of Medical statistics have been as numerous as valuable. We hope to be able shortly to furnish some account of his labours.

The Health of Barnsley.—We have received a copy of the *Barnsley Chronicle* containing a report from the Medical Officer of Health. From it we learn that the death-rate for 1866 is 26 per 1000, or the same as that of London, although the latter required an epidemic of cholera to raise it the 2 per 1000 above its normal rate of 24. Barnsley altogether escaped the cholera. The mortality of children is very marked. The atmosphere of Barnsley is greatly polluted by the smoke nuisance. The sewerage is good. The present water supply is bad, but the town will shortly be placed on a par with Glasgow and Manchester in that respect.

Supposed Death of Dr. Livingstone.—The following extract from a letter received by Lord Stanley from Dr. Seward has been forwarded to the *Times* by Sir R. Murchison: "I have personally made inquiries among the traders of Keelwa Koinga, and have gathered information there which tends to throw discredit on the statement of the Johanna men, who allege that they saw their leader dead. The evidence of the Nyassa traders strengthens the suspicion that these men abandoned the traveller when he was about to traverse a Mazite-haunted district, and for aught they know to the contrary Dr. Livingstone may yet be alive. I purpose sending details by the next mail."

Gloucestershire Eye Institution.—We have received a report of this Institution, which was established in May last. It appears to be working with success. From the Surgical report, which is signed by Mr. R. B. Carter, F.R.C.S., we learn that the following operations have been performed:—Iridectomy, or artificial pupil, 33; removal of cataract, 16; strabismus, 11; entropium, 6; removal of capsule of lens, 2; removal of orbital tumour, 2; removal of staphyloma, 1; removal of eyeball, 1; obliteration of lachrymal sac, 2; ptosis, 2; symblepharon, 1.

Cattle Plague Inquiry.—During the week ending March 9, 1867, two fresh outbreaks of cattle plague, embracing sixteen attacks, are reported; one on premises containing fourteen cows, in the Petty Sessional Division of Horncastle (Lindsey Division of Lincolnshire), and the other on a farm having a stock of thirty-one cattle in the Petty Sessional Division of South Holderness (East Riding of Yorkshire). In the former case one cow was attacked, and was killed by order of the inspector; in the latter, fifteen animals were attacked—viz., five cows, three heifers, and seven calves, the whole of which were killed by order of the inspector, as were also nine healthy cattle which had been in contact with infected animals. Eleven attacks of cattle plague are reported as having occurred in Great Britain during the week ending March 16; this is a decrease of five on the previous return. The disease prevailed on three farms, two of which furnish instances of fresh outbreaks. Seven healthy cattle were slaughtered during the week from having been in contact with diseased animals. The attacks reported are for the following two Petty Sessional Divisions of England—viz., (Yorkshire, East Riding) South Holderness, three steers and seven calves; and (Cumberland) Eskdale, one cow. Ten of the animals were killed, and one died. The aggregate number of cattle reported to have been attacked in Great Britain since the commencement is 253,891, and 52,657 animals have been slaughtered healthy to prevent the spread of the disease.

Statistical Society.—Council and Officers for 1867-68.—*President:* *The Right Hon. W. E. Gladstone, M.P. *Council:* *Walter Bagehot, M.A.; Major-General Balfour, C.B.; *R. Dudley Baxter, M.A.; Lord Belper; Sir John Boileau, Bart., F.R.S.; William John Bovil; Samuel Brown; William Camps, M.D.; David Chadwick; Leonard Henry Courtney; William Farr, M.D., D.C.L., F.R.S.; William Augustus Guy, M.B., F.R.S.; James Thomas Hammick; Frederick Hendriks; James Heywood, M.A., F.R.S.; William Barwick Hodge; Right Hon. Lord Houghton; Charles Jellicoe; Francis Jourdan; *John Lambert; Leone Levi; William Golden Lumley, LL.M.; Matthew Henry Marsh, M.P.; William Newmarch, F.R.S.; Frederick Purdy; Rev. J. E. T. Rogers, M.A.; *William Lucas Sargant; Col. W. H. Sykes, M.P., F.R.S.; *Jacob Waley, M.A.; John Walter. *Treasurer:* William Farr, M.D., D.C.L., F.R.S. *Honorary Secretaries:* William Augustus Guy, M.B., F.R.S.; William Golden Lumley, LL.M.; Frederick Purdy. Those marked * are new members.

Crichton Royal Institution, Dumfries. — Dr. Grierson, who has recently been appointed Medical Superintendent of the Roxburgh District (Border) Lunatic Asylum, was, at their meeting on Friday last, presented by the directors of the Crichton Royal Institution and Southern Counties Asylum with 100 guineas, as a mark of their appreciation of his valuable services to the latter institution during a period of seven years. Dr. Grierson has by his urbanity, assiduous performance of his duties, and intense devotion to his profession, gained for himself the respect and affection of all who are in any way connected with these asylums, and while they much regret the loss to themselves of so valuable and efficient an officer, they rejoice to know that Dr. Grierson has deservedly attained a more suitable and wider field for the development of his many talents, and that the directors of the Roxburgh District (Border) Asylum have shown that they have the true interests of their institution in view by unanimously appointing a gentleman in every way so well qualified, both professionally and socially, as Dr. Grierson. This is the second appointment within six months which has been gained by an Assistant Medical Officer of the Dumfries Asylum, the other being the equally fortunate one of Dr. H. G. Stewart to the Newcastle Borough Asylum.

An Examination for four Minor Scholarships will be held in Downing College on Wednesday, June 5 next, and the two following days, and will begin at 9 a.m. on Wednesday. The examination will be chiefly in classics and elementary mathematics, but some weight will be given to proficiency in French and German. Two additional papers of an elementary character will be set, one on moral philosophy, in connexion with the principles of jurisprudence, and on international law; the other on the natural sciences in connexion with Medicine—namely, chemistry, including analysis, mineralogy, botany, comparative anatomy, and physiology; and in awarding two of these scholarships, considerable importance will be attached to any special proficiency in the legal or in the Medical subject. Persons

who have not been entered at any College in the University, or who have not resided one entire term in any such College, are eligible to these minor scholarships, which will be of the value of £40 per annum, and tenable for two years, or until their holders are elected to foundation scholarships. No one elected minor scholar will receive any emoluments until he has commenced residence as a student of the College. At the same time an examination will be held for one foundation scholarship of the value of £50 per annum, tenable for three years, with rooms and commons, open to all members of Oxford or Cambridge who have passed the previous examination or Responsions, and who have not resided more than six terms. This scholarship will be given for proficiency in the natural sciences as above defined. Satisfactory testimonials as to their moral character must be sent to the master by all candidates on or before Wednesday, May 29. Further information will, if required, be given by the Rev. W. B. Pike, or John Perkins, Esq., Tutors of the College.

METROPOLITAN POOR-LAW MEDICAL OFFICERS' ASSOCIATION.—At a meeting of the Council of this Association, held on the 13th inst., the President (Dr. Rogers) and the Hon. Secretary (Dr. Dudfield) reported that they had attended at the House of Commons during the passage of the "Metropolitan Poor Bill" through committee. The Bill had been passed without material alteration. In the discussion upon Clause 59, in which Mr. Neate, Mr. Mill, Mr. Brady, and Mr. C. Gilpin took part, the question was raised whether it was the intention of the Poor-law Board to appoint resident Medical officers exclusively for workhouse infirmaries, etc. A strong opinion was expressed by those gentlemen that such a course would be most prejudicial to the interests of the sick poor, as it could not be expected that such salaries would be attached to the office as would secure the services of other than young and inexperienced men. The President replied to the effect that it would be necessary in certain instances to appoint resident Medical officers, but it was not intended to dispense with the services of the present visiting Medical gentlemen. The question of compensation was also ably raised by Mr. Mill, who suggested a reference to arbitration in case of dispute. In his reply, the President stated that he would have been well pleased to have been relieved from all responsibility in this matter, but as no amendment had been suggested the clause must stand. The Council felt that they had great cause for congratulating their Poor-law Medical brethren upon the extremely satisfactory statement of the President in reference to resident Medical officers, but they regretted that he had not acceded to Mr. Mill's suggestion of arbitration. They also expressed their deep sense of obligation to those honourable members who had so ably advocated the interests of the Poor-law Medical service.

CONCRETIONS IN PORK, ETC.—M. Virchow has frequently remarked in pork peculiar concretions, which, on examination, have been found to be formed of crystallised guanine. They especially occur in the cartilages, and in the ligaments which surround the articulations of the knee. The concomitant circumstances have led to the thought that the liver is concerned in this pathological phenomenon, and plays an important part in it. (*Zeitschrift für Chemie*, 1866, p. 377.) M. Bergmann, in his examination of these concretions, has found nothing organic in them. They consist of a mixture of phosphate and carbonate of lime, which has been already observed. They appear like sand, and the largest does not exceed the dimensions of a pin's head. Nothing authorises the notion that they are encysted trichina. M. Leuckart has observed other concretions, composed of stearine and margarine, in smoked meats. They are white spots which, when examined by the microscope, present the appearance of a mass of felted needles. (*Archiv der Pharmacie*, t. xxvii. p. 205.)

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Oppert is thanked for his valuable suggestions on the new Metropolitan Poor Bill.

E. S. P.—Before taking proceedings, consult a cautious attorney. The law is a bottomless pit.

Dr. Bolton is thanked.

Alumnus.—1. As a matter of custom, usually not. 2. We believe so, if he practise as an apothecary.

Mr. T. Hathway should write to the Commissioners of Lunacy.

Dr. Poggio.—The alteration of address requested in a previous note was attended to.

Scalpel.—Any one may call himself "Dr.," as the term does not necessarily mean Doctor of Medicine. We fear there is no remedy.

The editor of the *West Surrey Times* is thanked for the excellent leading article on the case of Dr. Tofts.

The Diarrhœa of Enteric Fever.—The last number of our contemporary, the *British Medical Journal*, furnishes a forcible illustration of the fact that Doctors disagree. Dr. George Johnson, in his "Clinical Remarks on the Diarrhœa of Enteric or Typhoid Fever," reviews the experience obtained by his quarter of a century's connexion with King's College Hospital, and compares the effect of two different modes of treating the diarrhœa of typhoid fever. Without entering any further into his contribution, we may say that he finds his results of the treatment of typhoid fever much better now than they were in the earlier part of his experience:—"It is a most unquestionable fact that, since the discontinuance of the opiate and astringent treatment, the diarrhœa and the other intestinal symptoms have been far less troublesome to the attendants, and far less distressing to the patients." He condemns the use of vegetable and mineral astringents, avoids the risk of irritating the bowels by repeated doses of mineral acids, gives alcoholic stimulants more sparingly and with more discrimination than formerly, and thinks that, so far from seeking to restrain the diarrhœa by astringents, we ought occasionally to exhibit a mild laxative to get rid of irritating secretions from the bowels. Dr. Murchison, *per contra*, in some clinical remarks on a case of typhoid fever, after saying that there is no proof that the retention in the body of typhoid stools is deleterious to the individual, avers his belief that we have positive proofs that diarrhœa does harm in typhoid fever. From the considerations he lays down, Dr. Murchison concludes that the best line of practice consists in checking the diarrhœa of this fever as much as possible, and he recommends the very remedies which Dr. Johnson disapproves! *Telle est la vie!*

L.R.C.P.—The following quotation from an advertisement from the Reading Dispensary, which appeared in the *Medical Times and Gazette* for February 23, will convey the information desired:—

"The following extract from the Rules refers to the qualifications required of the Resident Surgeon:—'The Resident Surgeon shall be at the time of his election a Member of the Royal College of Surgeons of England, and also a Licentiate of the Apothecaries' Company of London.' A proposal will, however, be made at the time of election that candidates being Licentiates of the College of Physicians shall be equally eligible for the appointment with those being Licentiates of the Apothecaries' Company of London."

A Parent who writes on Public School Reforms, when treating of school diet, says:—

"When I spoke of the boys spending their money upon trash, I did not refer to the 'sweetstuff,' which all 'small boys' are addicted to, whether at school or at home; but in suggesting that the breakfast-tables should be supplied with something more than bread and butter—that is to say, with bacon, eggs, and so forth—it was my wish to point out that such a stretch of liberality on the part of the masters might prevent the boys making themselves ill with bad herrings, rank sardines, stale sausages, and such poison, which they purchase for themselves and consume in their own rooms. It is the practice of the boys at some of the schools to take their breakfast at the 'tuck shops,' where they regale themselves on grilled kidneys, hot rolls, and who knows what else of the same description? Then, probably, by way of improving their digestion, they finish up with a visit to the plunge bath."

Note on an Instrument for Preventing Masturbation in Males.—An apparatus for this purpose is constructed by Mr. Pratt, of Oxford-street. It consists of a shield of leather accurately moulded to the pubic portion of the pelvis. There is an opening to receive the scrotum and penis in a cage of basket work, which is light and cool. An opening is left for the rectum to prevent the necessity of removal for the purposes of defecation. It is fastened on by a steel band, uniting at the back with a staple to receive the band from below, and the whole is secured by a spring padlock. It may be mentioned in connexion with the above that in two cases, we are told, men, one aged 45, and the other 38, sought relief voluntarily, declaring they were unable to restrain themselves at night, though they could exercise control during the daytime.

A Metropolitan Student.—The registration commenced at the College of Surgeons on Thursday last, and will close on Saturday, the 30th inst. No other registration at the College will be necessary until the commencement of your second session in October next.

An Orphan.—You will be able to obtain a certificate of your age at Somerset House, for which you will be charged a small fee.

ABSURDITY OF ENGLISH WEIGHTS AND MEASURES.

"The great reputation of the English as practical people rests on as small foundation as any other flattery, and it is precisely the things of common life that prove this most evidently. During the Crimean war we saw the stiff and formal English perish from frost and hunger, though they had abundant provisions at a small distance. It is just the same in social life. There is not a more senseless metrical and monetary system than the English. Without calculation you cannot reduce lines to inches, and inches to feet. The foot has no definite relation to the mile, nor the latter to the degree of latitude. Pounds, ounces, and scruples vary for different objects, just as formerly apothecary and market weight were in use in Germany, and they also cannot be reduced without calculation, and have no relation to the measurements of solids and liquids. This nonsense extends even to the thermometer, the Fahrenheit scale being the only

one in use. How simple, compared with all this, is the French system! How easily is it applied in making calculations and noting the results!" —*Lectures on Man* (Dr. C. Vogt), p. 23.

A Distressing Case.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Under this heading you kindly permitted me some weeks since to make use of your columns for the purpose of soliciting assistance for the almost destitute sick wife and four young children of a Medical Practitioner who, after much trouble, anxiety, and subsequent illness, had become helplessly insane.

Allow me now, Sir, to thank you for the insertion of my appeal, and to request you to publish the following list of subscriptions, of which an acknowledgment is required in your journal:—

W. F. Brook, Esq., Wye, 10s.; T. M. Kendall, Esq., King's Lynn, 10s.; Dr. Nattrass, Sunderland, 10s.; Dr. Godfrey, Gibraltar, 5s.; Arthur Evershed, Esq., Ampthill, £1; Mrs. Evershed, £1; Q. E. D., £1; John Skevington, Esq., Ashbourne, 5s.

I would also beg leave to add that the case is as deserving as it is distressing, and that I shall be glad to receive any additional help for this unfortunate family. I am, &c. Abbotts Smith, M.D.

22, Finsbury-square, E.C., March.

Cholera Stuff (?) in Water (?).

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The cause of cholera, like the causes of the cattle plague and the potato disease, being unknown, I hold it to be unscientific and misleading to the public to talk of cholera-stuff (cholerine), as though such a substance had been detected and its physical properties explained. It has been asserted that this something floats about in water, and produces cholera, though it is so subtle as to escape detection by chemical analysis or by the microscope; and this mysterious something, it would appear, did take up its abode last year in the water belonging to the East London Water Works Company, to the great injury of the inhabitants of East London.

I resided for upwards of twenty years in Upper Clapton, during which period there were two epidemics of cholera; and during the whole time I drank the water furnished by the East London Water Works, so did all the inhabitants of the district.

The only semblance of a proof that cholera is produced by water is that certain persons have been attacked with this complaint after drinking of a particular water. Now, I never suffered from cholera while at Clapton, nor did thousands of others, though they drank of the same water, then not even filtered.

It is true that a few poor ill-fed and ill-housed people were affected with this disease; but surely this is not sufficient proof that this water was poisonous. Even in the last epidemic comparatively few suffered from this disease in the East of London, and I will undertake to find a thousand persons who drank the water and did not suffer from cholera for every one that did. Now, Sir, you will oblige me by informing me on what grounds the public has been taught to believe that the water of the East London Water Works generated and propagated the poison of cholera.

At present, I confess I consider such a notion as absurd as that the cattle plague was generated in the cowsheds of London, and was not contagious. I pause for an answer, and am, &c. J. Jones.

53, Blenheim-crescent, Notting-hill, W., March 16.

*** The theory of this letter would seem to be that it would *not* be "unscientific and misleading" to ignore results of the utmost importance because we cannot detect and explain the physical properties which cause them. On this principle, we should have no right to regard vaccination as protective against small-pox, inasmuch as the constituent elements of the vaccine lymph have not been determined by chemical analysis. The "water-theory," as it is called, of choleraic propagation, is undoubtedly hypothetical, but it now rests on so large a basis of actual observation, that it would be worse than absurd to ignore it. The late diffusion of cholera in East London was at its outset ascribed to possible contamination of drinking water with sewage. It has recently been discovered that this hypothesis was absolutely true. What more could any reasonable being desire in the way of proof?

International Medical Congress.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The following letter has been sent to the undersigned from Dr. Jaccoud, the general secretary of the International Medical Congress to be held in Paris:—

"Paris, March 8, 1867.

"Dear Sir and very esteemed Colleague,—On August 16 next an International Medical Congress will be held in Paris under the auspices of his Excellency the Minister of Public Instruction. Considering the best means for insuring the success of that undertaking, the Central Committee thought it, before all, necessary to invite the Medical men of France and abroad to participate, and that the nomination of delegates is both the best and shortest way for that end.

"The Committee has consequently filed a list of delegates, whose duty it shall be to transmit to the undersigned general secretary the lists of such members as intend to take part in the proposed Congress. I have the honour to inform you, dear Sir and colleague, that you have been elected as corresponding delegate of the Central Committee. We hope that you will respond to our appeal and aid us in the accomplishment of our important scientific undertaking. The list of delegates will shortly be published, and you would oblige us by an early reply in case you should be prevented from accepting the office which we are happy to confide to you.

"Please accept, dear Sir and colleague, the expressions of my highest esteem, with which I remain,

"In the name of the Central Committee,

"The General Secretary,

"Jaccoud.

"To Hermann Beigel, Esq., M.D., London."

Giving publicity to the above letter, I shall be most happy to receive the names of the Medical brethren who intend to participate in the International Medical Congress, and to transmit their names to the general secretary. I am, &c. H. Beigel, M.D.

3, Finsbury-square, March 18.

Medical Acts Amendment Bill.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I venture to call your attention to the insufficiency of the amended clause proposed to be introduced into the new Medical Act for dealing with a great evil at present existing in the evasion of the law as it now stands. Of course I refer to the fortieth clause of the Act of 1858, and I have no hesitation in saying that the proposed clause xvi., as printed in the *Lancet* for February 2, page 164, will utterly fail in placing matters in a better position, or enable properly qualified Practitioners to distinguish themselves to the public as better qualified than the mere member of any one Medical or Surgical licensing body if he only happens to be "registered under the Act." The old and new clause only refer to unregistered persons; but how does or will the question stand as to registered assuming qualifications they do not hold? There are many Practitioners now, who are simply Members of the College of Surgeons, who style themselves Doctor, though when they have been interrogated as to what University they had graduated at, they give no reply, and boldly call and advertise themselves as Doctor, and the public believe them to be as well qualified as others, simply because they are registered Practitioners. It seems that—

"Doubtless the pleasure is as great
Of being cheated as to cheat."

I contend, however, that a Practitioner, after having obtained the diplomas of the College of Surgeons and Apothecaries' Company, and afterwards graduated at a British University by examination, has a moral claim, as well as a legal right, to a higher position in regard to qualifications than any one who has only obtained the College of Surgeons diploma, even if the deficiency be glossed over by the purchase of the licence of the College of Physicians in Edinburgh—in the year of (dis)grace 1860—to cover the want of a Medical qualification properly obtained.

Having drawn your attention to what I consider a glaring defect in the old Act, and an equally bad one in the proposed new one, I earnestly hope you will use your powerful aid to amend the sixteenth clause before it be too late. The preamble to the Medical Acts Amendment Bill states that "whereas the Medical Act of 1858 has been found ineffectual to enable persons requiring Medical aid to ascertain who are qualified Practitioners"—and I have no hesitation in saying that if the oversight I have called your attention to be not rectified, the public will still be unable to distinguish between the fully qualified Practitioner and the one who, with a Surgical qualification alone, assumes to be a full-blown Physician, and something more.

Unless, therefore, the clause be made to apply to "registered" as well as unregistered persons falsely assuming any qualification they have not obtained, the Act may as well stand as it is. We have lost more in position by it, by far, than we have gained, particularly in the case I have pointed out, as the man with one qualification now passes himself off as the equal of the man who has obtained both a Surgical and a Medical qualification.

In this case the base coin passes quite as current and undetected by the public as the genuine metal, with this unfortunate advantage, that the former pockets the public money without the mental exertion or preliminary expenses, and the latter not only pays the College fees and heavy Medical expenses, but also undergoes additional mental labour, to find himself no better off than his unscrupulous opponent.—I am, &c.

Lindfield, Malvern, March 11. James Williams, M.D.

The late Meeting of the Anthropological Society.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The account given, in the last number but one of the *Medical Times and Gazette*, of the discussion on Dr. Thurnam's paper "On Early British Skulls," at the late meeting of the Anthropological Society, appears to me to be so exceedingly inaccurate, that I venture, as an unprejudiced witness, to give my own impression of what actually did take place. In order that I may not occupy too much of your space, it will, perhaps, be best that I should confine my remarks chiefly to a correction of the actual misstatements (as I conceive them) contained in your report.

That report states that "Mr. Pike, in very forcible language, pointed out the inaccuracy of Dr. Thurnam's statistics," whereas the fact is, that neither Mr. Pike, nor any one else present, made the slightest attempt to dispute the accuracy of Dr. Thurnam's statistics. It is true that Mr. Pike expressed an opinion that the author of the paper had not recorded a sufficient number of cases to justify him in laying down any such general axiom as "Long barrows, long skulls; round barrows, short skulls;" but how such a criticism, even if well founded, could possibly lay Dr. Thurnam open to a charge of *inaccuracy* as regards his statistics, I cannot for one moment imagine. In support of my own individual opinion that such criticism is not well founded, I am content to fall back upon the authority of Dr. Welcker, one of the most acute, and at the same time most laborious, of craniologists—one, moreover, who has insisted more strongly than any other writer on the paramount necessity of extended series of cranial measurements. He says, in the preface of his work on the structure and growth of the skull, "It appears to me that at least twenty to thirty skulls, free from abnormity, and of course all of one sex, are requisite, if we would obtain *decisive* averages." In a note he adds that even five or six skulls give a sufficiently accurate average to serve for general purposes. How many instances, then, has Dr. Thurnam brought forward in support of his theory of the association of long skulls with long barrows? He has given measurements of no less than seventy-four such skulls, and no single instance contradicts his axiom. There are only four instances in which the breadth index exceeds eighty, and of these two are cases of children of the respective ages of seven years and twelve months, and therefore entirely out of the question; the third is that of the skull B from Winterbourn Stoke, a most palpable case of secondary interment; and the fourth that of the skull E from Ebberton, in Yorkshire, is admitted by its discoverer, the Rev. Mr. Greenwell, to have come from a previously disturbed barrow, and to have belonged to a secondary interment. Of course, your readers will understand that all these seventy-four, or rather seventy, skulls do not fulfil the necessary condition of being of one and the same sex. I cannot recall at the present moment the exact proportion of the sexes, but on the most unfavourable supposition—viz., that there was an equal number of each sex—the numbers considered necessary by Welcker in order to obtain "decisive averages" would still be exceeded. I am not concerned to defend the latter half of Dr. Thurnam's axiom—viz., "round barrows, short skulls"—as the prevailing type in that class of barrows is admitted on all hands to be dolichocephalic.

As regards the other remark attributed by your reporter to Mr. Pike—viz., that that gentleman pointed out the improbability of Dr. Thurnam's "sort of axiom"—I certainly have no recollection of Mr. Pike's having

referred to probabilities at all, and I submit that to object to a scientific hypothesis on the ground of *à priori* improbability, when the question could be discussed on the basis of a large series of actual facts, would have been futile in the extreme.

The report goes on to say that Dr. Hunt "congratulated Dr. Thurnam on the way in which he had virtually abandoned the ground taken up by him in his first memoir before the Anthropological Society." Unless my memory deceives me, no such observation was made by Dr. Hunt. He stated his impression that in Dr. Thurnam's former paper he had laid down his "axiom" absolutely, whereas the new facts obtained from the Dorsetshire tumuli showed that the occupants of round barrows were sometimes extremely long-headed. Whether Dr. Thurnam is fairly open to this criticism I leave your readers to judge from the following extract from his former paper:—"It is not probable that the pre-Celtic [that is, long-headed] people were everywhere and at once extirpated or absorbed by the Celtic [that is, the short-headed people], and hence the occasional (though still rare) presence of both cranial forms in the same tumulus." (Mem. Anth. Soc., vol. i. p. 150.) Here Dr. Thurnam clearly contemplates his rule of "round barrows, short skulls" being occasionally transgressed.

The observations attributed to Mr. C. C. Blake are, I believe, correct. Upon one of those observations I should be sorry to offer any comment; but I may, perhaps, be allowed to say, with regard to Mr. Blake's defence of the French anthropologists, that it appears to me to have been entirely gratuitous. Dr. Thurnam tried to account for a difference between his own measurements and some taken by Mr. Blake by the suggestion that the instrument used by Mr. Blake, the *compas d'epaisseur* of Matthieu, did not afford such trustworthy results as the one used by Dr. Thurnam. No attack was made either directly or indirectly upon Dr. Broca or any other foreign anatomist.

Trusting that your anxiety that no injustice shall be done to an able and original investigator of an obscure but deeply interesting branch of anatomy may induce you to find a place for this letter in your columns,

I am, &c. F. P.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The report of the meeting of the Anthropological Society, criticised by "F. P." in the preceding, is in all essential particulars, although abbreviated, in accordance with notes taken at the time. All I can say in reply to "F. P." is, that it is more probable that his impressions should be in error, than the notes of one who was also present.

I am, &c. YOUR REPORTER.

COMMUNICATIONS have been received from—

Dr. DUDFIELD; Dr. J. E. SMYTH; Dr. CORFE; Mr. MACNAMARA; Dr. JACOB; Dr. JONES; A PARENT; M.R.C.S.E.; Mr. CONSTABLE; Dr. LATHAM; Dr. JACKSON; Mr. R. B. CARTER; Dr. ABBOTTS SMITH; Dr. CAMPS; Dr. EARLE; ALUMNUS; Dr. MACLAGAN; Dr. BOLTON; Dr. RADCLYFFE HALL; OMEGA; Mr. EVANS; Dr. OPPERT; Dr. FOTHERBY; Dr. ALLBUTT; Mr. WM. TURNER; SCALPEL; Dr. KITCHENER; Mr. C. CARTER BLAKE; Dr. GEORGE JOHNSON; Professor LAYCOCK; Mr. L. S. LITTLE; Dr. J. SOELBERG WELLS; Mr. J. CHATTO; Dr. HUGHLINGS JACKSON.

NEWSPAPERS RECEIVED—

Gazette des Hôpitaux—L'Union Médicale—Gazette Hebdomadaire—Gazette Médicale de Paris—Jamaica Guardian—Gloucestershire Chronicle—Barnsley Chronicle—Sunday Gazette—Medical Press and Circular.

BOOKS RECEIVED—

Dental Journal, No. 128—Memoir of Dr. Brinton—Phelan's Observations—Bloxam's Chemistry, Organic and Inorganic—Brinton, On Intestinal Obstruction.

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 16, 1867.

BIRTHS.

Births of Boys, 1098; Girls, 1048; Total, 2146.
Average of 10 corresponding weeks, 1857-66, 2023·6.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	763	809	1572
Average of the ten years 1857-66	732·5	703·3	1435·8
Average corrected to increased population..	..	..	1579
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,388	2	3	2	1	17	4	5	..
North ..	618,210	8	3	1	2	18	6	2	..
Central	378,058	3	4	1	..	9	4	..	..
East ..	571,158	13	1	2	1	14	11	3	..
South ..	773,175	9	2	7	..	6	6	5	..
Total ..	2,803,989	35	13	13	4	64	31	15	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·542 in.
Mean temperature	34·1
Highest point of thermometer	44·3
Lowest point of thermometer	24·5
Mean dew-point temperature	29·8
General direction of wind	N.E.
Whole amount of rain in the week	0·95

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, March 16, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending Mar. 16.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending Mar. 16.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	2146	1421	1572	44·8	24·5	34·1	0·95	96
Bristol (City) .	165572	35·3	117	74	176	41·6	26·4	33·5	1·46	147
Birmingham (Boro')	343948	43·9	276	167	149	40·6	24·2	32·9	0·96	97
Liverpool (Borough)	492439	96·4	387	285	316	40·3	23·7	32·3	0·18	18
Manchester (City) .	362823	80·9	246	205	‡260	43·8	21·0	33·7	0·10	10
Salford (Borough) .	115013	22·2	76	58	72	41·3	21·2	33·1	0·09	9
Sheffield (Borough).	225199	9·9	194	119	119	38·0	25·6	31·7	0·29	29
Leeds (Borough) .	232428	10·8	231	118	136	44·0	19·0	32·8	0·14	14
Hull (Borough) .	106740	30·0	81	49	54	..	..	..	..	..
Newcastl-on-Tyne, do.	124960	23·4	106	66	74	38·0	23·0	31·6	0·25	25
Edinburgh (City) .	176081	39·8	107	85	111	37·7	24·0	33·5	0·20	20
Glasgow (City) .	440979	87·1	345	257	279	38·6	20·6	31·5	0·00	0
Dublin (City and some suburbs) .	319210	32·8	167	†157	185	41·8	25·5	34·4	0·89	90
Total of 13 large Towns . . .	6187761	34·3	4479	3061	3403	44·8	19·0	32·9	0·46	46
	(1863)				Week ending Mar. 9.	Week ending Mar. 9.				
Vienna (City) .	560000	..	..	..	362	..	..	§35·2	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·542 in. The barometrical reading increased from 29·02 in. on Sunday to 29·87 in. by the end of the week.

The general direction of the wind was N.E.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 35·3°.

APPOINTMENTS FOR THE WEEK.

March 23. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Professor Frankland, "On Coal Gas."

25. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

ROYAL COLLEGE OF SURGEONS, 4 p.m. A Lecture, by Professor Huxley.

26. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ETHNOLOGICAL SOCIETY OF LONDON, 8 p.m. Meeting.

ROYAL INSTITUTION, 3 p.m. Rev. G. Henslow, "On Botany."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Dr. Gibson, "On the Condition of the Urine in Epilepsy." Dr. Gee, "On Enlargement of the Spleen in Hereditary Syphilis." Dr. Robt. Lee, "On a Case of Difficult Parturition from Distortion of the Pelvis, etc."

27. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 2 p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.

HUNTERIAN SOCIETY, 8 p.m. Mr. Gowlland, "Cases of Fistula in Ano requiring different Methods of Treatment."

ROYAL COLLEGE OF SURGEONS, 4 p.m. A Lecture, by Professor Huxley.

28. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Mr. W. Pengelly, "Evidences of Antiquity of Man in Devonshire."

29. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.

ROYAL COLLEGE OF SURGEONS, 4 p.m. A Lecture, by Professor Huxley.

ROYAL INSTITUTION, 8 p.m. Professor Frankland, "Water Supply of the Metropolis."

EXPECTED OPERATIONS.

Ophthalmic Hospital, St. George's-circus, Southwark.—The following operations will be performed on Wednesday, at 2 o'clock:—

Cataract Extraction; Iridectomy; Strabismus.

No. 12, Ward's Patent Albert

Lounging Chair, the most simple and luxurious extant, is fitted for the Drawing Room, Boudoir, Cabin, or Camp; is made in Wood, Iron, or Brass, and folds into a small compass for shipment. From 4½ Guineas.

No. 17, a Four-wheel Victoria Pleasure-ground Chair, mounted in a very light Iron-framed Carriage, upon C and patent India-rubber Springs, is either drawn by Hand or Animal, and is the most elegant and easiest Chair made.

No. 16, a ditto, upon three wheels, mounted same as four wheels, on C and India-rubber Springs.

No. 19, a Bath Chair, with Leather Head, and Folding German Shutter.

No. 18, a Sofa Britska Spinal Carriage, with the inside Tray made to take out and in, on which an Invalid may be taken from her room to the carriage.

No. 8, Ward's Improved Operating Dentist Chair, suitable for a Child or Adult.

BY HER MAJESTY'S ROYAL LETTERS PATENT
AND BY SPECIAL APPOINTMENT TO HER MAJESTY
AND THE ROYAL FAMILY
THE EMPRESSES OF RUSSIA & FRANCE &c. &c.

JOHN WARD

5 & 6, LEICESTER-SQUARE, LONDON.

Nos. 10, 10, sketch of Earl's

General Invalid Couch or Bed, made with or without a Convenience; it adjusts the back seat and legs to any given position by means of machinery, and is recommended by the Faculty as being the most complete Bed ever made for confirmed Invalids, or for Fractured Limbs.

No. 11 is Ward's Patent Reclining Chair, with Shifting Elbows for more easily getting on and off the Chair when the leg-rest is drawn out, as shown in the drawing.

No. 7 is an elegant Patent Recumbent Chair.

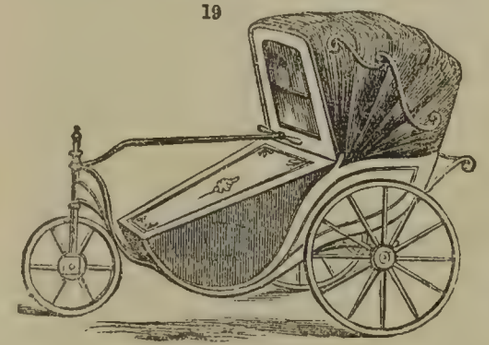
Nos. 13, 13, is a Couch-Chair or Bed invented by Dr. Hester, and may be placed in any position by the Invalid without the assistance of a second person.

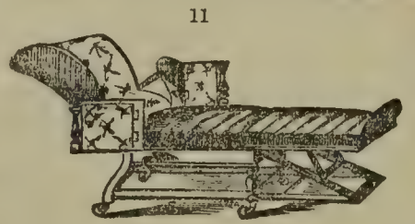
Nos. 2, 3, and 4, are all Self-Propelling Chairs, upon the best and most scientific principles; either may be used by a child eight years of age with perfect ease.

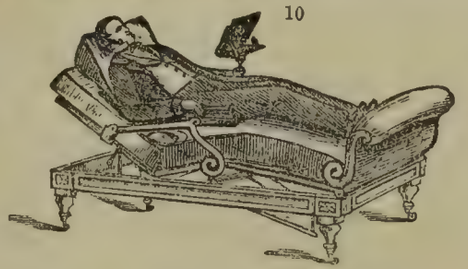
No. 24, Ward's Improved Child's Perambulator, with Patent Parasol. A variety always on hand.

No. 14 is the simplest and best-constructed Chair for carrying invalids up and down stairs, the lower handles for level ground, the upper ones for ascending or descending a staircase: the sketch conveys the exact idea: it is also made portable for travelling. Several other kinds are always in stock, upon various principles.

N.B.—The largest Assortment in the World of Invalid Chairs, Carriages, Crutches, and Beds, always on hand, for Sale or Hire. Established more than a Century.


19


11

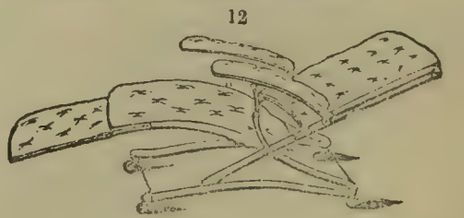

10

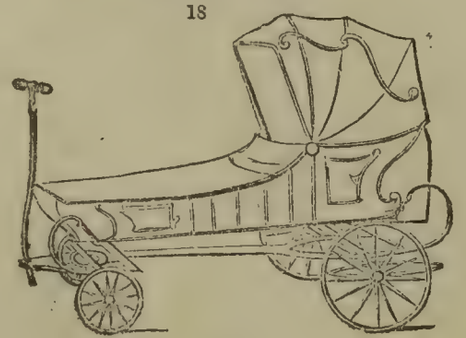
17

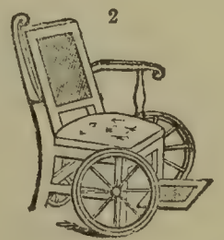
3

14

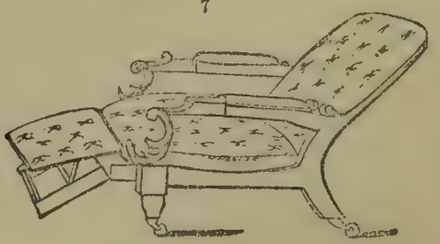
4

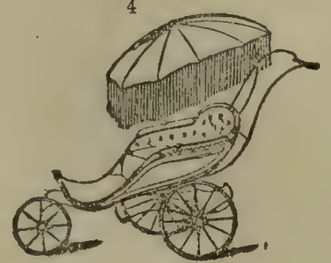

12

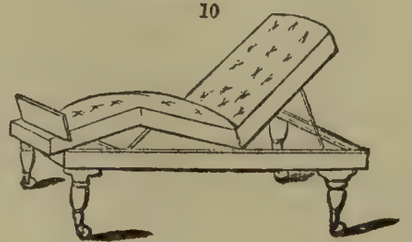

18

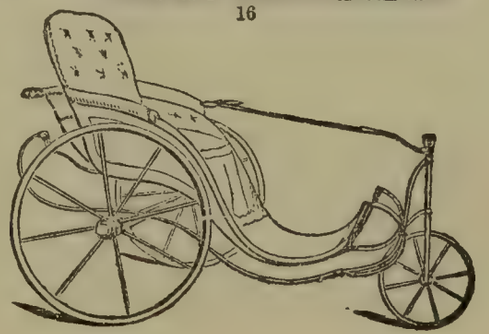

2

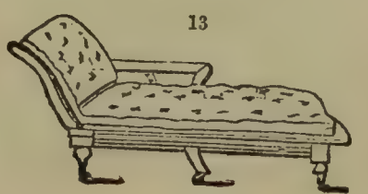
8

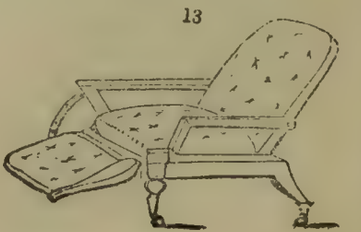

7


4


10


16


13


13

ORIGINAL LECTURES.

LECTURES ON CATARACT,

AND THE

MODERN OPERATIONS FOR ITS TREATMENT.

DELIVERED AT

King's College, London,

DURING THE SUMMER SESSION, 1866,

By J. SOELBERG WELLS,

Professor of Ophthalmology in King's College, and Ophthalmic Surgeon to King's College Hospital.

LECTURE VIII.

OPERATIONS FOR LAMELLAR OR ZONULAR CATARACT.

GENTLEMEN,—When describing the nature of lamellar cataract,(a) I mentioned that in those cases in which a sufficiently broad margin of transparent lens substance exists great improvement of vision may often be attained by dilating the pupil by atropine. A glance at the accompanying figures will explain this. In Fig. 20, *a* represents the undilated pupil

FIG. 20.

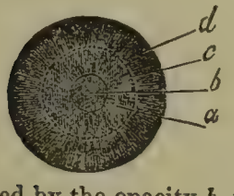
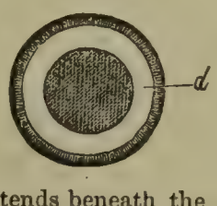
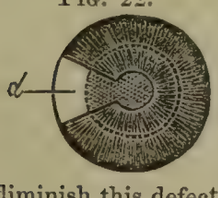


FIG. 21.



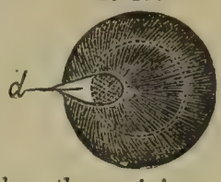
occupied by the opacity *b*, which extends beneath the iris as far as the dotted line *c*, where the transparent margin *d* commences. As the latter is completely covered by the iris, the rays of light can only pass through the central opaque portion; hence the indistinctness of vision. But when the pupil is dilated (Fig. 21) the transparent margin of the lens *d* is uncovered, and the rays can now pass through it to the retina. This fact is of great practical importance, for it furnishes us with a very valuable indication as to the treatment of such cases of lamellar cataract, for we may often succeed in restoring excellent vision by simply making an artificial pupil without operating upon the lens itself. Such a proceeding possesses very marked advantages over any operation for the removal of the lens; for the patient retains the power of accommodation, and is freed from the necessity of wearing cataract glasses, which are not only inconvenient, but also unsightly, more especially in youthful individuals. The artificial pupil may be made either by means of an iridectomy or an iridesis. The former operation has the disadvantage that the base of the artificial pupil (Fig. 22) is opposite the periphery of the lens *d*, and may therefore give rise to a certain indistinctness of vision, on account of the rays being irregularly refracted by the edge of the lens, circles of diffusion on the retina being thus produced. In order to diminish this defect, the iridectomy should be but small. In most cases I think Mr. Critchett's operation of iridesis (b) is to be preferred. It is to be thus performed:—The patient having been placed thoroughly under the influence of chloroform, the lids kept apart with the spring speculum, and the eyeball fixed with a pair of forceps, a puncture is to be made in the sclerotic with a broad needle curved at an angle, close to the inner side of the cornea, just below its horizontal meridian, so that the direction of the artificial pupil will be slightly downwards and inwards. A small loop of fine black silk is then placed upon the incision, and through this loop the operator passes a blunt silver or platinum hook into the anterior chamber to the inner edge of the pupil, which is to be caught by the hook, and the iris drawn gently through the aperture. As soon as a sufficient portion of the iris has been drawn out, an assistant, seizing each end of the loop with a pair of broad cilia forceps, draws the noose tightly round the

FIG. 22.



prolapse, close to the aperture. A considerable portion of iris should be drawn out, in order that the entire pupil may be drawn near the margin of the cornea, for the iris will thus cover a large extent of the opaque portion of the lens. There will thus result a pupil like that in Fig. 23, having its apex, and not its base, opposite the clear portion of the lens. Mr. Critchett has also in some cases obtained great improvement of sight by making a second iridesis close to the other, thus gaining a somewhat broader pupil and admitting more light.(c)

FIG. 23.



If the transparent margin in lamellar cataract is not sufficiently broad or clear to admit of much improvement of vision by an artificial pupil, the lens itself must be operated upon either by division with or without iridectomy, or by Von Graefe's new modified linear extraction.

Operations for Traumatic Cataract.

If the wound in the lens is of but slight extent and the patient young, the cataract may be left to absorption if no symptoms of inflammation set in. The pupil should be kept widely dilated with atropine, and the condition of the eye carefully watched. If inflammatory symptoms supervene, it may be necessary to remove the lens by linear extraction, more especially if it swells up considerably, or large portions have fallen into the anterior chamber and are setting up irritation. This operation should also be at once performed if the wound in the lens has been considerable, so that the latter, imbibing much aqueous humour, becomes rapidly swollen and presses upon the iris and ciliary body. The simple linear extraction will generally suffice if the lens is so softened that it will readily escape through the incision. But if the nucleus or the greater portion of the lens is still firm, it may be more advisable to make a large iridectomy, in order to afford more room for the swelling of the lens, and then to leave the latter to undergo absorption, which will now be attended by far less risk. In those cases in which great swelling of the lens is accompanied by severe inflammation, it will be best to make a large iridectomy and remove the cataract either with or without the aid of the scoop. If there is much soft matter, this may be removed with the suction syringe, although I am rather afraid of its use in such cases, especially if there is any iritis or irido-choroiditis, as it may easily produce hyperæmia *ex vacuo* of the inner tunics of the eyeball. If a foreign body—*e.g.*, a chip of steel, glass, or gun-cap—is lodged in the lens, it is wiser to endeavour to remove it together with the lens. This should be done by introducing a scoop well behind the foreign body and lifting it out; for if we permit the lens to undergo absorption, the foreign body will at last become disengaged and fall down into the anterior or posterior chamber, and probably set up severe and even perhaps destructive inflammation. The situation of a bit of metal in the lens may often be recognised by the aid of the oblique illumination, when we may observe a little brown spot in the lens or a little dark line showing the track of the foreign body.

If the foreign body has passed through the lens and is lodged in the vitreous humour, retina, or choroid, great attention must be paid to the condition of the eye, as severe and destructive inflammation is but too likely to ensue. The degree of sight, the state of the field of vision, and the tension of the eyeball, should be especially watched. If in such a case the lens swells up very considerably, it may be wise to perform linear or scoop extraction combined with a large iridectomy, in the hope that the absence of the lens may diminish the inflammation, although it must be remembered that the chief exciting cause—the foreign body—still remains behind, and may at any time, even after the lapse of years, again set up inflammation. In all such cases of injury, the condition of the other eye must also be anxiously watched. At the earliest symptoms of sympathetic inflammation, or even of well-marked and recurrent sympathetic irritation, the wounded eye should be at once removed, for only thus can we insure the safety of the other. If the injury is so severe that the sight is greatly, and probably permanently, impaired, the immediate removal of the eye may be indicated, even although the other eye does not sympathise. This is especially the case amongst the labouring classes, who cannot be under our immediate supervision, or cannot afford the time to undergo a lengthened course of treatment without the hopes of regaining any useful degree of vision. The same course may be advisable amongst the higher classes, if from circumstances—such as officers being

(a) *Medical Times and Gazette*, Oct. 27, 1866, p. 440.

(b) For further information upon this subject, I must refer the reader to Mr. Critchett's excellent papers on congenital cataract, *Roy. Lond. Ophth. Hosp. Reports*, vol. iii. parts 1 and 2.

(c) *Roy. Lond. Ophthal. Hosp. Reports*, vol. iv. part 2, p. 150.

ordered abroad, necessity for a long voyage, etc.—they cannot be under constant supervision, so that the earliest symptoms of sympathetic inflammation may be detected.

Removal of Soft Cataract by a Suction Instrument.

In the extraction of soft cataract through a simple linear incision, some difficulty is occasionally experienced in removing the firmer portions without exerting a certain amount of pressure upon the globe, or introducing the curette into the anterior chamber. This difficulty has led Mr. Pridgin Teale, junior, to the ingenious employment of a suction curette for the more easy and complete extraction of soft cataract.(d)

His instrument consists of three parts — a curette, a handle, and a suction-tube.

"The *curette* is the size of the ordinary curette, but differs from it in being roofed in to within one line of its extremity, thus forming a tube *flattened* on its upper surface, and terminating, as it were, in a small cup. The curette is screwed into the 'handle.'

"The *handle* receives the curette, and is hollow for a short distance, thus being a continuation of the tube of the curette. Passing out at right angles from this portion of the handle is a further continuation of the tube, to which the 'suction-tube' can be fixed.

"The *suction-tube* is a piece of india-rubber tubing, ten or twelve inches long, having an ivory or metal mouthpiece at one end, and fitting on to the projecting part of the handle by the other."

Mr. Teale describes his mode of using it thus:—"The anterior capsule of the lens having been freely torn asunder by two needles, a small opening was made in the cornea by the broad needle, through which the suction curette was introduced. Holding the open end of the curette in the area of the pupil, and slightly depressing it towards the posterior capsule, I withdrew, by suction, the soft matter, the pupil becoming perfectly clear in a few seconds."

Mr. Bowman has devised an excellent suction syringe, the use of which is, I think, more easy, and can be regulated with more nicety than the curette. (e) The operator having made an incision in the cornea with the broad needle, and freely divided the lens, can introduce the nozzle of the instrument (which is to be held in the right hand) in the corneal aperture, and gently "suck out" the soft lens substance.

Although it appears that the idea of employing suction for the removal of cataract dates back as far as the fourth century, and that it has since been advocated by several authors, more especially, in later years, by Blanchet and Langier, it never attained a recognised position until it was introduced by Mr. Teale. This operation has now met with much and deserved favour, more especially at the Royal London Ophthalmic Hospital, Moorfields, where it has been employed with marked success. It is especially indicated in soft cortical cataract, which may generally be very readily and completely removed by the suction instrument. If the cataract be somewhat more firm in consistence, it will be well to break it up well with the needle a few days previously. I have also used it with much advantage in removing portions of soft cortical substance which have remained behind in the pupil in the operations for senile cataract, for such portions may often be more readily and thoroughly removed in this way than by rubbing the eyeball or the reintroduction of the scoop. Some care and delicacy are, however, required in the use of this instrument; for, if too great a suction power is employed, hyperæmia (*ex vacuo*) of the iris and the deeper tunics of the eyeball may easily be produced.

Sperino's Treatment of Cataract by Paracentesis.(f)

This mode of treatment is chiefly based upon the theory that the impairment of vision in cataract is partly dependent upon a temporary disturbance in the intra-ocular circulation, especially an occasional state of congestion of the choroid, and partly upon the opacity of the lens. Dr. Sperino holds that the opaque lens fibres may regain their transparency as long as their intimate structure is not disorganised, which always follows, more or less rapidly, upon the opacity, but less rapidly in old than in young persons. Now, as the operation of tapping the anterior chamber relieves the intra-ocular circulation, it often produces a marked and immediate improvement in the sight, and in some cases often-repeated tappings have at last effected a complete cure. In others, their effect has been but moderate, or even negative. The operation consists in making a small puncture with a broad needle at the edge of the cornea or slightly in the sclerotic; a blunt probe is then inserted between the lips of the wound, and the aqueous humour slowly evacuated. The evacuations by the same opening may be made repeatedly during a single sitting, followed by an interval of several days, or singly at an interval of a day or two. The operations in cataract were repeated a great number of times. In one case 167 tappings were made, and finally linear extraction was performed. I am not aware that this treatment has been adopted by any other Surgeon on a sufficiently large scale to warrant any exact conclusion as to its efficacy. It would be, I think, very difficult to find patients who would submit to such a very protracted course of treatment and such numerous operations.

Operations for Capsular and Secondary Cataract.

I have already stated in a former lecture(g) that capsular cataract often occurs in retrogressive lenticular cataract, and that in such cases it may be advisable to remove the lens in its capsule. If, in an operation for senile cataract, the capsule is found so tough and thickened that it resists the pricker, it should be torn across with a sharp hook, and then, after the extraction of the lens, the capsule should be removed by the hook or a pair of forceps. In such cases the connexion between the posterior capsule and the hyaloid is not unfrequently loosened, and the lens may often be readily extracted in its capsule by the hook. Some operators, in making the section, divide the tough capsule across with the point of the knife.

Secondary cataracts vary much in thickness and opacity. They may be produced by portions of lens substance remaining behind and becoming entangled in the capsule, by the deposition of lymph upon the latter, or by the proliferation of the intra-capsular cells.

Again, if the more fluid constituents of a cataract become absorbed and the cortical substance undergoes chalky or fatty degeneration, the lens gradually dwindles down, and assumes the appearance of a flattened, shrivelled disc.

Mr. Bowman(h) has also called special attention to another form of secondary cataract, in which the capsule, though quite transparent, is crumpled or wrinkled, and thus produces much confusion of vision by irregularly refracting the rays of light. This condition of the capsule may easily escape detection, even although the eye be examined with the oblique illumination, and is not perhaps noticed until the ophthalmoscope is employed, when the observer finds that he cannot obtain a clear and distinct view of the optic disc, but that it looks somewhat distorted. On then getting the capsule itself into focus, the wrinkles may be readily observed.

No operation for secondary cataract should be performed until the eye has quite recovered from the cataract operation and is entirely free from all irritation. Generally three to four months should be allowed to elapse between the two operations. Nor should it be done if the area of the pupil i not of a good size. If it has become contracted, or is partially occupied by lymph, or if there are extensive posterior synechiæ, a preliminary iridectomy should be made, and then, when the eye has become quiescent, the operation upon the capsule may be performed.

Formerly, the favourite mode of operating was by the removal of the obstructing membrane. But this is falling more and more into disuse, as it is a far less safe operation than that of opening up the membrane by the needle, which is attended by much less risk of setting up inflammation. Moreover, it is a well-established fact that a small clear aperture in the opaque membrane will afford most excellent sight.

For the needle operation chloroform is hardly necessary unless the patient proves very unmanageable. The eyelids should be kept apart with the stop speculum, and the eye may be steadied with the forceps. Bowman's fine stop needle should then be passed through the cornea a short distance from the margin, and the operator should endeavour to tear a hole in the centre of the opaque membrane. The portion which is thinnest, least opaque, and consists chiefly o wrinkled capsule, should be selected for this purpose. It is to be torn across in different directions, the point of the needle comminuting the membrane, without, however, being allowed

(d) *Vide* his paper "On a Suction Curette for Extraction of Soft Cataract," *Roy. Lond. Ophth. Hosp. Reports*, iv. 2, p. 197.

(e) Both Mr. Teale's and Mr. Bowman's instrument are made by Messrs. Weiss.

(f) *Vide* a most interesting work by Dr. Sperino, entitled, "Etudes Cliniques sur l'Evacuation repétée de l'Humeur aqueuse dans les Maladies de l'Œil," Turin, 1862. Also a review of this work in *Ophthalmic Review*, vii. p. 294.

(g) Lecture II. *Medical Times and Gazette*, November 10, 1866, p. 495.

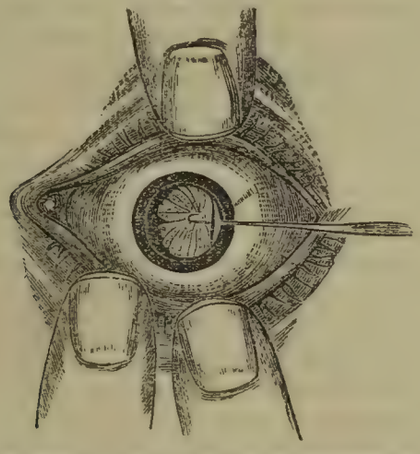
(h) *Royal London Ophthalmic Hospital Reports*, vol. iv. part 4, page 359.

to go deeply into the vitreous humour. If the operator finds, after one or two ineffectual attempts to transfix it and tear it through, that the false membrane yields before the needle and eludes it, or if it is too tough and firm to be torn through, he should at once have recourse to a second needle. This is to be passed into the anterior chamber from an opposite point of the cornea. Transfixing and steadying the false membrane with the needle held in his left hand, the operator employs the other needle to tear the membrane and open it up. Or the points of the needles may be made to cross each other, and then, after being revolved a few times round each other, be separated, which will cause the membrane to be torn across. Great care must be taken to use the needles with extreme delicacy, and not to drag roughly upon the adhesions between the capsule and the iris; otherwise severe inflammation may be set up. If any portion of the iris should have been considerably dragged upon during the use of the needles, it may be advisable to excise this segment, in order to allay any tendency to inflammatory reaction. This ingenious double-needle operation was first devised by Mr. Bowman,(i) and has proved a most valuable addition to Ophthalmic Surgery.

Should the false membrane be found but slightly adherent to the iris, so that it floats almost freely in the pupil, the adhesions may be torn through by the needle, and the whole membrane extracted by the canula or small iris-forceps through a linear incision. If the adhesions are found to be so firm that a good deal of force would have to be employed to break them down or to divide them, this should on no account be attempted; but the free portion should be caught by a sharp hook, gently drawn through the linear incision, and snipped off, which will leave a good-sized opening in the capsule.

In cases of chalky or siliculose cataract, in which the capsule looks like a little wrinkled bag containing small chalky chips of lens, it may be possible to remove the whole capsule with a sharp hook through a good-sized linear incision, as in Fig. 24. But it is often a dangerous operation.

Fig. 24.



After an operation for secondary cataract atropine should be applied, the patient be kept in a somewhat darkened room for a few days, and carefully watched, in order that the first symptoms of inflammatory reaction, accompanied, perhaps, by increased intra-ocular tension, may be detected. Within from twelve to twenty-four hours of the operation the patient may experience a good deal of pain in and around the eye, and down the corresponding side of the nose (ciliary neurosis); there is perhaps some subconjunctival injection and lachrymation, and the sight appears somewhat cloudy. On trying the tension of the eyeball it is found increased, and the iris pushed forward (sometimes partially), so that the anterior chamber is narrowed. If the intra-ocular tension is considerably increased (T 2), and persists for twelve hours from the commencement, Mr. Bowman (k) strongly advises that the bulging part of the iris should be punctured with a broad needle, thus establishing a communication between the anterior and posterior chambers, which will generally diminish the intra-ocular pressure and cut short the inflammation.

Royal College of Surgeons in Ireland.—At a meeting of the College, held on Friday, the 22nd inst., Dr. Humphrey Minchin was elected to the Chair of Botany in the School of Surgery, vacant by the death of Dr. Arthur Mitchell.

(i) *Vide* Bowman's paper "On the Use of Two Needles at once in certain Operations on the Eye," *Med. Chir. Transactions*, vol. xxxvi. p. 315, 1853.
(k) *Royal Lond. Ophth. Hosp. Reports*, iv. 4, 367.

ORIGINAL COMMUNICATIONS.

A SCIENTIFIC INQUIRY INTO SOME OF THE CAUSES ALLEGED TO PRODUCE ASIATIC CHOLERA.

By the Rev. SAMUEL HAUGHTON, M.D., F.R.S.,
Fellow of Trinity College, Dublin, and of the College of Physicians, Ireland.

(Continued from page 248.)

Terrestrial Causes of Asiatic Cholera.

Those who deny the evidence in favour of the contact theory of cholera have sought for causes capable of producing the disease, among the stars, in the air that surrounds us, and finally in the ground beneath our feet. The terrestrial, or, as it is the fashion now to call it, the telluric theory of cholera, was first propounded by some Medical officers of the Russian Government who were appointed to watch the progress of the plague across Asia, through Persia, from Hindostan into the Russian provinces on the Caspian Sea.

The cholera appeared in Calcutta in 1817, and in 1822 had reached the south of Persia, following always the routes of the caravans and the lines of human traffic. In 1828 cholera attacked the inhabitants of Teheran, but was checked, as is supposed, by the approach of winter. In June, however, of the following year (1829) it spread rapidly from Teheran to the shores of the Caspian Sea, and it reached Tiflis, the capital of Georgia, on August 8, 1830. Cholera first appeared in Astrachan in 1823, having been imported from the Persian ports of the Caspian, where it was then raging. It failed to establish a permanent footing in this city, but reappeared there on July 3, 1829, having been reimported from Baku, the port from which it had been introduced in 1823.

In 1829, the cholera destroyed in eighteen days 433 persons out of 1299 attacked in Astrachan, showing a mortality of 33⅓ per cent. only, which is mild when compared with that of other towns.

During the winter of 1829 the disease relaxed in virulence in Astrachan, but reappeared there again on August 2, 1830, and destroyed many lives.

The cholera spread rapidly from Astrachan, following the line of traffic up the Volga in the manner here specified:—

		Days.
1. Astrachan,	August 2, 1830	0
2. Zaritzin,	,, 16, ,,	14
3. Saratof,	,, 18, ,,	16
4. Samara,	,, 27, ,,	25
5. Nischni Novogorod,	,, 30, ,,	28
6. Moscow,	October 2, ,,	61

In Nischni Novogorod it made its appearance first among the boatmen employed in the traffic on the Volga, and destroyed in 34 days 575 persons out of 1068 attacked by the disease, giving a mortality coefficient of 54 per cent.

The Russian Emperor, acting under the advice of the great majority of the Commission appointed to study the progress of the disease, issued an order on August 23, declaring cholera to be a contagious disease, and authorising the rational precautions rendered necessary by such a belief, and fixing the period of quarantine of infected persons and clothes at fourteen days, all such persons and clothes being fumigated with the aid of chlorine and vinegar.

In spite of these and other precautions, the cholera, although delayed in its onward progress, reached Moscow on October 2, 1830, and raged in that city until March 17, 1831; destroying 4690 persons out of 8576 attacked by the disease, showing a coefficient of mortality of 54·6 per cent.—almost identical with that of Nischni Novogorod.

A small minority of the Russian Commission, impressed with the fact that cholera had travelled westward from Calcutta in 1817, and not eastward, and with the additional fact that it had never invaded the southern hemisphere, cast about them to discover some new cause of startling originality to account for these remarkable facts, and for the rapid spread of the disease. They commenced with the well-known proposition, that the course of the sun and moon round the earth is from east to west; and reflected that the electric currents that cause the earth's magnetism follow the course of these luminaries, which are themselves great magnets; and so built up their theory, step by step, until they arrived at the conclu-

sion that the spread of cholera and other epidemic diseases is due to terrestrial agencies, over which man has no control.

Some years later Humboldt's writings rendered the term telluric popular; and the terrestrial or telluric theory of cholera, fever, and other supposed contagious diseases became fashionable with Whig bishops, editors of liberal newspapers, and other classes of the community that wish to appear wiser than their neighbours.

The magnetic storms and electric currents of the earth are now so well known, and their relations so clearly established, that no person of education, save, perhaps, an Army Surgeon in a blue book, at the present day ventures to hazard the statement that cholera or any other epidemic disease is favoured in its onward progress, much less that it is actually produced, by such telluric agencies as electricity or magnetism. The telluric theory has been, therefore, forced to reappear in a new dress, and has been reproduced in the assertion that bad drainage, bad food, bad water, bad air, bad everything—including, I presume, the Evil One himself—may, under favourable conditions, produce Asiatic cholera, on land or on shipboard.

Those who believe in cholera as a specific entity or poison, introduced *ab extra*, of course laugh at such absurdities, and ask their opponents to show them a case of syphilis produced spontaneously, a case of small-pox appearing without infection from without, or demand that Cadmus should be again called in to sow his dragon teeth in the badly-drained ground, from which will spring—not armed warriors, but cholera, typhus, small pox, and other animal poisons as definite in character, and more deadly in nature, than brucine, strychnine, nicotine, which no person has hitherto been mad enough to believe capable of spontaneous generation.

The truth is, that man has always failed in his attempts to unravel the origin of things; he himself springs from the mysterious eternity *a parte antè*, and plunges headlong into the eternity *a parte post*; the companions of his short journey in the animal and vegetable worlds have origins as obscure as his own, and it is as idle to ask the origin of a snail or oyster as that of man himself. The animals and plants that surround him, and influence him and each other, the diseases that infest them, are entities which may be examined and studied, and their noxious effects may be guarded against by his intelligence and foresight; but the moment man presumes to ask his or their origin, he is lost in metaphysical subtleties.

Cholera is a specific entity, as a flea, or a mouse, or strychnine is, whose origin must not be discussed, but its presence admitted as an ultimate fact, behind which the reason of man cannot penetrate.

ON A SUGGESTED CAUSE OF NYCTALOPIA OR NIGHT-BLINDNESS.

By THOMAS LAYCOCK, M.D.,

Professor of the Practice of Medicine and Clinical Medicine; and Lecturer on Medical Psychology and Mental Diseases in the University of Edinburgh.

I COMMUNICATED to the *Medical Times and Gazette* of April 21, 1866, a short note of five cases of nyctalopia or night-blindness in the same family, complicated with partial deafness, and invited the attention of scientific oculists to the coincidence of the two affections. I ventured to suggest that both might be due to defective accommodation. Mr. Carter and Mr. Hulke did me the honour of noticing my communication. Mr. Carter was quite certain the night-blindness was due to "pigmentary retinitis." Mr. Hulke illustrated by cases the two conditions of which it is the common symptom. The first is "exhausted sensitiveness of the retina caused by prolonged exposure to a glaring light," with no organic change appreciable by the ophthalmoscope, and commonly observed in seamen. The second is widely different, being due to a contracted state of the visual field depending on structural alterations in the choroid and retina, characterised by very definite ophthalmoscopic signs." These are lucidly stated by Mr. Hulke as those of the so-called "retinitis pigmentosa." He thinks my cases are of the latter class, and so agrees with Mr. Carter. Neither of these gentlemen, however, touches upon the maint point I submitted to consideration—the coincidence of partial deafness with the nocturnal defect of vision, or the cause. I am very ready to concede that both may be quite correct in their conclusion as to the pathological anatomy of my cases, but I do not see clearly the order of causation; and it is not wholly improbable that the night-blindness and the disordered pigmentation may be due to a common cause in those cases in which they coincide. Is it quite certain (as Mr. Carter seems to hold) that this chronic disease of the choroid is always associated with the visual defect? If this be so, then Mr. Hulke's theory that the latter is due to contraction of the visual field is inadmissible; otherwise, any similar contraction from other causes would be associated also with nyctalopia, and Mr. Carter's opinion would be untenable. I confess my inability to concur with either doctrine, and the more readily because we have two other "experts" testifying in the journal to the causes of the affection, in opposition to both—viz., Mr. Haynes Walton,(a) and Dr. F. E. Junker, in reference to Mr. Walton's lecture.(b)

I think it may be fairly inferred, from what they write, that the pathology of the affection is by no means so clear as Messrs. Carter and Hulke seem to think. The one case Mr. Walton mentions was that of a sailor, who, however, had already recovered good vision when examined; but Mr. Walton's colleague, Mr. Taylor, had examined several cases, and found in all an anæmic condition of the interior of the eye. Mr. Walton remarks, after pointing out some well-founded objections to current theories, "The pathology does not appear to me to be clear." Dr. Junker then comes to the rescue with an interesting and useful summary of the conditions under which it occurs. He distinguishes between "genuine" and "symptomatic" night-blindness. One kind of the "genuine" is that which Mr. Hulke attributes to exhausted sensitiveness of the retina, and Dr. Junker therefore naturally classes snow-blindness with it. And here appears the first rock on which the theory of the "genuine" strikes. I have never seen but one case of snow-blindness, and in that the patient was blind during the day as well as the night, whereas it is the special characteristic of night-blindness that the patient sees well enough during the day. Thus the sailor that Mr. Walton examined was often sent up aloft during the day to keep a "look-out," although at night he groped about with difficulty, and however much objects were illuminated by lamplight he could not see them. Dr. Junker had three cases of snow-blindness, in which for two days the patients were able to distinguish only large objects as if through a mist; then the sight gradually returned, and they were all well by the seventh day, so that the course of the two affections from an alleged common cause—namely, "glaring light"—is wholly different. So, also, as to the pathological anatomy, for Dr. Junker found in his three cases of snow-blindness "hyperæmia" of the retina, whereas in night-blindness Mr. Taylor found "anæmia," and Mr. Hulke either anæmia or nothing. It is right to state, however, that in this class of his cases of "genuine" night-blindness Dr. Junker observed dilatation of the pupil (in one case only spasmodic contraction), hyperæmia of the retina, and injection of the conjunctiva, but nothing more. Another form of "genuine" night-blindness which Dr. Junker has seen occurs in low marshy localities, where ague and other malaria fevers are prevalent, either alone or as a complication of intermittent fever. As to the "symptomatic" form, the conditions he names, on the authority of numerous German and French observers, are softening, and atrophy, and compression of the optic nerve from enlarged vessels, with hyperæmia of the ciliary ganglia; "dead ague," masturbation, helminthiasis, ergotismus, Lenten diet, "stupeur" of the ciliary ganglion and nerves from cholera, endemicity in an orphan asylum, hysteria, bilious attacks. Dr. Junker is silent as to "pigmentary retinitis."

Before explaining my own hypothesis, I would remark on the nomenclature of the affection. Following the example of at least one eminent British authority, I designated it nyctalopia. Mr. Carter corrects me, and says night-blindness is the proper term, agreeing herein with Mr. Haynes Walton. It is much to be desired that Messieurs the oculists would agree amongst themselves on this point. The great nosologists of the middle of the last century—Sagar, Vogel, Linnæus, Sauvages, Cullen—used the terms nyctalopia and hemeralopia correlatively; the former to indicate good vision during the night with defective vision during the day, the latter defective vision during the night with good vision during the day. Consequently, what is now designated night-blindness or nyctalopia was with them hemeralopia. One can easily understand how an oculist unlearned in nosology might readily catch at a sort of analogy between such a term as presbyopia, which means old [defective] seeing, and nyctalopia as night [defective] seeing, and so turn the meaning upside down.

(a) *Medical Times and Gazette*, February 17, 1866.
(b) *Ibid.*, July 21, 1866.

Leaving these philological points out of view, however, nyctalopia is just as good for its purpose as presbyopia. Indeed, I am not quite sure whether it is not a better term than night-blindness. Mr. Walton prefers the latter because it gives a correct idea of the complaint, but this is precisely what I think it does not. In by far the majority of cases the vision is simply imperfect after sunset, as in mine, and the patients are not blind in the correct sense of the term, as Mr. Hulke accurately shows. The seamen affected, he says, "cannot see to do their work on deck after the sun goes down, except, perhaps, at full moon, when the sky is clear; while in a well-lighted cabin their visual acuity is not much diminished." I suspect the great nosologists just named had this peculiarity in view when they used the term hemeralopia. They were very accurate writers, and would distinguish between blindness, which is deprivation of vision, and dimness (to use a significant old word), which indicates defect.

How, then, does this night-dimness of vision arise? Take its most common form—the tropical. This appears in Europeans and in seamen, so far as we know, exclusively; it is not seen in passengers, for example. Dr. Junker saw it "exceptionally" in two or three acclimatised old residents in the tropical latitudes of America; he never saw negroes affected with it. A glaring light seems to be the chief, if not the sole, exciting cause, but the proximate cause is apparently not in the retina, as in cases of snow-blindness, although it be admitted that there is retinal congestion. What other portion of the visual apparatus, then, can be affected in the seaman? The eye has apparatus of accommodation of two kinds—firstly, as to the amount of light let into the eye; and, secondly, as to the point from whence the rays of light come. A special apparatus adapts the lenses to vision of near or distant objects; the iris regulates the amount and extent of light admitted. Now the seaman's eye is called upon to perform both these functions when he is within the tropics, for it is obvious the iris must be strongly stimulated by the glaring light to contract during the day, and the duties of a "look-out" man intensify the action of the lens-adjusting mechanism for seeing distant objects. It is in this way, we are told, the seaman is apt to become a sort of presbyop, just as the student and watchmaker tend to be myops. The part which the iris plays in vision, in dim light or twilight, is very well illustrated in the zoological hemeralops and nyctalops. The owls and bats are night-seers or nyctalops; man is a hemeralop. I therefore incline to the theory that night-dimness is due, in part at least, to (shall we say?) exhausted sensitiveness of the iris. What, then, is the observed pathological condition of the iris? It does not appear that it has ever been examined at night, when the dimness comes on, and only casually during the day. Indeed, the use of the ophthalmoscope would necessarily prevent a proper investigation of the iris, if not examined previously. Whether any change could be detected or not, is also doubtful, but it is to be remembered that, besides the influence of the ciliary nerves upon it, guided by the retina, both heat and light have a direct action upon the iris-tissues, even when wholly separated from the retina and ciliary nerves. This has been proved experimentally.(c) It is more than probable, however, that the iris works in harmony with the lens-adjusting mechanism, so that it will adapt the supply of light to distinct vision under varying intensities. Now, for this conjoint harmonious action there must be a common nerve-centre, the function of which is to regulate the different apparatus. This, I also conceive, may be affected (shall I say?) with exhausted sensitiveness in tropical night-blindness.

But there is a third element in the causation. The frequent coincidence of morbid pigmentation with night-dimness, noted by Mr. Carter and Mr. Hulke, is too important a fact to be overlooked. That the presence and production of pigment have relations to vision is generally admitted; it is enough to look at a blinking Albino to be certain that they play an important part in the process of adaptation, and the exemption of negroes (are other dark races exempt?) from night-blindness points to the same conclusion. The structure and functions of the choroid in night-seeing animals have also evidently a close connexion with their powers of nocturnal vision. Further, the so-called pigmentary retinitis is, in fact, no retinitis at all, according to Mr. Hulke, who states that the choroideal epithelium and choroid are wasted and atrophied, and that dots and clusters of black pigment are scattered and massed along the course of the retinal vessels. Nor is the course of the degeneration, as described by Mr. Hulke, without important significance, for it appears to be in accordance with the law of centripetal degeneration of nerves, so admirably worked out by Waller and Budge, inasmuch as the morbid changes progress from the front of the choroid and retina towards the optic nerve. So that even if it be established that the choroideal degeneration is inseparably associated with the retinal, the conjunction of the two only serves to show more conclusively that the former is due to morbid innervation.

I infer therefore, from all these considerations, that there are at least grounds for the theory that the functions of the visual apparatus of accommodation are disordered in tropical night-blindness, and that the choroid, the iris, and the co-ordinating nerve-centres are chiefly involved, although the retina be also. On this theory, the "symptomatic" forms of night-blindness can be explained, for it will be seen that the conditions with which it has been observed to coincide are all such as involve the nervous system and nerve-centres. My own cases could be referred to no recorded cause. The coincidence of night-dimness of vision with pigmentary degeneration in the syphilitic, noted by Mr. Hulke, is interesting, when we remember that both the choroid and iris belong to the class of cutaneous tissues, but there was no reason to suspect any such cause in mine—no history of it, no physiognomical signs in those affected with the deafness and dimness—besides the less conclusive fact—the exemption of five other members of the same family. Perhaps the conjoined defects are rather to be classed with family deaf-dumbness, for there was no history and not a trace of local disease of the organ of hearing.

Having thus determined a probable cause of night-dimness not hitherto suspected, we are prepared to consider this coincidence of night-dimness and defective hearing. It is a fact too striking to be overlooked, and can be explained by the theory already advocated. It is very well known that the organ of hearing, like that of vision, is capable of adaptation to impressions of varying distance and intensity. The late Mr. Toynbee, in a paper read to the Royal Medico-Chirurgical Society of London on May 8, 1866, illustrated very clearly some pathological results of interference with this function of adaptation of the auditory apparatus. He showed that one of the functions of the *ossicula auditus* was to act as the analogue of the iris by adapting the labyrinth for the reception of sonorous vibrations having varying degrees of intensity. The motor apparatus of these *ossicula* may be rendered incomplete or defective, and more or less deafness result therefrom in two ways—viz., either by changes in the apparatus itself, such as disconnexion of the *ossicula*, gouty deposits or other diathetic changes, relaxation or destruction of the tympanum, and the like, or by changes in the nerve-centre which co-ordinates the muscular apparatus of adaptation; or the two conditions may be conjoined. Now, it is highly probable that there is such a thing as a short-hearing analogous to myopia—that is, a person may hear perfectly well when the sounds are not too distant, or are of a certain pitch, but otherwse not at all, or very imperfectly. A Medical friend well known to me who can use the stethoscope admirably only discovered that he had short hearing accidentally. When we listen we always bring this adjusting apparatus into action, but, curiously enough, we also hear with the assistance of our eyes. For, I presume, it is not necessary to state more in proof than the fact, within every one's experience, that it is always found subservient to good hearing to see the speaker. The aurist can, perhaps, explain why some people also look and listen with their mouths open. This co-ordination of eye and ear in attention and perception is much more obvious in instinctive actions in animals with movable ears—such as the horse, dog, deer—than in man. An experienced rider watches his horse's ears to learn how the animal is using his eyes, and the deerstalker knows well what the gaze of the deer with its erect ears signifies. I conclude from these considerations that there is a co-ordinating nerve-centre the function of which is to secure such a harmonious conjoint action of the organs of hearing and vision in certain acts of attention and perception, that the entire apparatus of adjustment in both the iris and lenses, and tympanum and ossicula auditus, and eyelids and movable ears (in those animals that possess them) shall be put into action, and that this was disordered in my cases.

Although I have explained my suggestion as to an unrecognised cause of night-blindness (if we must term as such an affection which is not blindness) on general grounds only, I trust it will not be without an interest to the really scientific

(c) I am sorry that, being at present an exile from my library in consequence of slow convalescence from a long illness, I cannot give a reference to the name and works of the experimenter.

oculist, who can look beyond the narrow field of research open to the eye of sense to that infinitely wider expanse over which the eye of the intellect ranges; and if I have failed to support it by special facts, it is chiefly because I am not aware that observations have been made beyond that narrow field. And now for a few words as to the warning Mr. Carter gives the Profession against being misled by my bad example in neglecting the ophthalmoscope. I fully appreciate the value of that instrument as well in eye cases as in other affections more general; and although it did not appear to me necessary from my view of the case to examine the retina and choroid, I readily admit that the history would have been more complete if the ophthalmoscopic signs had been detailed. I ought to add, however, that at the time of visit neither my colleague nor myself had the leisure or the means to investigate them if we had had the skill, and however much we desired to do it. Mr. Carter should bear in mind that this is a very common position to be in as to thousands of the Profession, and that in reproving me he also reproves them. It is little querulous assumptions of this kind which serve to render specialists unpopular, and possibly there is something of a narrowing element in special practice which fosters the tone of feeling they imply.

NOTE ON ACUPRESSURE.

By LAWSON TAIT, Esq.,
Member of the Surgical Society of Ireland, etc.

At a meeting of the London Medical Society in November last, when acupressure was a subject of discussion, none of the many Hospital Surgeons present spoke of their having given it a trial save Mr. Bryant, and his success had not been encouraging. It seems rather strange under such circumstances to read in the *Lancet* of the 16th instant an expression of sympathy "with Sir James Simpson that he has not been enabled to put in practice his original idea, but we think he may safely leave the matter in Surgical hands," etc. Most assuredly Sir James needs no such sympathy, for many a needle have I seen him put in; and had the writer taken the trouble to look at the elaborate work published early in 1864, he would have seen that the methods were perfectly described there, and that the use of acupressure even at that time was established, and that it was anything but an experiment. In Edinburgh we had made and finished the experiment in 1859 and 1860, and, since 1861, acupressure has been with many the established practice. That, for my own part, this is the case is proved by the fact that in January, 1863, I removed a needle from the femoral artery in twenty-one hours, without any assistance being at hand, so confident had I become by that time of the efficiency of the process (*Medical Times and Gazette*, circ. June, 1863; Simpson's "Acupressure," p. 283). In fact, as I stated at the meeting before referred to, I have not used a ligature since 1860. I never carry them, and I cannot imagine any case in which the ligature would be required to supersede an acupressure needle. There never was any rational doubt "of the capability of acupressure to arrest hæmorrhage" in the minds of those who had seen it fairly tried. Again, it requires no particular manipulative skill in its application—much less, indeed, than does the ligature; and this idea, which has been extensively promulgated by the objectors to acupressure, has, I believe, done more harm by hindrance to its adoption than any other. I have had but a very slight experience of the ligature in my own hands; but I can affirm that it does not take me one-half of the time to secure the vessels of a stump by acupressure that I see others take to do the same with the ligature.

The other day, in a case of primary amputation below the knee, the time which I took to complete the operation, including the insertion of stitches, was observed by a bystander to be a few seconds under three minutes, and that without the presence of any trained assistant. There were four vessels to secure. I obviated the difficulty often experienced in this operation from the retraction of the posterior tibial, by the simple expedient of dividing the interosseous structures low down, immediately after the completion of the flaps, so that when the bones were divided the vessels had not retracted above the saw-cut. The needle securing the posterior tibial was marked. The patient was the victim of a railway accident, and, as the only available Medical aid on the spot was unavailing to check the hæmorrhage, and I had a long distance to go to him, he had lost a large quantity of blood before the operation. During the consequent delirium, about twelve hours after the operation, which was performed during shock, the marked needle was dragged out of its position by some unguarded corner of blanket. Not a drop of blood followed—indeed, the attendants did not think it worth their while to awaken me on its account.

Eighteen hours after the operation I put the patient in a carriage and conveyed him a distance of twenty-two miles, to be within easy access of efficient Medical attendance. I had the stump on my knee throughout the journey, and although I felt rather uncomfortable when I observed reaction set in, yet I had sufficient confidence to deter me from any unnecessary interference. The result was that on the thirteenth day the stump was completely united by first intention, save at the inner corner of the wound, where a few shreds of intermuscular septa were sloughing. Not a drop of blood was lost at any time after the operation.

On the twentieth day he shivered, and rapidly became pyæmic, and died with symptoms of abscess in the left hemisphere of the brain.

On examining the stump it was found that the union had for the greater part been undone, but that what still remained was very firm. All the vessels were closed in a thoroughly efficient manner. The ends of the bones were covered with firm, healthy granulations.

I do not record this case with any intention of recommending that any needle should be removed so early as the twelfth hour. Besides being quite unnecessary, such practice would in many cases be very unsafe; but it shows how very little is really required to close a vessel. During the past few months I have had several serious operations, requiring the use of acupressure, and in all I have found it quite successful.

CASE OF LARGE HYDROCELE OF TWO YEARS' STANDING CAUSED BY AN INJURY.

TREATMENT BY SIMPLE PARACENTESIS—SUPPURATIVE INFLAMMATION WITH PARTIAL SPHACELUS OF THE SCROTUM AND TUNICA VAGINALIS—TREATMENT BY FREE INCISION—COMPLETE AND RADICAL CURE.

By J. E. SMYTH, L.R.C.P.

J. C., labourer, aged 60, a pauper patient, with a large scrotal tumour on the left side, applied to me for advice February 1, 1866. He thought himself he was suffering from a "rupture," but a sense of fluctuation, and the readiness with which I could feel the spermatic cord, led to the conclusion that the case was one of hydrocele, caused, according to his own statement, by a kick he received on the scrotum from a fellow-labourer about two years previously. The swelling gradually increased, and had now attained such a size that it quite disabled him.

On his second visit a few days after, I employed the well-known transparency test, which confirmed the correctness of my diagnosis. The shape, however, of the tumour was not pyriform, but irregularly oval; there was also much pain in it with increased temperature of surface, and its weight was certainly greater than one would expect to find in connexion with simple hydrocele. Under these circumstances I recommended perfect rest at home in the recumbent posture, with some aperient medicine and cold lotions. Notwithstanding this treatment, the pain increased much, the heat and redness of the integuments more clearly manifested themselves, and the lower part of the scrotum became very tense and prominent, presenting very much the appearance of an abscess pointing. At that spot, on February 9, with the concurrence of my friend, Mr. Monday, who kindly saw this patient with me, I introduced a small trocar with canula, and drew off more than a pint and a half of fluid, the first portion of which—about a pint—was clear and amber-coloured, the remainder very turbid, and containing several shreds of fibrinous material, mixed with numerous pus-globules.

After this operation he felt much relieved for several days, but the swelling, again reappearing, became very painful, and gave rise to much constitutional disturbance, for which palliative treatment was prescribed until February 24, when, perceiving that the upper part of the scrotum assumed a livid hue, indicating some gangrenous mischief, I lost as little time as possible in making a free incision through the diseased structures into the tunica vaginalis, from which at least one

pint of pus was discharged. To make a still more open outlet for any further discharge, which might probably contain some detached portions of disorganised tissue, I prolonged the incision downwards on a director, so as to bring into view the upper extremity of the testis, round which I could easily pass my finger. Some hæmorrhage followed the division of an enlarged vein, which was readily controlled by pressure. During the progress of the case, as some of the sloughs were very adherent and likely to retard the curative process, I carefully cut them away close to the living tissues, leaving a clean surface, which, by poulticing first, and afterwards by the use of the lot. sulph. zinci, granulated well and cicatrised much quicker than I had expected. A complete and radical cure of the hydrocele has been thus effected; the left testicle is quite healthy, and the scrotum on that side is reduced to its natural dimensions. Meat, wine, and arrowroot were freely supplied from Lambeth Workhouse to this patient on my certificate.

The late Sir Astley Cooper, in describing a case of hydrocele, in many, though not in all, respects similar to this—the only one, I believe, recorded—where a slough of the scrotum and tunica vaginalis was spontaneously produced, accompanied with suppurative inflammation and granulations leading to a cure, makes use of these words:—"I once, and only once, had an opportunity of witnessing this process"—an observation from such an authority sufficiently suggestive of the rarity of such an occurrence.

2, China-terrace.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

ST. MARY'S HOSPITAL.

Hospital Wards—House-Surgeons—Hospital Gangrene—Amputation at Elbow—Amputation of Leg—Lithotomy—Amputation for Simple Ulceration—Fracture of both Malleoli—Neville's Splint—The Telegraph in Surgery—Arsenic in Ulceration of the Toes—Caries of Frontal Bones—Open Knee-Joint—Graves' Disease—Eczema and its Treatment—Intermittent Forms of Disease—Hæmatemesis—Acute Rheumatism and its Treatment—Impervious Femoral Veins—Bromide of Potassium as a Sedative—Plain Water for Gouty Concretions—Vesico-Vaginal Fistula.

One of the most recent institutions of the kind, St. Mary's Hospital, has been in every way successful. Though small, the amount of good it does is very great, not only among the poorer classes in its neighbourhood, but also to many living at a distance, as its vicinity to the Great Western Railway terminus induces many country Practitioners along the line to send cases, often of great interest, to be treated at the Hospital, where Medical and Surgical appliances are more readily attainable than at home. From an educational point of view, St. Mary's has also come out well, having rapidly attained a high place among what are known, in contradistinction to such institutions as Guy's and St. Bartholomew's, as the minor schools. The number of students is probably about seventy. The building, being of recent date, has been furnished with means of ventilation not found in some of the older Hospitals, but, as in many other cases, these have not been found to work satisfactorily. The fact is, that the building, as it now stands, is overcrowded, but the new wards, which will be opened almost immediately, will to a great extent remedy this evil, as it is not intended to increase the number of beds much, but so to distribute them as to give a greatly increased cubic space to each. As they now exist, the arrangement of the wards is very bad, and, being lighted from one side only, they cannot have their atmosphere purified by a calmly flowing through-current of air; in fact, to keep them in a state at all satisfactory, an amount of cold air far from agreeable has to be admitted; hence, unfortunately, cases of bronchitis and pneumonia have been only too common among the patients. The new wards are, however, better arranged, and will greatly improve existing accommodation. There are three resident Medical officers, who have their duties arranged in a somewhat complicated manner, one being attached to two Surgeons, one to two Physicians, and the third partly to Surgeons and partly to Physicians. It is now proposed to assign one to a Surgeon and Physician jointly, which we cannot help thinking is a somewhat unfortunate arrangement, and one not likely to prove very satisfactory. Assigning so many months' duty with the Surgeons, and so many with the Physicians, to each gentleman, would probably be a better plan.

Crowded wards, although increasing opportunities for clinical observation, are not conducive to the successful treatment of Surgical cases, and lately in several instances hospital gangrene in a slight form has been observed, whilst erysipelas is not by any means unknown. For hospital gangrene or for sores when they take on an unhealthy action, Mr. S. Lane is in the habit of ordering a lotion of dilute nitric acid, and it is wonderful how speedily with it the aspect of the wound alters for the better. We noticed this more especially in two cases of railway injuries implicating the upper extremity—in one the arm had to be removed at the shoulder-joint, in the other at the elbow-joint (an operation, by the bye, very seldom performed, but which gives admirable results), Mr. J. Lane being the operator. Soon afterwards the wounds assumed a rather unhealthy appearance, but the nitric acid lotion quickly set them to rights. The amputation at the elbow-joint also showed very well how much more prone the surfaces of flexion are to contraction than are the extensor surfaces; for although the anterior flap had been constituted by a great proportion of the tissues of the forearm, and the posterior was extremely short, a day or two after operation the latter was the longer of the two.

Speaking of operations reminds us of the plan adopted by Mr. Haynes Walton for securing a neat stump when amputating the leg. He makes no anterior flap, and in forming his posterior one cuts out sharply, so that he has a good firm solid pad. He then separates the tissues from the bones for a considerable distance upwards, and saws through a good deal above the level of his first incision. If well done, the flaps, if we may call them so, fit with great precision. Our readers are aware of the excitement which has recently prevailed about St. Mary's on the subject of the special Hospitals, especially that for stone. Just the other day a patient came under the care of Mr. Walton, having a large stone in the bladder. Lithotomy was performed, and, fortunately for the cause of the general Hospitals, the case has hitherto gone as well as could be desired.

"Should a limb ever be amputated for simple ulceration?" is a question to which many of our readers would, we suspect, be inclined to reply "Certainly not." We have lately seen two instances where this operation was performed—in one case by Mr. Marshall, at University College Hospital, and in the other, with which meanwhile we have more immediately to do, by Mr. Haynes Walton. The patient was a very dissipated character; the ulceration was extensive and of the most obstinate character, having lasted for years; the constitution was very bad, and beginning to suffer from the continued drain on the system; above all, there was the chance of erysipelas, which would almost to a certainty have proved fatal. The patient consented, the limb was amputated, and he left the Hospital without a leg, but with an improved constitution.

Some fractures are troublesome things. Thus, a short time ago a woman fell upon a slide and fractured both tibia and fibula, just breaking off the malleoli. The muscles contracted strongly, and the two fragments were pushed apart by the astragalus, and there they remained. By judicious management Mr. S. Lane, in whose care the patient is, has been able to improve the condition of the parts to a very great extent, but complete restoration is, we fear, impossible. What should be done in such cases? Is it worth while to cut the tendons and set the parts at rest; or would the plan of extension by weights, so often employed in the treatment of fractures, and with great success during the American war, prove sufficient? We observed another case of fracture under the care of Mr. S. Lane, also of the leg, but in this case compound and with a great amount of extravasation. The usual resource in such cases is Macintyre's splint, but the result is not always satisfactory. It was employed here in the first instance, but ultimately it had to be removed, and Neville's substituted for it. At St. Mary's, for compound fractures, two varieties of splint are in general use—the simple box splint, with its back and movable side pieces, and the splint (Neville's) just mentioned. This last is of very simple construction—a piece of sheet iron, bent so as to exactly correspond with the contour of the back of the leg and sole of the foot, two or three lateral projections to prevent tilting over, and having holes by which bands may be passed for its suspension from a swing if desired, and two ordinary splints for side pieces are all that is required. The side splints

are made to extend beyond the sole-piece, so as to prevent undue pressure on the limb, and the whole is firmly bound up by straps with buckles. These splints have the additional merit of cheapness, costing only a few shillings.

A curious use of the telegraph was made the other day in a case of fracture. A man who had fallen from a ladder was sent into Hospital from the country, and came under the care of Mr. Spencer Smith; but by the time he reached town his shoulder, which was the part injured, was so enormously swollen that nothing could be made out as to the condition of parts, and no statement had been sent along with the patient. A telegraphic message was therefore sent off to ascertain what the diagnosis was, from the gentleman who had first seen him, and who replied through the same channel. When the swelling began to subside, sure enough the somewhat unusual combination of fracture of the Surgical neck of the humerus with dislocation of the head of the bone forwards was detected, just as was stated by the Practitioner originally called in. Under Mr. Smith we observed a case of injury to the toes from excessive cold, which had given rise to considerable ulceration. For all cases of ulceration in that situation Mr. Spencer Smith is accustomed to rely upon the local application of Fowler's solution of arsenic, which gives very favourable results. He does not employ it in ulceration of other parts.

Mr. S. Lane has under his care one of those disagreeable cases of syphilitic caries of the bones of the head. In this instance the frontal bone alone is affected, the mouth not being touched, but on one side the dura mater is completely laid bare. A case of a somewhat similar kind, though in this instance the lesion was the result of injury, was recently under the care of Mr. Haynes Walton. When we last saw the boy the skin had completely covered the part, but there was no bone beneath, and the brain could be felt palpitating under the finger. Another case of very great interest was recently in the charge of Mr. Walton. A man, whilst chopping wood, allowed the corner of his axe to strike his knee between the inner condyle and the patella. The joint was completely exposed, and an incision of about a couple of inches in length remained. This wound was carefully closed by one or two sutures, and covered with two or three layers of collodion, the limb put on a splint, and absolute rest maintained. The patient recovered without a single bad symptom throughout; but the mode of healing is rather curious—the integuments and synovial membrane seem to have become adherent to the inner condyle of the femur, to which they are now firmly attached. Such results are highly encouraging.

In the Medical wards there are many cases of great interest. We shall begin with one under the care of Dr. Handfield Jones, a very good illustration of that rather uncommon malady, exophthalmic goître, Graves's disease, or, as it is also called on the Continent, Basedow's disease. We find the pale anæmic condition, the projecting eyes, the enlarged thyroid, the palpitations, and the bruits, not only over the heart, but along all the great vessels; so also the alternating constipation and diarrhœa. As to the irritable temper so often noticed in such patients, we of course cannot speak. Not long ago Dr. H. Jones had a similar case, but one of a much worse character, terminating fatally. The arteries were in that case perfectly powerless. Unlike many others, Dr. Jones employs no iodine and no digitalis. He exhibits instead iron combined with a very small proportion of corrosive sublimate, so that the latter may act as a tonic. This combination in a bitter vehicle Dr. H. Jones has found highly beneficial in many cases.

What will cure chronic eczema? is a question, we fear, more easily put than answered. No one who has had any experience in the treatment of skin diseases will dispute the extreme difficulty of getting rid of any one of them when it has once fairly fixed itself in the system. And it is needless to say that the remedy which succeeds in one case will not in all, as two cases under the charge of Dr. H. Jones well show. The one patient was a boy who had not long been ill. Arsenic effected a speedy cure. The other was an old woman, who had been ill for years. Arsenic was given for weeks, during which she grew no better, but rather got worse. This drug was after a time discontinued, and simple effervescing salines given, under which the patient rapidly improved, but we fear signs of relapse are already showing themselves. Another patient in the same ward shows well how malaria tends to introduce a periodicity even into such a disease as hysteria. In this case the patient had long lived in a marshy neighbourhood, and was very subject to neuralgia, which, as well as the hysteria, assumed an intermittent character. Quinine and iron never failed to cure them both.

Under the care of Dr. Sieveking we observed a curious case of hæmatemesis; it had been of the most obstinate character, and as nothing would rest on the stomach the patient was in danger of starvation. All the ordinary remedies had been employed, but without success, and, to give the affected part rest, nourishment was introduced by the rectum. This was continued until the rectum became too irritable to retain anything, but by this time rest had done its work, the stomach was, comparatively speaking, quiet, and food could be given in small quantity. The hæmatemesis has gone of its own accord, and, curiously enough, its disappearance was almost synchronous with the formation of an erythematous eruption over parts of the body.

If there be anything unsatisfactory in Medicine, surely the treatment of acute rheumatism is one: it is almost as various as there are Medical men to make it so, yet, curiously enough, the results are nearly identical in them all. Two patients in St. Mary's well illustrate this point: one, under Dr. Handfield Jones, has been treated by alkalies and other remedies and dieted on slops; the other, under Dr. Sibson, has had absolutely no medicine—not even a *placebo*—and has had nourishing food, with an allowance of beer, but the affected joints have been carefully kept warm with cotton wool, and absolute rest has been insisted on. The result is, that both coming in about the same time, both bad cases, are both now well, neither with any cardiac complication. Dr. Sibson looks upon rheumatism as a disease which will run its course, the same as scarlatina (which, by the bye, he treats, or rather does not treat, in the same way) or measles, and that it is useless to attempt to cut it short. Alkalies, as impoverishing the blood, he views as likely to retard rather than aid recovery.

Another case in Dr. Sibson's care is of unusual interest. The patient, a young man, came in on the last day of the year, having been ill for some days, cold and shivering. He had great pain in the calf of his right leg, extending up the thigh, but ultimately seating itself in greatest intensity in the knee, into which fluid was soon effused, giving rise to great tension. The left knee also became affected, and rheumatic pains were felt in other parts of the body. The left femoral vein was felt to be very hard on January 8, and this hardness has since increased, the vein being obviously impervious, and the blood returning by superficial veins over the abdomen to the intercostal and axillary veins. The current, it is quite evident, is in an upward direction, and the veins over the sacrum and buttock are enlarged, showing, probably, that the internal as well as the external iliacs are affected. A similar change is going on in the right side. During the progress of his illness, he was afflicted with intercurrent pleurisy, pneumonia, and albuminuria, but the heart remained sound. He is now in very good health.

Among the out-patients there are many cases of interest; we select the two following from among those under the care of Dr. Broadbent:—

The first illustrates the effects of bromide of potassium in a state of nervous system which may be called melancholia. It is as follows:—

A woman, aged 53, is attending as out-patient for the third time for similar symptoms. Sleepless and extremely restless nights; constant and painful apprehension of death or some terrible calamity; often trembling with fear, and startled by the least thing; usually low-spirited and depressed, but at times excited so as to alarm her children. She complained of pain in the hip, along the spine, and in the occipital region. Her aspect was sullen; her eyes averted and wandering; her face flushed and the seat of acne.

The date of her first attendance was February 1, 1866. First valerian in large doses, then morphia in gradually increasing quantity, alone and with sedatives, was tried till stupor and lethargy were induced. She was worse, rather than better, on March 8, when bromide of potassium was given in doses of twenty grains thrice daily. There was no marked improvement on the 22nd; the dose of bromide was then doubled. From this time she began to mend, and on May 14 ceased to attend.

On the 26th of July she again appeared as ill as ever, having in the meantime been much better. The bromide of potassium was given on August 2 in doses of thirty grains, and increased on the 30th to forty grains. On September 20 she was quite herself, and a week later was in good spirits. She continued to attend occasionally till December 10, taking the bromide

at first every night, then occasionally only when she felt restless.

The symptoms returned in February, 1867, but she was at once put upon full doses of the salt, and was speedily relieved.

The second case exemplifies a simple method of treating gouty deposits in the small joints which Dr. Broadbent has found effectual. This is to wrap the hands in linen or flannel dripping with water, warm or cold, and enclose them in a waterproof bag all night. This very speedily removes inflammatory stiffness, and little by little the concretions of urate of soda soften, frequently disappearing entirely. Dr. Broadbent has, in other cases, applied alkaline solutions, and water acidulated with nitric acid, to one hand, while water alone has been applied to the other, and has come to the conclusion that water is the agent in the process of removal. Urate of soda is soluble in a sufficient quantity of water. When once deposited round the joints it is extra-vascular, and not readily acted on through the blood, but water being absorbed by the skin effects its solution, and when dissolved it is carried away.

The patient now under observation has persevered with this application for more than six months, and has been rewarded by great improvement, both in the appearance and usefulness of his hands. He has been taking iodide of potassium and cod-liver oil. It may be well to add that he has on former occasions had the same internal remedies with great advantage as to his general health, and in the relief of subacute gouty attacks, but without any effect on the deposits.

At St. Mary's a small ward is set apart for the diseases of women, and in it there are now two cases on which Mr. J. R. Lane has operated for vesico-vaginal fistula. In one patient the opening was transverse, and just at the neck of the bladder, so that although the foramen is completely closed, yet, owing to deficiency of the muscular fibres of the sphincter, there is a slight dribbling from the urethra. The other was higher up and longitudinal. In operating, Mr. Lane makes use of the simple silver sutures, having abandoned the original plan as too troublesome. He thinks, however, that when the opening is very long, a splint is useful. The most important part of the operation, in his opinion, consists in sloping away the wound so as to make the adherent surfaces as broad as possible. The sloping should be made at the expense of the mucous membrane of the vagina, as there is always plenty of that.

Finally, we must return our thanks to all the officials, especially to the House-Surgeons, Mr. De Tatham and Mr. Land, for their kindness and courtesy.

MEDICAL COLLEGE HOSPITAL, CALCUTTA.

(Communicated by J. FAYRER, M.D.)

CASE OF POPLITEAL ANEURISM—RUPTURE OF THE SAC—LIGATURE OF FEMORAL ARTERY—SUBSEQUENT GANGRENE—AMPUTATION AND RECOVERY.

(Under the care Dr. J. FAYRER.)

[Reported by BABOO GOPAUL CHUNDER ROY, L.M.S., House-Surgeon.]

A., aged 30 years, a Mahomedan servant, was admitted into the Medical College Hospital under Dr. Fayrer on October 1, 1866, with popliteal aneurism of the right leg. He stated that he had been in the enjoyment of good health until twenty-five days before admission, when one night he felt pain in the right ham. It was, however, trifling, and on waking from a sound sleep he found that he was unable to extend his right leg, although there was no swelling observable anywhere near the seat of pain. Next morning he had his right ham scarified and cupped according to the native form by a person who abstracted about an ounce of blood. Three days later a pulsatile tumour became visible, and a week subsequently the foot and ankle became edœmatous, accompanied with a burning pain in the sole of the foot. Blisters and other local remedies were applied, the disease being treated as though of a rheumatic nature.

The patient was of feeble constitution. The right foot swollen and œdematous, but not painful. There was an oval swelling in the right popliteal region about the size of a duck's egg. It was seated transversely over the flexure of the joint, and was tense, shining, and elastic. It had an impulse synchronous with the arterial pulse, the pulsation disappearing on compressing the femoral artery. The bulk of the tumour could be lessened by gently pressing out its contents. Aneurismal bruit was distinctly audible. There was a lancinating pain shooting from the region of the ham to the sole of the foot.

On examination the heart's action was found to be loud, tumultuous, and irregular; its impulse strong, and the cardiac dulness increased in area. There was dulness over the second costal cartilage, but no swelling or pulsation. On laying the palm of hand on that region a distinct thrill was communicated to it. There was a murmur with both sounds of the heart, louder at the aortic cartilage than at the apex, where the first sound was heard more distinctly. Pulse 120, sharp, thrilling, and reduplicating.

The leg was gently flexed by Baboo Gopaul Chunder Roy, the House-Surgeon, upon the thigh, and retained in that position by a bandage. A quarter of an hour after acute pain was experienced in the popliteal region, which soon became so intense that the patient removed the bandages himself.

2nd.—The aneurism seems to have burst; there is a diffuse swelling on the ham, and the limb is tense, swollen, and painful; no pulsation to be felt, but the bruit still audible; toes colder than those of the other foot; sensation not so perfect.

3rd, 8 a.m.—Ligature to the femoral artery applied at the apex of Scarpa's triangle; there was no hæmorrhage, and no vessel was wounded; on tightening the ligature the bruit that was audible on the lower part of aneurism immediately ceased. Temperature between the toes of right foot just before and after operation 88°.

4th.—Temperature between the toes 88°, in the right popliteal region 99°, in the axilla 102°; toes livid and devoid of sensation; lower two-thirds of leg colder than the rest of the body, and mottled; sensation imperfect.

5th.—Large blisters on the ankle; the livid appearance of the leg steady, and not extending higher up.

The leg became gangrenous up to its upper third, where a line of separation formed. The ligature wound was healing without any febrile disturbance, and the patient continued in good spirits, feeling occasional tingling sensation referred to the toes, when on the 12th he was much prostrated by the sudden occurrence of bleeding from the wound. He lost about a pound of blood before the hæmorrhage was stopped, which was efficiently done by simple pressure. The ligature on the artery was still adherent.

15th.—The ligature from the femoral came away this morning—*i.e.*, twelve days after operation; the wound nearly healed; temperature in the right popliteal region 101°, axilla 99°.

28th.—The line of separation deepening gradually, and extending nearly down to the bone; the gangrenous parts partly separated from the living tissues, which are covered over with granulations; the hardness of the right popliteal region subsiding; its temperature 96°, on the left 98°. There was bleeding from the living tissues at several points, to arrest which much disturbance of the part by dissection was necessary. Amputation of thigh at its lower third was therefore performed by Dr. D. B. Smith, in Dr. Fayrer's absence, by antero-posterior flaps. About twenty-five vessels were ligatured.

Five days after operation, the anterior flap sloughed away, the bone was exposed, and the medulla protruded in a fungoid darkened condition; but the mischief was limited, inasmuch as the end of the bone only has necrosed, and a groove of separation has been formed higher up than the soft parts, which have nearly healed. The patient is still in the Hospital in a fair state of recovery.

Remarks.—An interesting point in the history of this case is the alleged suddenness of the occurrence of the symptoms. It is certainly uncommon for a circumscribed aneurism to manifest itself in the course of a night, and in the absence of any definite history one is led to the conclusion that it had existed, though unnoticed, for some time previously, until, having arrived at a stage when it caused pressure on the nerve, the pain attracted the patient's attention. In popliteal aneurism it is usually considered that flexion of the limb is a safe mode of treatment, but it would seem from the case in question that the practice is not altogether so safe as supposed. I am inclined to think that when the tumour is a rapidly spreading one, with thin sac and contents fluid, and especially when there is structural disease in the vascular system generally, it must be applied with caution, bearing in mind the possibility of a ruptured sac, and consequent diffused aneurism. When the sac bursts the blood is extravasated into the surrounding tissues. Unless, therefore, its flow be early arrested into the ruptured sac by deligation of the main trunk, gangrene of the limb will be the almost inevitable result. If after ligature of

*

the main artery gangrene supervene, it is said that amputation should be performed as high as where the vessel had been tied. In this case the artery was tied in Scarpa's triangle in the hope that, by arresting the flow of blood into the sac soon after rupture had taken place, gangrene might be averted; but this faint hope was frustrated, and gangrene set in. The line of demarcation having ultimately formed, amputation was performed on the lower third of the thigh. It is interesting to note that, notwithstanding his feeble condition, his diseased arterial system, probably atheromatous throughout, including both aortic and mitral valves, he was able to bear so much. He took chloroform several times, and underwent the operation for ligature of the femoral artery; gangrene of the limb followed, and subsequent amputation of the thigh; this was followed by necrosis, but no myelitis of the femur, and yet he recovered. This is the more remarkable, as recovery after amputations of the thigh is so rare an event in the Calcutta Hospitals even in more promising cases.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0

Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

Terms of Subscription for India, £1 15s. per annum.

The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.

Post-office Orders and Drafts on Army or Navy Agents, should be made in favour of Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d. | A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d. | A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, MARCH 30, 1867.

THE COUNCIL OF THE OBSTETRICAL SOCIETY.

It is alleged in certain circles that the Council of the Obstetrical Society have been animated by low personal motives or by Professional jealousy in bringing forward their proposition for the removal of Mr. Baker Brown's name from the list of Fellows of the Society. It must be borne in mind, however, that the verdict of the Fellows is to be taken upon "published matters," and that the Council, in appealing to the moral sense of their constituents as to the nature of those published matters, have taken the course of all others the most favourable to the defendant. Personal spite and Professional jealousy can hardly be diffused throughout the whole body of Fellows. Any country Fellow can say whether the sentiments enunciated in certain published matters are such as ought to be approved or disapproved of; but the very blood of an Englishman would boil at the idea of helping a clique in office to turn out a successful rival.

In order that the common sense of this question may be apparent, just let us see who the Council are, and what is the *primâ facie* probability of their being influenced by underhand and sordid motives in taking the very painful step which they say they have felt it a duty to take.

First stands the President, Dr. John Hall Davis, a man whose position is due to the unremitting labour of a life of teaching and practice in the branch of the Profession to which he devotes himself; once a colleague and friend of Mr. Brown's, it is difficult for any one who knows London Professional life to conceive of any personal advantage he can obtain by persecuting Mr. Brown, or to accuse him of taste or capacity for dishonest and factious manœuvring.

The senior Vice-President is Mr. Francis Seymour Haden, a man whom the Profession and public would declare to be of all others the most incapable of benefiting himself by injuring another man. Of good position in society, enjoying a reputation as an artist and man of letters, and with a professional position exempt from the toils and troubles of public appointments, it is difficult to see what he can possibly gain by joining in a selfish intrigue. Mr. Haden's name is whispered as that of the next President. He possibly is not conscious of this, but if he were, and felt inclined to take underhand means of obtaining the dignity, he would scarcely begin by affronting a man so capable of defending himself as Mr. Baker Brown.

Dr. Graily Hewitt, Dr. Braxton Hicks, and Dr. Priestly amongst the Vice-Presidents; Dr. Meadows, the Treasurer; Drs. Murray and Gervis, the Honorary Secretaries; Dr. Tyler Smith and Dr. Robert Barnes, lately Presidents; Dr. Eastlake and Dr. Playfair, are all Obstetric Physicians, attached to various recognised schools and Hospitals in this widespread city, whilst they all have contributed to the literature of their Profession, and have earned a repute of which their position is the evidence; they all find scope for their talents, and the certainty of further eminence, in the duties of their respective offices, and it would be a gratuitous hypothesis to assume either envy of Mr. Baker Brown or conspiracy to injure him. They might be much more reasonably supposed to be jealous of each other.

Drs. Wilson and Leishman, of Glasgow, both hold public appointments in that city. Each is a zealous worker, and contributor of obstetrical facts and statistics, and each is far enough from London to come into no personal collision with Mr. Brown. Dr. Lumley Earle, of Birmingham, is a man busied in obstetric work, and quite out of Mr. Brown's way; we may say the same of Dr. Corry, of Belfast.

Dr. Hall, of Brighton, one of the Vice-Presidents, has the repute of enjoying a practice and social position so good as to place him quite above any possible grounds of jealousy. Dr. F. C. Corry enjoys a large practice at the East of London. Dr. Constantine Holman, of Reigate; Mr. Mitchell, of Clapham; Mr. Napper, of Cranley, founder of the Village Hospitals; Mr. Newton, of Wimpole-street; Mr. Oldham, of Brighton; Dr. Squire, of Orchard-street; and Dr. T. Pollock, are examples of first-class Practitioners — men whose age, experience, and success have gained for them the confidence of their fellows, and have placed them in that position of grave responsibility which of necessity belongs to the governing body of every large professional society. Men of this stamp form the most influential body in the Profession. Not that they are professors or teachers in the technical sense; nor do we see their names often in the trail of advertisements of Professional works, although our columns show them to be as well able to observe and describe as to practise. But they represent our Profession, as does the Obstetrical Society itself in a larger sense, in those relations in which perfect honour and integrity are most essential; they are admitted to all the recesses of family life; they are the type of Medical Practitioner known to the upper and middle classes of the population of England. They may well be asked whether the "published matters" relating to clitoridectomy show a state of things favourable to healthy family life and morality.

Mr. Bryant is well known as Assistant-Surgeon to Guy's Hospital, and as the author of an admirable work on clinical Surgery, the last part of which, on ovariotomy, was lately reviewed in this journal. To suppose that he can feel personal umbrage at Mr. Baker Brown's professional success, requires a good deal to make it probable. Dr. Tilt has been working all his lifetime at certain branches of obstetric practice. Mr. James Reeves Traer, the Librarian, is well known to be not only in good practice, but to devote his leisure to anatomical and artistic pursuits, of which those admirable plates in the "Anatomy of the Female Organs" and the "Reports on Surgical and Obstetric Instruments at the Great Exhibition of 1862," published in this journal, are examples. We mention Dr. Greenhalgh's name last, because, as is well known,

he has of late been engaged in controversy with Mr. Brown; but that very controversy furnishes evidence up to quite a recent date that no feelings of personal hostility existed between them.

We may, then, take at its real worth any allegation of corrupt motive on the part of the Council. That so many men should agree in judgment, and that judgment be a selfish or personal one, would be a marvel. Happily, the issue laid before the Fellows is one from which all consideration of motive may be excluded. *Litera scripta manet.* No corruption, intrigue, selfishness, envy, or malice on the part of the Council of the Obstetrical Society could have called those "printed matters" into being, on which a dispassionate judgment must be founded.

ARCHÆOLOGICAL PSYCHOLOGY.

Whilst some archæologists are eagerly getting together collections of material objects for illustrating the physical condition of early man—whilst they are ransacking tumuli and graves, digging up the ground underneath pile buildings, carefully sifting the kitchen middens, and collecting and scrutinising the decaying vestiges of humanity with almost religious care—others are quite as eagerly tracing out man's earliest mental condition; they dig after the roots of the oldest words, get at their primary meanings, and comparing these with the gestures, cries, and customs of existing savages, and with the earliest mental efforts of children, they endeavour to construct a psychological archæology, and to estimate the steps by which civilised man has attained to his existing state of mental culture.

The discourse delivered on Friday evening at the Royal Institution by Mr. E. B. Tylor, on the traces of the early mental condition of man, was a good sequel to Mr. Greenwell's, on the foregoing Friday, on the sepulchral remains discovered in ancient tumuli. One treated of the succession of bone, stone, and metallic tools; the other of the instruments and processes of thought. Mr. Tylor proposed to point out, in the actual language and mental operations of to-day amongst ourselves, traces of processes which exist now amongst children and savages, and which have clung to us ever since we emerged from our primary condition of savage childhood. He drew thence the inference that the condition of man, as a whole, was that of a being rising gradually from a lower to a higher mental state, and not that savage man has fallen from a state of primitive civilisation. There was a practical moral deducible, too—viz., that we should distrust such ideas as have clung to us ever since savagehood, or, at all events, test them by modern science before yielding submission to them.

Three subjects were chosen by Mr. Tylor to illustrate the traces of the earlier mental condition of man still existent amongst ourselves:—First, the origin of numerals and mode of counting; secondly, superstitious beliefs in a spirit world; and, thirdly, absurd associations of ideas, as exhibited in astrology, necromancy, and the "black art" generally.

By the aid of numeral words ready coined for us, which we are familiar with from early childhood, we can reckon any quantity, from the lowest fraction to the highest sum imaginable. Yet we can notice in our own children the slow steps by which the exact conception of more than a very low number is attained. The child at first counts "one, two, *more*," or "one, two, *lot*;" and so we now find savages in the Brazilian forests and in Australia to whom 3 or 4 seems so large as to stand for an almost indefinite number. In the earlier chapters of the Bible the numbers "seven" and "forty" bear traces of being used for numbers indefinitely large. One tribe described by Mr. Oldfield reckoned "one, two, many;" but if hard pressed could be driven on to another stage, and then would count "one, two, two-one, two-two." Thus, amongst these people, 2 and 2 do not make 4, but "two-two." But when word language fails savages, they have a more primitive way yet of expressing higher numbers. They fall back on gesture language, and on the use of that primæval calculating machine, the fingers, when words fail. Thus, Mr. Oldfield was able to get from an Australian that men equal to thrice the fingers—*i.e.* 15—had been killed in a certain fight, though there were no words for 15.

Now, when we hear the words "one two, three, four," they have no etymology to us. They represent nothing concrete—only abstract numbers. Not so with similar words amongst races in a less advanced mental condition. Thus, a Tamanac Indian counts up to 4, and when he reaches 5 calls it "a whole hand." Six is "one of the other hand;" ten is "both hands;" eleven, "one to the foot;" fifteen is "a whole foot;" and twenty "one Indian," that is a whole man, or at least the fingers and toes of a whole man. Twenty-one is signified by "one to the hands of the other Indian;" forty=two Indians. Now these phrases are real numerals, but they are simply word-translations of the gestures of counting on the fingers and toes. Many examples could be added from the languages of uncultured tribes, showing the material origin of their numerals. Thus, in the Esquimaux 26 signifies "one to the other hand of the next man;" in the Muysea language of Bogotá, eleven = "foot one"—*i.e.* one toe *plus* both hands. In a certain West African language 20 signifies "a man is finished"—*i.e.* his fingers and toes are all counted. The miserable natives of Van Diemen's Land count with difficulty up to five, and then jump to the word "man," or 20, for indefinite multitude. But no savages, according to Mr. Tylor, exceed the Zulus in the concreteness of their numerals. Thus, beginning with the little finger of the left hand for "one," he calls five "finish the hand," and six "take the thumb." The numeral seven is a whole metaphor in itself. For seven cows the Zulu says, "the cows have pointed"—that is, having used the fingers and thumb of the left hand for 5, and the right thumb for 6, he points with what comes next—the right or pointing finger, the universal *index*—to signify 7.

But, although the hands and feet gave names to many numerals, and specially to 5, 10, and 20, they were not the only sources. Thus the Hindoos invented a set of numerals to serve as a *memoria technica* whereby to remember dates and formulæ, and in this they took "earth" or "moon" for one; for two, "eyes," "arms," or "wings," because these go in pairs; for three, "Rama," "fire," or "quality," because there were considered to be three Ramas, three kinds of fire, and three qualities; for four, "veda," or "age," because there were reckoned to be four ages and four vedas, and so on. Wilhelm von Humboldt, thirty years ago, pronounced this to be the original mode of formation of numerals; thus the Malay word for five is "hand," and amongst some South African tribes "ostrich-toes" stands for four.

The original meaning of numeral words is usually soon lost, and the words reduced to mere symbols, like our "one," "two," "three," "four," whose etymology is lost in the night of antiquity.

Even in European languages, said Mr. Tylor, numeral words spring up from time to time, ready to become proper numbers in case of vacancy. Thus in English we have "pair," or "couple," or "brace" ready to do the work of the unintelligible "two," and "score" or "notch" for twenty. Amongst the Letts, who threw small fish by threes, the word "mettens," a "throw," has come to mean three; and so in other instances.

We need be at no loss, then, to trace the origin of the almost universal quinary, decimal, and vigesimal systems of counting. The Roman numerals, which count to v, and then begin vi, vii, represent a quinary system=hand, hand one, and so on. The decimal system is our common one. The vigesimal survives in such terms as "threescore and ten" for seventy, "*quatrevingt-treize*," or "fourscore ten and three," for ninety-three, and the like. The odd thing is, that the

French and English, having a perfect decimal system of numerals, should have thus adopted vestiges of an alien and less perfect vigesimal system, which they doubtless found amongst the earlier Celtic inhabitants of Western Europe.(a) There is a French word for ninety—*nonante*—and *nonante-trois* might be used (and is used at Brussels) for ninety-three, instead of the retrograde and barbarous "*quatrevingt-treize*;" but a Parisian Frenchman would probably call *nonante* bad French! Anyhow, the remains of a quinary and vigesimal system of numeration, amongst ourselves, are to be regarded as surviving traces of an earlier mental condition of man; equally so, our use of a *decimal* system, whereas a *duodecimal*, which would have followed if we had had six fingers and toes, would have been more convenient.

The second part of Mr. Tylor's discourse related to the opinions of the lower and earlier races as to the nature and habits of spiritual beings. These races account for the facts and events of the outer world by ascribing a sort of personality, not to men only, but to plants, animals, rocks, streams, winds, sun, stars, and all other objects, animate and inanimate. They believe all things to be the outer "tabernacles" of spirits, even as the soul dwells in the body of man. Thus, some low tribes ascribe every illness to a spirit, or *hantu*. One *hantu* brings small-pox, another inflammation; one causes wounds by hanging on and sucking blood. The worship and propitiation of such spirits form the lowest type of religion. The ancient Greeks and the modern Esquimaux, who see intelligent anthropomorphic beings in the sun and moon, exemplify that early stage of mind which sees in all nature the operation of animated life. It is easy to show that the savage is a gross spiritualist—a wonderfully ignorant consistent and natural spiritualist; and, secondly, how the remains of this gross spiritualism may be traced forward through the mental development of educated races. Savages fear ghosts intensely; nay, they have far greater fear of the ghost of an enemy after death than of any man living. Their notion of a ghost is that of the English peasants—a thin phantom, gliding from place to place through anything, resembling the person it belonged to when alive; invisible at times, but capable of knocking and uttering sounds. Men are slain that their ghosts may carry messages to the invisible world; with horses, dogs, and tools, they are sacrificed at funeral ceremonies, in order that their ghosts may follow and serve that of the deceased. In one of the South Sea Islands a cord is put round the neck of a woman at her wedding, which she is to wear till her husband dies, and then it is tightened that her ghost may be released to serve his in the next world. Not only human beings and animals, but implements of all kinds, are conceived to have shadows, if not ghosts; hence the origin of the custom of burying food, money, arms, and ornaments with the deceased; and to this origin the speaker traced some of the funeral solemnities in use amongst ourselves, though now no more than conventional expressions of respect and affection—even to the placing a wreath of *immortelles* on a tomb.

The third topic was the association of ideas—the habit of connecting in thought things which have no actual material connexion, and the habit of acting as if this association was material. To this head belong witchcraft, magic, astrology, the doctrine of signatures, and all kinds of sorcery, many of which have been elaborated into pseudo-scientific systems which are anything but extinct amongst our own vulgar. Such is the origin of the practice of making a waxen image of an enemy, and slowly melting it before a fire, or sticking a heart with pins.

By the study of facts such as those adduced in this discourse, we seem, said Mr. Tylor, to get a glimpse of an early condition of our own ancestors much like that of existing savages; traces of a state of language so low as to be deficient in words for counting; of a condition in which there was little definition between fact and imagination, between last night's dream and to-day's waking. Out of this state of mind arose a consistent and intense spiritualism, and a process of association of thoughts wholly unchecked by experience, and giving rise to those notions of sorcery which embitter the whole existence of the savage, and are not extinct even amongst the civilised. But, by a slow process of natural selection, man is ever throwing aside what is worthless, and rising to truer knowledge. The study of the existing mental condition of savages—if it be conceded that this is not abnormal and degraded, but a natural and rudimentary state—may enable us to see our own former condition, and trace the steps by which we rose out of it.

(a) This circumstance is quoted by Mr. Pike ("Origin of the English," p. 90) as a proof of Celtic influence in Western Europe.

THE WEEK.

THE INTERNATIONAL MEDICAL CONGRESS.

Dr. Foster, of Birmingham, has been appointed one of the foreign delegates of the International Medical Congress, to be held at Paris in August next. Those members of the Profession in the provinces who intend to take part in the Congress can obtain information from Dr. Foster.

THE ATTACK ON MR. SQUIRE.

We are sorry to see that an attack has been made on Mr. Squire, the eminent chemist, which originated in a misapprehension of matters of fact, and has been persevered in unhandsomely in spite of Mr. Squire's full explanation. He is accused of having made use of his position as confidential adviser of the Pharmacopœia Committee for his own trade purposes; inasmuch as he is said to have made a set of preparations according to the new British Pharmacopœia—which is said to have been sent to him in proof sheets to receive the benefit of any suggestions he might offer—and to have exhibited those preparations to the Medical Profession here, before sending them to the Paris Exhibition; thus stealing a march on his pharmaceutical brethren who were not in the confidence of the Pharmacopœia Committee, and had not received proof copies. The simple answer is, that Mr. Squire was not concerned professionally for the Pharmacopœia Committee, that he violated no confidence, but made a set of preparations for the Paris Exhibition with the knowledge and consent of the Pharmacopœia Committee, who sent him the new work for that express purpose. Mr. Squire's plain statement on this point is confirmed by other evidence of the highest kind, which has been submitted to us.

WIGHT *v.* WIGHT AND FIELD.

This case, which has lately occupied four days of the sittings of the Divorce Court, furnishes an instance of the danger to which Medical men are exposed in the performance of their professional duties and in their intercourse with patients. We are happy to say that Mr. Field has been freed from the charge made against his character by the unhesitating and most explicit verdict of the Court, and we are sure that the whole Profession will congratulate him warmly on this termination of the case. But the condition of mental inquietude and the pecuniary outlay which the defence of his reputation must have involved are a heavy burden to be borne by an innocent man. Charges of this nature may easily be manufactured by suspicious ingenuity from material furnished by the ordinary routine of duties performed by all members of our Profession who are employed as the Medical attendants of families. We are therefore glad to announce that a movement has been set on foot to express in a public manner the sympathy felt for Mr. Field, and the undiminished confidence reposed in him by his Professional brethren and friends. A preliminary meeting for

this purpose was held on Tuesday last at the house of Dr. Langmore, 12, Sussex-gardens, at which Dr. Sibson presided. It is proposed to hold a general meeting at the Marylebone Rooms, Edwards-street, Portman-square, on Tuesday next, at 5 o'clock, when Dr. Copland will take the chair. We trust that on that occasion a large number of Medical men will attend to defend the character of a highly esteemed Practitioner, which has been most unjustly assailed, and to offer him those expressions of sympathy and esteem which are most thoroughly his due.

THE SOUTHAMPTON SANITARY COMMITTEE AND THEIR MEDICAL OFFICER OF HEALTH.

Dr. M. J. MacCormack, the Medical Officer of Health for Southampton, has addressed and published a remonstrance to the Southampton Sanitary Committee, on the subject of the inadequate payment which the Committee propose to award him for his extra labours during the cholera epidemic. There can be no doubt that the duties of the Medical Officer of Health, as prescribed by the 40th section of the Public Health Act of 1848, do not include the treatment of cases of epidemic disease in temporary Hospitals, nor the organisation and superintendence of an Hospital ship, both of which, with much other work of an unusual character, seem to have fallen to Dr. MacCormack's lot. In his remonstrance, Dr. MacCormack quotes an opinion recently given by Mr. Keane, Q.C., on a case submitted to him by the parish authorities of St. James, Westminster, which was to the effect "that, under the order in Council for putting in force the Diseases' Prevention Act, the services of the Officer of Health were not required to be given in consideration of his salary, and that he was clearly entitled to claim extra remuneration." There can be, therefore, but little doubt that Dr. MacCormack is legally entitled to a fair recompense for the extra work entailed on him by the late epidemic. We hope that his remonstrance will be received in a proper spirit by the Sanitary Committee. Exposed as it constantly is to the importation of contagious disease, Southampton is the last place in the Kingdom which can afford to be unjust, or even illiberal, to its Medical Officer of Health. The constant complaints we are receiving on the subject of inadequate payment during the late epidemic lead to the suggestion that in the case of another it would be wise for Parochial and Health Officers to make fair terms in the onset, and not trust to the proverbial faithlessness of Boards and Committees.

MOTIVELESS CRIMES.

Dr. Forbes Winslow has written a letter to the editor of the *Pall-Mall Gazette* in reference to the case of Dr. Pearson, the Medical Practitioner who has lately been sentenced to five years' penal servitude for poisoning with strychnia two horses belonging to Mr. Hall, a solicitor, who had previously been on terms of intimacy with the culprit. The only point in defence urged for the prisoner was the apparent absence of all motive. Dr. Winslow frankly admits that it would "be highly dangerous to the well-being of society if we were to consider the apparent absence of all motive as conclusive proof of criminal irresponsibility," and quotes with approbation certain passages from Willes on "Circumstantial Evidence," and from the speech of the Solicitor-General at the trial of Francis for shooting at the Queen, to the effect that "actions and external facts, as the end and objects of motives, are the only legitimately cognisable subjects of human tribunals," and that to assume that you must ascertain the motive before you can convict of the crime is a doctrine that would lead to many dangerous consequences to society. He, however, urges, and we conceive pertinently, that it is of great consequence that the mental condition of prisoners convicted of apparently motiveless crimes should be carefully investigated.

"Concurring, as I am bound to do, in the rule of law thus laid down, I am nevertheless prepared to admit [without expressing any opinion of Dr. Pearson's mental condition] that it is our duty to thoroughly investigate the antecedents of men guilty of acts of crime alleged and proved to be motiveless. It is possible that in many of these cases, apart from the absence of motive, there may, after proper examination, be found unequivocal symptoms of deranged thought and insane conduct [which have escaped observation] sufficient, in all probability, to remove the prisoner from the circle of sane and responsible men, and potent enough to justify an appeal to Government on his behalf."

It would be a great relief to the minds of those who were lately his Professional brethren to know that Dr. Pearson was incontestably of unsound mind when he committed the act; but, in the interests of justice, we are bound to say that an apparently motiveless crime, *per se*, is no proof of insanity—it may be only an evidence of depravity. Prove that a felon is mad by evidence which would leave no doubt in any case, and we will gladly receive it; but nothing less will satisfy the ends of justice or maintain the safeguards of society.

FROM ABROAD — PRIZE QUESTIONS OF THE ACADÉMIE DES SCIENCES — STUDENTS' ROWS AT THE PARIS FACULTY — LUNATICS IN THE DEPARTMENT OF THE SEINE—PROFESSOR BOULEY ON THE CATTLE PLAGUE IN BELGIUM.

The following are the subjects of the prizes offered by the Académie des Sciences:—1. The Montyon Prize of Experimental Physiology, a gold medal, 764 fr. in value, will be bestowed annually on the author of the work, whether printed or manuscript, which shall appear to the Academy to have most contributed to the progress of experimental physiology. 2. The Montyon Prizes in Medicine, and Surgery, and arts detrimental to health. Annual valuable prizes of varying amount will be adjudged to the authors of works relating to discoveries and inventions tending to perfecting Medicine and Surgery, and to diminishing the dangers contingent on various professions and mechanical arts. 3. The Academy Prize in Medicine and Surgery of 5000 fr., for 1869, will be given for the best essay on the application of electricity to therapeutics. 4. The Cuvier Prize, for 1869, of a gold medal, 1500 fr. in value, will be given to the author of the most remarkable work of all those which have appeared during 1866-68 on the animal kingdom and geology. 5. The Bordin Prize, for 1867, of a gold medal of 3000 fr. value, subject "Investigation of the Anatomical Structure of the Pistil, and of the Fruit in its Principal Modifications;" the subject for the same prize in 1869 is, "Investigation of the Offices of the Stomata in the Functions of Leaves." 6. Another Bordin Prize will be given for the best monograph on a marine invertebrate. While leaving the choice of the animal open to candidates, the Academy suggests that among the groups which are most pressing for attention may be mentioned the acalephæ, the lower crustacea, and especially the lerneæ. Whatever species be chosen, it should be treated of as regards its anatomy, histology, physiology, and embryology. 7. The Bréant Prize for 1867, 100,000 fr. in value, will be awarded to the discoverer of a cure for cholera, and, awaiting his advent, the interest of the sum may be expended in rewarding any marked advancement with respect to our knowledge of cholera or other epidemic diseases. 8. The Jecker Prizes for 1867 will be given to the authors of the works which have most contributed to the progress of organic chemistry. 9. The Barbier Prize of 2000 fr. will be awarded to whoever makes a valuable discovery in Medical, Surgical, or Pharmaceutical science, and in Botany in relation to the healing art. 10. The Godard Prize for 1867, of 1000 fr., will be given for the best memoir on the physiology and pathology of the genito-urinary organs. 11. The Savigny Prize, of the interest of 20,000 fr., is devoted to assisting young travelling zoologists who may engage in investigating the invertebrates of Egypt and Syria. 12. The Desmazières Prize for 1867, of 16,000 fr., will be given to the

author of the best and most useful work on the Cryptogamia published during the preceding year. 13. The Thore Prize for 1867 will also be decreed for the best work, printed or manuscript, on the Cryptogamia. All works and essays to be forwarded to the Academy by June 1 of the respective years.

The Medical students at the Paris Faculty seem still to be in a very dissatisfied state, and do not hesitate to express their opinions in a somewhat violent manner, in spite of the authorities. Quite recently the Professor of Botany, M. Baillou, was prevented going on with his lecture, the pupils having assembled in great numbers and interrupted him with loud cries, which continued in spite of the interposition of Professor Wurtz, the conciliating Dean of the Faculty, so that the lecture had to be abandoned. It is stated by the pupils in defence that the lectures of the Professor are crotchety and quite unsuited for students, and that the Professor is injudiciously severe in his examinations. A still greater uproar took place at the introductory lecture of M. Sée, the new Professor of Therapeutics. It is true that he was received with great applause by a portion of his auditory; but the cries, tumult, and hissing of the others entirely overpowered the lecturer, so that, in spite of an appeal of Professor Gavarret, the lecture had to be given up. "The *concours!*" "the *concours!*" was shouted from every part of the theatre, so that the mode of his appointment, rather than any personal objection to the Professor, was probably the cause of the feeling manifested,

In an account of the French law concerning the admission of lunatics into asylums contained in the March number of the *Archives Générales*, we find a statement of the numbers admitted into the asylums of the Department of the Seine during 1866. In the *Bicêtre* at the end of 1865 there remained 740 insane males, and 1314 were admitted during 1866, making a total of 2054. To 1502 insane females in the *Salpétrière* at the end of 1865, there were added 1164 in 1866; total, 2666. *Charenton* contained 745 males and 418 females during 1866. There were in *private asylums*, at the end of 1865, 293 male and 334 female patients, and during 1866 there were added 340 males and 260 females, making a total of 1227 patients. The gross total of the lunatics in all the asylums, public or private, of the department during 1866 amounted, therefore, to 6692 (3105 males and 3587 females), and of this number 3252 (1777 males and 1475 females) were admitted during the year. Of this number 722 were placed in the asylums by their friends, and the remainder by the public authorities.

It will be recollected that, by the energetic procedures of the eminent Veterinarian Professor Bouley, the cattle plague which broke out in the northern departments of France, and at the Jardin d'Acclimatation, was promptly and completely arrested. The disease having made its appearance recently in Belgium and Rhenish Prussia, the Government at once despatched him on a tour of investigation, and at the last meeting of the Academy of Medicine he detailed the results of his visit. It was, he observed, from England having so long neglected the incontestable truth that the cattle plague is a disease imported from Hungary or Russia that she lost 400,000 head of cattle, and obtained no security from yet greater losses until Parliament, tardily obeying the dictates of science, passed the Act compelling the sacrifice of all suspected animals. From England the disease was transported to Holland, where it still exerts its desolating effects. Everything there, indeed, has contributed to this, for not only is there no preventive system organised by authority, but there is great ignorance among the populace, and fanaticism amongst the clergy, who have declared from their pulpits that, this scourge being inflicted by the divine will, attempts at arresting it would be impious. Towards the middle of January the disease was brought by some cattle from Cologne to Tongres, on the eastern frontier of Belgium. Three of the herd were sent to Liége and the remainder to Hasselt, a town with a population of about 11,000 souls and the centre of the Belgian distilleries. There were supposed to be about 4000 head of cattle in its vicinity. Other infected cattle arrived by Rhenish Prussia. The disease broke out among these and the cattle of the place, but the Belgian Government, alive to the danger, caused within a fortnight 999 sick and about 400 suspected animals to be slaughtered, thus putting from 2000 to 3000 beasts in a state of security at an expense of about 800,000 fr. Every sanitary precaution was put into force, and such a cleansing of the stalls had taken place, that M. Bouley on his arrival found them fit for a festivity or ball. At Liége the same prompt measures were taken, and with the same success. Four towns of Rhenish Prussia, especially Clèves, also manifested the disease, but prompt slaughtering cut short its progress. M. Bouley comes to the conclusion that, with such energetic states as sentinels, France need not fear any invasion of the cattle-plague in these directions; while on the side of Bavaria, Wurtemberg, and Switzerland, the severe quarantine set up offers ample protection. Should the disease, in spite of all precautions, penetrate these frontiers, it will meet with the same efficacious energy that counteracted its progress in the north, "for we must, indeed, be very unfortunate or very unskilful if we allow it to penetrate to the heart of our country and to commit ravages similar to those to which England and Holland have submitted."

PARLIAMENTARY.—FLOGGING IN THE ARMY—ARMY MEDICAL OFFICERS—ARMY SANITARY COMMITTEE, APPOINTMENT OF DR. SUTHERLAND—SANITARY CONDITION OF THE METALLIFEROUS MINES—FACTORY ACTS EXTENSION AND HOURS OF LABOUR REGULATION BILLS—THE METROPOLITAN POOR BILL—YELLOW FEVER—THE PUBLIC HEALTH—PORTUGUESE WINES—THE CASE OF THE MURDERER WAGER—ARTISANS AND LABOURERS' DWELLING BILL.

In the House of Commons, on Thursday, March 21,

Mr. Otway gave notice that, in consequence of what had fallen from the Secretary of State for War the other evening, he would move in Committee on the Mutiny Bill to postpone clause 21, relating to corporal punishment, in order that Her Majesty's Government might bring up an amended clause in accordance with the resolution of the House passed on the 15th inst. with respect to flogging in the army during time of peace.

Mr. Synan asked the Secretary of State for War from what date it was proposed to give the increase of pay to Army Medical officers; and if, in the new Army Medical Warrant, it was contemplated to change the denomination of, or to give any "brevet rank" to, Assistant-Surgeons on completing their tenth year of service.

Sir J. Pakington replied that the increased pay to which the hon. gentleman referred would commence on the first day of next month. There was no intention to make the change mentioned in the second question.

Sir G. Stucley asked the Secretary of State for War what was the name and date of the appointment of the civilian member of the Army Sanitary Committee referred to in Vote 17, Army Estimates; why, with his travelling expenses, he was to receive £1200 per annum; and why a Medical officer of the Army cannot perform the duties required from such civilian Practitioner.

Sir J. Pakington replied that the name of the civilian member of the Army Sanitary Committee was the well-known name of Dr. Sutherland. He was first appointed to serve under the War Department in 1855 by Lord Panmure, who sent him out to make inquiry into the sanitary condition of our soldiers in the Crimea. In 1857 he was again appointed by the same noble lord a member of the Commission to inquire into the sanitary state of the Army, and his appointment to the discharge of the particular duties which he now performed was made by Sir G. Lewis in 1862. In answer to the second question he must observe that his hon. friend seemed to labour under a mistake, at which he could not wonder, because of the somewhat careless mode in which such entries were made in the estimates. The salary which Dr. Sutherland received for the duties which he now performed was £1000 a year, but he was a member of a committee of which the other members were unpaid, and in whose case an allowance of £200 a year

was given for travelling expenses. The charge, therefore, was one which was not peculiar to Dr. Sutherland. In reply to the last question, he would simply observe that there might, no doubt, be many Medical officers in the Army who were quite competent to discharge the duties in question, but Dr. Sutherland was a man of the highest possible reputation, and he doubted whether there was in England a higher authority on sanitary subjects, with which he had years ago been appointed to deal because of his very great eminence.

On Friday, in the House of Lords, the Metropolitan Poor Bill passed through Committee. Approval of the measure was expressed by the Earls of Carnarvon and Shaftesbury.

In the House of Commons, Mr. G. Clive (supported by Mr. Kinnaird) brought under the notice of the House the unhealthy condition of the metalliferous mines, which do not come under the operation of the Mines' Regulation and Inspection Act; and after some conversation on the subject,

Mr. Walpole undertook to do his best to bring in a Bill on the subject this Session.

The Factory Acts Extension and the Hours of Labour Regulation Bills were read a second time.

On Monday in the House of Lords the Metropolitan Poor Bill was read a third time and passed.

Sir J. Pakington gave notice that in committee on the Mutiny Bill, he proposed to move a new clause, instead of the clause as it now stands, relating to corporal punishment in the army. The clause would have two objects—to restrict the infliction of corporal punishment in time of peace to three offences—mutiny, aggravated insubordination, and disgraceful conduct of an indecent character; and, in the second place, to set forth on the face of the Bill the division of soldiers into two classes; enacting, at the same time, that under no circumstances shall a soldier in the first class be subject to corporal punishment.

On Tuesday, March 26,

Sir J. C. Jervoise asked the Vice-President of Council on Education whether his attention had been called to the Report of the Commission on Yellow Fever at Bermuda, 1856; Report of Committee on Yellow Fever at Bermuda, 1864; Report of the late Epidemic of Scarlet Fever among Children at Aldershot, 1866; and what conclusion was to be drawn from these reports as to the infectious nature of the diseases referred to.

Lord R. Montagu said he was sure the House would not expect that he should within the limits of a reply to a question enter into all the intricacies of the Medical considerations which it involved. He might briefly state that the reports referred to had been brought under his notice, and that there was no particular conclusion to be drawn from them as to the infectious nature of the diseases mentioned.

In answer to a question by Sir M. H. Beach,

Mr. Walpole said that several places had applied to the Home-office for the issue of regulations under the 35th section of the Public Health Act, and that twenty-five of those places had received the regulations already framed in consequence of such application. In the east end of London, Poplar, Rotherhithe, Limehouse, Whitechapel, and Bethnal-green had applied, as well as other districts with very large populations throughout the country. Under these circumstances, there being every reason to suppose that the Act was working well, he did not see that there was any immediate necessity for further legislation.

Mr. Akroyd asked the Secretary of State for Foreign Affairs if he had received any communication from the Portuguese Government favourable to the negotiation of a treaty of commerce upon the same terms as the French treaty, provided that Portuguese wines, although of a higher degree of proof than French wines, be admitted at the same rate of duty, and whether he would lay the correspondence upon the table of the House.

Lord Stanley replied that a correspondence had for some months past been going on between Her Majesty's Government and that of Portugal which had for its object the establishment of a new treaty of commerce between the two countries. He regretted, however, to have to state that those negotiations had not proved successful. The Portuguese Government insisted as a *sine quâ non* on a condition which would have practically amounted to the total abolition of the alcoholic test as applied to wines. They sought to have their wines admitted at the lowest rate of duty charged upon the wines of any country. Her Majesty's Government were willing to assent to some modification of the present high rate of duty, but the amount of concession which they felt they could with safety offer was not such as to satisfy the Portuguese Government, and the negotiations on the subject had, accordingly, come to an end.

Captain Archdall rose to put a question respecting a recent exercise of the Royal prerogative of mercy in the case of the murderer Edward Wager.

Mr. Walpole said that the murder referred to by the hon. gentleman was one of aggravated enormity and barbarity. When the case came before him he thought it his duty to apply as a test the unanimous recommendation of the Commissioners on the subject of capital punishment. That recommendation was that unless there was a premeditated and deliberate intention to kill—"malice aforethought" was, he believed, the expression in their report--these cases in future should not be followed by the penalty of death. When he read the case now alluded to, his first impression was, like that of the hon. gentleman, that it was a case of such barbarity and cruelty that it was proper that the law should take its course. On the other hand, he found that the jury recommended the criminal to mercy. He felt that in this, as in all similar cases, it was his duty to apply to the judge who tried the criminal, and he did so without intimating any opinion one way or the other. The learned judge had twice intimated to him his opinion, and that judge's report, which induced him to take the course which he had pursued, ended by stating that the murder was not premeditated, and that the judge did not think, when the criminal commenced the quarrel, that he intended that amount of violence which he afterwards committed, and the judge was therefore of the opinion that the case was not unfit for the exercise of the mercy of the Crown.

Mr. D. Griffith asked whether the right hon. gentleman adopted it as a principle that he should give effect to the recommendation of the Royal Commissioners before legislation had taken place on the subject.

Mr. Walpole said that the hon. member had better give notice of his question.

On Wednesday,

The second reading of the Artisans and Labourers' Dwelling Bill was moved by Mr. M'Cullagh Torrens, who sketched its chief provisions, and explained that it was in the same form as it came out of the Select Committee. It gives power to the Officer of Health, either on requisition or without it, to inspect premises in a state likely to engender disease, and upon his report the local authority, after the process of a presentment to the grand jury has been gone through, may cause plans to be made for the improvement or demolition of the premises. The owner of the premises may either sell them to the local authority or carry out the works himself, and if he neglects or refuses to do either, the local authority may effect the improvements, charging the cost to the owner; but when total demolition is required the local authority must compensate the owner. The expenses of the local authorities in carrying out the Act are to be charged on the local rates, which, however, are not to be increased by more than 3d. in the pound; and they are also empowered to borrow money from the Public Works Loan Commissioners under the sanction of the Treasury. Mr. Torrens intimated that he should gladly acquiesce in any improvements which could be suggested in the machinery of the Bill.

In the discussion which followed the Bill was warmly supported by Mr. Locke, Mr. H. Bruce, Mr. Selwyn, Mr. Hughes, and Mr. M'Laren, and its leading provisions were generally approved, coupled with suggestions for the improvement of the machinery, by Mr. Ayrton, Mr. Henley, Mr. Potter, Mr. Powell, and others.

Objections were taken to the Bill by Mr. J. B. Smith and Mr. Bazley, particularly to the erection of new buildings at the expense of the ratepayers. Mr. T. Chambers pointed out that no provision was made for the evil of overcrowding; and Mr. H. Lewis complained of the burden which was about to be thrown on the rates.

Mr. Walpole, on behalf of the Government, assented to the principle of the Bill, intimating that it would require amendment in some of its details, and it was read a second time.

The remainder of the sitting was occupied by the consideration in committee of Mr. R. Gurney's Criminal Law Bill.

MEDICAL CHARITIES.—The friends of the following metropolitan Hospitals will be glad to learn that the late John D. Middleton, Esq., has bequeathed £800, in equal sums of £200 each, to the Charing-cross, Westminster, Middlesex, and Convalescent Hospitals.

OBSTETRICAL SOCIETY OF LONDON.

OFFICERS FOR 1867.—ELECTED JANUARY 2, 1867.

Honorary President.

Locock, Sir Charles, Bart., M.D.

President.

Davis, John Hall, M.D.

Vice-Presidents.

Haden, Francis Seymour, F.R.C.S.
Hall, Alfred, M.D., Brighton.
Hewitt, Graily, M.D.
Hicks, John Braxton, M.D., F.R.S.
Priestley, William O., M.D.
Wilson, James George, M.D., Glasgow.

Treasurer.

Meadows, Alfred, M.D.

Honorary Secretaries.

Murray, Gustavus C. P., M.D.
Gervis, Henry, M.D.

Honorary Librarian.

Traer, James Reeves, F.R.C.S.

Other Members of Council.

Barnes, Robert, M.D.
Bryant, Thomas, F.R.C.S.
Corry, Thos. Chas. Steuart, M.D., Belfast.
Cory, Frederick Charles, M.D.
Earle, James Lumley, M.D., Birmingham.
Eastlake, Henry E., M.D.
Greenhalgh, Robert, M.D.
Holman, Constantine, M.D., Reigate.
Leishman, William, M.D., Glasgow.
Mitchell, Joseph Thomas, F.R.C.S.
Napper, Albert, M.R.C.S., Cranley.
Newton, Edward, F.R.C.S.
Oldham, James, M.R.C.S., Brighton.
Playfair, William, M.D.
Pollock, Timothy, M.D.
Smith, William Tyler, M.D.
Squire, William, L.R.C.P.
Tilt, Edward John, M D.

LUMLEIAN LECTURES.

DELIVERED BEFORE THE ROYAL COLLEGE OF PHYSICIANS.

By J. RUSSELL REYNOLDS, M.D., F.R.C.P.,
Holme Professor of Clinical Medicine in University College, and Physician to University College Hospital, and to the Hospital for the Paralysed and Epileptic.

LECTURE I.

THE object of this lecture was to show—1st, that the Medical Profession acts in no exceptional manner when it has to deal with law, inasmuch as its whole business is the discovery and application of the laws of nature. 2nd. That when the Medical and legal professions come in contact, it is not because either of them disputes the existence of, or necessity for obedience to, the laws which it is the business of the other to expound, but because misapprehension has arisen with regard to the appreciation of the one, or the application of the other, in a particular case. 3rd. That differences of opinion exist in all departments of thought when regard is paid to any complex phenomena, and that these differences are not greater in scientific than in unscientific matters, and not more pronounced in Medico-legal investigations than in any other form of scientific inquiry. 4th. That scientific testimony must consist of both facts and opinions; and that the difference between these two elements of evidence is not so great as is sometimes imagined, inasmuch as the statement of scientific fact involves to some extent the element of opinion. 5th. That the conditions which give value to the statement of facts are threefold: (*a*) that they be observed, and, in order that this may be the case, that they be "looked for;" (*b*) that they be well observed, and hence that the examiner be both informed and skilled; (*c*) that they be truthfully and exactly represented, and hence that the witness be honest. 6th. That "expert" evidence is by these conditions rendered necessary in regard of facts; but that the difficulties thrown in the way of the Medical expert are as great as they can be, owing to the nature of the case, the circumstances in which the Medical examiner is placed, and the necessary conditions of human thought. 7th. That the introduction of "opinion" into Medical evidence is necessary, because the questions raised can only be determined by regard to either the past or the future—*i.e.*, to either the cause of symptoms or their probable result. 8th. That in the search after cause, and in the attempt to estimate effects, the examiner and the witness pass into a region of thought altogether different from that which they occupy when observing and detailing facts. 9th. That the difficulties in the exercise of such mental processes are, under all circumstances, weighty, and that they are sometimes insurmountable; but, 10th, that in certain cases, which form the topics of Medico-legal investigation, they are as great as it is possible for them to be, and are such as cannot be overcome.

The common questions asked of the Medical witness in doubtful cases of life insurance, of injury, and in the treatment of the insane, are those of prognosis, or prevision; and it is in the answers given to such questions that perhaps the greatest diversity of opinion is encountered. In explaining this, all that has been said about the importance of an observing faculty, of extensive knowledge, and of flexibility but not flaccidity of thought, is applicable. The present facts of the case must be known, and also all those which bear upon it; but even under such circumstances much difference of opinion will arise, and will continue to do so, it cannot but be believed, for some time to come. The reason for this is to be found in the obvious condition of Medical science. That which is the test of the existence of a science is the power which it possesses of "prevision." The degree to which any particular science has advanced may be measured by the practical amount of this predictive power. In astronomy and physics prevision is as minute and accurate as observation itself; but in the more complex sciences which have to deal with life prognosis, though sometimes safe enough, is too often—and that from the condition of physiology and pathology, and not from any fault in the individual Practitioner—either one among many guesses, or is utterly unattainable. The questions that are asked are—"Will this man live during an ordinary lifetime? If not, during what time is he likely to survive? what addition should be made to his age in order to place him on the scale that we can work with? Or, what is the probable issue of this injury? Will the patient recover, or will he be permanently disabled? If he will recover, how long, and in what degree of comfort or discomfort, will he exist till his restoration be complete? if he will not recover, how long may he be expected to live? Or, again, if the patient be insane, what will he be in a week, a month, or twelve months hence?"

Now I repeat that, exact as it may be in many matters and when dealing with large numbers, Medical science is not yet sufficiently extensive or precise to furnish accurate answers to questions of this kind in particular cases; and, further, that in very many instances the answers that are given are, and necessarily must be, mere guesses at the truth. In the present state of affairs the Medical man is asked, and must be asked, definite questions; and his answers are, and must be, not those of definiteness, but of probability and possibility. It is not the fault of the individual that his answers are couched in terms of doubt—it is often his fault that they are not; it is because the science of Medicine, as a whole, has not yet arrived at exactitude that many diverse opinions are not only possible, but tenable. Books, and recorded cases, and current beliefs may give much assistance to anxious endeavours to obtain a wide foundation on which to build thought; but the actual experience of the individual is that which practically and in the main directs his mind—the readiness with which the mind answers to such directive power being determined by what we call the "temperament."

Every one knows that some men take gloomy views of everything, and especially of their cases; while others are so hopeful that they cannot believe in the probability of a future evil, or that their patients can get worse. The one man by his despair lets opportunities pass by unused; the other clutches at floating straws, and cannot but believe that they are lifebuoys in which he may place implicit trust;—the one detects no glimmer of light in the darkness that lies before him, while the other has a Mr. Micawber-like belief that something he has not yet dreamed of will assuredly "turn up" and help him. Much of both these qualities is quite independent of, and, indeed, often opposed to, experience; but

those who belong not to either extreme, who are neither over-sanguine nor unduly despondent, are guided by experience, and mainly by their own. Herein lies one of the most fruitful sources of discrepancy. All who have seen much of disease, and some who have seen but little, have met with rare, or what we term "exceptional," cases, and such cases do not, and cannot, fail to make strong impressions upon the mind. The force of influence exerted by one rare case is sometimes so strong as to overbalance that of twenty ordinary examples of acknowledged commonplace disease; and the disturbing influence of such exceptions to ordinary rules is to be seen in much of the writing, speaking, and acting of the present day. It is scarcely possible to alter this. In regard of its ultimate effect upon the science of the future, it is undesirable that it should be altered; but in the meantime errors and injustice may arise from the fact of its existence. If the range of personal experience be very large, and the power of discrimination be proportionate to the extent of the field over which it passes, the resultant direction given to prognosis will be in the main correct. I say in the main advisedly, because it may just happen to fail in its application to the particular case in question. Such failure may be due to the very fact of the largeness of experience. The few exceptions, so called, to general principles are lost sight of in the multitude of examples of their correctness. But it must be remembered that rare cases are just as real as common ones, and that what we term an exception is often a most significant illustration of the truth that our general statement was erroneous. If the generalisation could be honestly applied to the case, if there was nothing whatever which could be seen to remove it from the category in which it had been placed, and yet the outcome proved different from all that it ought to have been, that generalisation was wrong. There are no exceptions to, no variations from, natural law, while there are many departures from our notions about them; so that "exceptional cases" are the demonstration of the inadequacy of our science. The general proposition is wrong, because it includes too much and excludes too little; because in its application certain things are overlooked, which, if we could see them, would either remove special cases from the category in which they had been placed, or necessitate an alteration in the general statement. One of two alternatives must exist—either the particular case is not under the law that has been expressed, or the law has been wrongly stated. It was wrong either, on the one hand, to have used the general inference to the special instance, or, on the other, to formulate such general expression; if the pathology was right, diagnosis was at fault; if the diagnosis was correct, pathology was wrong.

REVIEWS.

Lectures on Clinical Medicine. Delivered at the Hôtel-Dieu, Paris, by A. Trousseau. Translated and Edited, with Notes and Appendices, by P. Victor Bazire, M.D. Part 2. London: Hardwicke. 1867. Pp. 512.

The subjects treated of in the second part of Dr. Victor Bazire's translation of Trousseau's Lectures are—Progressive Muscular Atrophy, Facial Paralysis, Cross Paralysis, Infantile Convulsions, Eclampsia of Pregnant and Puerperal Women, Tetanism, Chorea, Senile Trembling and Paralysis Agitans, Cerebral Fever and Chronic Hydrocephalus, and Neuralgia. We shall follow the plan of review adopted with the previous Part, as the only method applicable to such a book, merely adding that throughout this, as in the preceding volume, some admirable and instructive notes and addenda are furnished by the editor.

When speaking of facial paralysis M. Trousseau relates an interesting case where it was occasioned by a sudden fright, but draws attention to the fact that it comes on slowly and by degrees when due to organic alteration, and not suddenly, as it does when it is not due to an appreciable organic lesion. In the former case, of course, the prognosis is not favourable. He thinks that in the cases where Graves observed it in association with small cerebral hæmorrhages, he must have overlooked an imperfect paralysis in one or other of the limbs of the same side. He himself has never met with an instance where hæmorrhage has given rise to Bell's paralysis exclusively. He says, in respect to the diagnosis between cerebral hemiplegia and Bell's paralysis, that he has never seen complete paralysis of the orbicularis palpebrarum, however complete the hemiplegia may be, for that the eye could always be closed. Dr. Bazire adds to this a note to the effect that, whenever in hemiplegia of cerebral origin the face is affected, he has found that although the patient can close both eyes simultaneously, he cannot close the eye on the same side as the paralysis while the other remains open. There are also some interesting remarks, with editorial notes, upon the subject of the contraction of the facial muscles which follows upon Bell's paralysis, and upon the subject of the action of the interrupted galvanic current.

The tenth lecture, on Cross Paralysis, consists mainly of a critique upon Gubler's views upon this subject, and discusses the question of the connexion of cross paralysis with lesions of the pons Varolii. Trousseau narrates a case where there was paralysis of the right half of the trunk and left side of the face, in which no disease whatever was found in this part of the brain, but where there were discovered after death meningeal hæmorrhage and extensive softening of the central parts of the brain. His conclusion is that Gubler's law is not as absolute as he has asserted.

The lecture on Infantile Convulsions well deserves careful study. Professional notions upon this subject are, we fear, often wanting in precision. The author especially calls attention to the occasional origin of the disease in an external source of local irritation, such as a badly placed pin or a painful constriction of some part of the child's dress. He adds, "Remember also that fits are often brought on by the application of blisters, of sinapisms to the limbs of children with the intention of combating nervous disorders of no gravity. How often have I seen convulsions which terminated in death supervene in children that had been covered over with blisters; and how often have I seen Medical men use fresh blisters against the evil they had themselves caused, forgetting the nervous symptoms which so frequently accompany a burn of the first degree." (P. 344.) He discusses in connexion with infantile convulsions the disease which passes under the name of "laryngismus stridulus." It is well known that it has been ascribed by some writers to an abnormal development of the thymus gland, but Trousseau says that during twenty years he *never once* saw swelling of the thymus gland that was capable of giving rise to the slightest accident. We quote in full the view he propounds of the pathology of this very common affection:—"Who does not see that there need only be a want of harmony between the spasmodic movements of the diaphragm and those of the muscles which move the arytenoid cartilages in order to give rise to the laryngeal whistling and the dyspnœa? In a regular act of inspiration the upper portion of the larynx opens, while the diaphragm is depressed and makes a vacuum inside the chest. Now, if the diaphragm be depressed too rapidly, and there be at the same time laryngeal spasm, as happens in hooping-cough, inspiration becomes almost impossible, and is accompanied by a very loud whistling. In the present instance we need not have recourse to a want of harmony between the movements of the diaphragm and those of the laryngeal muscles; we need only suppose that the will or instinct no longer presides for a moment over the movements of the arytenoid cartilage. The muscles which move these cartilages, no longer responding to a nervous impulse, are for the time in the same condition as those of animals whose recurrent laryngeal nerve has been cut. What occurs deep in the larynx may sometimes take place under the observer's eye. In order to test the truth of the theory which I had framed to myself regarding the so-called *thymic asthma*, I have on occasions remained a long time by the side of a child suffering from convulsions of the diaphragm without participation of the larynx, and have brought on at will the phenomena of *thymic asthma* by closing for a moment the child's mouth and nose. When the mouth was closed, and the nostrils pressed slightly so as to occlude them for a second only, and thus to leave them half opened at the moment when a greater convulsion of the diaphragm carried the air more rapidly through the nasal fossæ, the alæ nasi, yielding to the pressure of the air, were seen to press against the septum, and so intercept the passage of air, so that immediate suffocation resulted. The reason of this was, that during the convulsions the alæ nasi did not open during the forcible inspiration as they do in a physiological and even a pathological condition." (P. 355.) He believes that in this affection, after removing known causes of irritation, the less the Practitioner meddles actively with the case the better. Where the convulsions are prolonged he puts faith in chloroform inhalations.

Amongst the most important causes of idiopathic or inter-

mittent tetanus, M. Trousseau places nursing and diarrhœa, and endeavours to press upon his readers the want of gravity of the affection. "Even in its most severe forms, when the symptoms have sometimes become apparently serious, and have excited fears that death might occur, I have never seen a single patient die, and I have by this time seen a very considerable number of such cases."—P. 382.

The treatment which has seemed to M. Trousseau to be the most beneficial in chorea is that by strychnine, and he gives a detailed account of the mode in which he employs this drug. The form he adopts is a syrup, made by dissolving one grain of sulphate of strychnine in two ounces and a half of syrup. "According to the age, give on the first day from two to three teaspoonfuls of the syrup, and see that they are taken at equal intervals of time during the day (morning, noon, and evening), so that you may watch the effect produced, so as not to go beyond a certain point. If the dose of three teaspoonfuls be well borne, it is continued for two days, and then increased by one teaspoonful; after another two days the dose is again increased by another teaspoonful, and so on, until six teaspoonfuls are taken in the course of the day, always at equal intervals of time. When this dose has been reached, a dessert-spoonful is substituted for one of the teaspoonfuls, and by attending to the same rules as before as many as six dessert-spoonfuls are administered, containing $\frac{3}{5}$ths of a grain of sulphate of strychnine. A tablespoonful is then substituted for one of the dessertspoonfuls, and by gradually increasing the dose with the same prudence, and taking the essential precaution of giving the medicine at equal intervals of time, in the course of the day, you may in the end administer to the child from $\frac{3}{5}$ths to $\frac{4}{5}$ths, and even 1 grain and $\frac{1}{5}$th, of sulphate of strychnine. In the case of adults the dose should be larger from the beginning."

While discussing the subject of cerebral fever (acute hydrocephalus) and the value of the sign of excavation of the abdominal walls, and what he terms the *cerebral macula*, he takes occasion to relate a case where both these signs were present, notwithstanding that the disease was actually typhoid fever. He then adds: "Now what are the characters of that cerebral or *meningeal macula* which I have taken care to point out to you in the above cases, and which you always see me carefully look for in individuals whom I suspect of being the subjects of cerebro-meningitis? When, in order to ascertain how many teeth the little girl in St. Bernard ward had cut, I opened her mouth with my hands, you must have been struck with the bright red tint which her skin immediately assumed. Again, when I very gently made on her abdomen with my nail cross markings, longitudinally and transversely, in less than half a minute the portion of the skin which I had touched was suffused with a very bright red tint, which was diffused at first, but grew by degrees fainter, leaving along the track where the nail had passed, lines of a deeper red colour, which persisted for a pretty long time. This is what I mean by the *cerebral macula*. . . . The regions where the macula appears most easily are at the first, and above all, the anterior aspect of the thighs, the abdomen, and the face . . . . Whereas it is an invariable constant phenomenon in cerebral fever, observed throughout the whole course of the disease, nearly from the beginning to the end, it only appears exceptionally and accidentally in other affections." (P. 459.) In regard to prognosis, M. Trousseau says, "In the course of my Medical career, which has already extended over a long period, I have known two cases only terminate favourably." He says further, as might have been almost anticipated, that on instituting a comparison between the results of energetic treatment and those of the expectant method, he has found that death came on at an earlier date in the first class of cases than in the second. With these further samples of the teaching of this great master, we must leave the book in the hands of the Professional public, by whom it cannot fail to be appreciated.

Royal College of Surgeons.—Professor Huxley brought his course of twenty-four lectures "On the Osteology and Dentition of the Sauropsida or Reptiles and Birds," to a close on Friday. Neither the Council nor the Members of the College appear to have taken due interest in the course, judging from the thin attendances of both. The lectures for the present year will be completed by Professor Hancock, who will deliver six lectures "On the Anatomy and Surgery of the Foot," in continuation of his course of last year. The registration of students closes this day (Saturday).

FOREIGN CORRESPONDENCE.

FRANCE.

Paris, March 27.

A most disgraceful scene took place last Friday at the School of Medicine. For some time past the Parisian students have made it a rule to create a disturbance whenever they are discontented. The expulsion from the University of France of the young men who made themselves so conspicuous at Liége was the first occasion for similar proceedings, and since then to interrupt the official lectures has become a system with our Medical youth, whenever they find the Faculty too harsh, their examiners too severe, or the educational authorities little disposed to comply with their wishes.

In the present case, a party among the students objected to the nomination of Dr. Sée, one of the newly appointed Professors, and a "manifestation" was organised in consequence. As the *Ecole de Droit* has always been closely allied to the *Ecole de Médecine* on similar occasions, a written notice was placarded there to engage the law students to join their Medical friends; and on the day appointed for Dr. Sée's opening lecture more than two thousand persons were accumulated in and near the great amphitheatre of the Medical School.

It must not be supposed, however, that the audience was exclusively composed of hostile elements. On the contrary, a large majority were sympathisers, and came for the express purpose of supporting the new Professor; besides which, that impartial fraction of the public which comes only to enjoy the fun was largely represented. When Dr. Sée made his appearance he was received with a storm of cheers and hisses, which would not have been out of place at an English election—I mean, of course, a hotly contested one—and when he attempted to speak his voice was drowned in the vociferations of both friends and enemies. It was impossible for him to utter a single word. Professor Gavarret, Professor Pajot, and other persons of distinction struggled to gain a hearing, but their efforts were unavailing. Various orators from the benches, however, jumped upon the table, and addressed the public. One gentleman, who alluded to his political antecedents (he had just come out of prison), was favourably received by the audience; but when he generously endeavoured to obtain a moment's silence for the lecturer, the uproar recommenced. After braving the storm for a full hour, Dr. Sée retired, and was loudly cheered by the crowd which had gathered outside without being able to gain admittance within.

On the ensuing Monday, the first half of the Professor's lecture was taken up by a regular fight between the two parties, in which the *opposition* was signally defeated; and order having been at last restored by the forcible expulsion of those who came for the express purpose of disturbing it, the lecture began. It is needless to say that applause was abundantly bestowed upon the iron-hearted lecturer, but the audience must have been too much inflamed by the struggle to understand much of what they heard. It may be confidently expected, however, that no further attempt will be made to interrupt the regular course, but it cannot be too much regretted that the youth of France should have adopted the absurd and ungenerous system of bullying their teachers, whose only defence lies in their moral authority. There is a *nexus socialis* between students and professors which makes it impossible to insult the latter without bringing discredit upon the former. The heads of our Profession ought to be respected not only on account of their personal merit, but also as the chief representatives of Medical respectability. And if the students insult those whom the Faculty itself has chosen to be their instructors, what could they do if Government were to force upon the School of Medicine a candidate of its own choice, as was nearly the case with Dr. Liebreich? No amount of vituperation could then force the intruder from his seat; for the Minister would be entitled to tell the Faculty that *their* nominees were fully as unpopular as his own; and the pressure of public opinion, which in such cases might be beneficially exerted, would have lost all its power.

Turning to a very different subject, I will inform your readers that no famine need be anticipated in Paris during the Exhibition, in spite of all predictions to that effect. If the beef-eaters of England, America, and Germany are to devour all our cattle, we must be content to eat our horses; and we are getting used to it by degrees. The *Bulletin* of the *Société d' Acclimatation* informs us that fifteen stalls are esta-

blished in Paris for the sale of horseflesh; that from seventy to eighty horses are slaughtered every week, making, altogether, 4000 per annum; and that four *restaurants* supply their customers with *viande de cheval*. It appears that the ordinary price of an *eatable* horse is about £1. At all events, the actual price of horse's meat is 1½d. a pound, and the low price of this new article of food renders it acceptable to the lower classes, who are beginning, in this respect, to forget their old prejudices.

GENERAL CORRESPONDENCE.

POLYANDRY IN INDIA.

Letter from Dr. Edward J. Waring.

[To the Editor of the Medical Times and Gazette.]

Sir,—With reference to an article in your issue of the 16th ult. on polyandry as it exists in Ceylon, it may interest some of your readers to know that the same practice has prevailed from time immemorial on the western coast of the Madras Peninsula, from Cape Comorin to the north of Cannanore, a tract of country inhabited by the Nairs or Malealie Súdras. Amongst these it is a caste rule or custom for one brother in a family only to marry, and the wife becomes the common property of all the brothers, who, however, generally console themselves by keeping concubines in addition. From personal observation I feel assured that this debasing caste custom is disappearing before the progress of education and moral and religious enlightenment, and is in growing disfavour with the more respectable portion of the community. It may be confidently anticipated that the day is not far distant when Dr. F. Day's assertion ("Land of the Permauls," 1863) with regard to the Hindoos of Malabar, that "polyandrism is the rule, not the exception," will be found untenable. In this system of polyandrism is doubtless to be fonnd the origin of the curious law of inheritance which exists among the Nairs, by which family property descends to the nephew (sister's son) in place of, as amongst us, to the son. The old saying, "It is a wise child that knows its own father," applies with great force to the Nairs; with so many possible fathers, the old Hindoo legislators doubtless deemed it injudicious to constitute a son, or reputed son, the heir of the family property, and substituted in his place the sister's son, who must perforce be a blood relation. This law of inheritance is in full force amongst the Nairs, applies to all grades of them from the highest to the lowest, and is recognised in our courts of law in India.

I am, &c. Edward J. Waring.

28, George-street, Hanover-square, March 21.

ON THE INVENTION OF LOCAL ANÆSTHESIA BY REFRIGERATION.

Letter from Dr. James Arnott.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the *Times* of Tuesday se'nnight a report appeared of the proceedings at a meeting of the Society for the Prevention of Cruelty to Animals, where Dr. B. Richardson read a paper "On Local Anæsthesia in Surgical Operations," in which, it is stated, "he narrated briefly the line of inquiry which led him to the invention;" and on Tuesday last an advertisement was inserted in the same newspaper respecting the presentation of a testimonial to Dr. Richardson, "chiefly for his successful invention of a method for producing, without danger, local insensibility to pain in operations"—implying that there is only one successful method, and that this is Dr. Richardson's invention. I consider these statements to be most erroneous, and I request the opportunity from you, as editor of the journal in which Dr. Richardson published his first paper on local anæsthesia by cold, and in which many of my own papers respecting it have also appeared, of submitting the question to the Profession.

As it is well known to the Profession that the discovery was made by me, many years ago, of the possibility of freezing the animal tissues without injuring them, and that this process might be used beneficially both as an anæsthetic in operations and as a remedy of disease, I need not at present do more than allude to it. What it is more necessary to elucidate is the great difference which exists between the invention of the principle of any new therapeutic proceeding, and the invention of any other means of carrying this principle into effect than those which have been originally proposed. All that Dr. Richardson can claim has relation merely to the latter. The principle of his method of anæsthesia is precisely that which I discovered in 1848.

He endeavours, indeed, in his first communication (*Medical Times and Gazette*, February 3 last), to make it appear that there is a difference of principle between the two methods. After relating his unsuccessful attempt some years ago to produce anæsthesia by what he called voltaic narcotism, "I came," he says, "to the conclusion that Dr. James Arnott's plan of using extreme cold was the first true step in the progress of discovery, and that if it could be made easier of application, and at the same time could be combined with the use of a narcotic fluid, an important advance in therapeutics would necessarily follow." The supposed second true step, I presume, and the step intended to reach the goal, was (as far as concerns the principle) this combination of a narcotic agency with intense cold, and it was represented to be a very great advance; for by the narcotic fluid (ether) there was to be produced "the deepest anæsthesia," giving the power of amputating a limb painlessly. No wonder that a method of such pretensions should have been so well received by the Profession; but, unfortunately, it was soon discovered that the second "step" was an utter delusion. Dr. Richardson is not the only one who has fallen into this error. The same idea of a combined agency had been maintained by M. Richet, the original proposer of anæsthesia by vaporised ether, and who also, upon the strength of it, claimed the invention of a principle in some respects new.

As the principle, then, is precisely the same, whether the intense cold is artificially produced by the rapid solution of ice and various salts, or by the rapid evaporation of volatile fluids, upon what ground is the invention claimed for Dr. Richardson, and a large sum of money sought as a reward from the Profession and the public? Granting, for argument's sake, that the means which he employs for carrying out the principle are more convenient than those originally proposed, and that they were first proposed by him, that constitutes no sufficient reason, if the means originally proposed are adequate for their purpose. If great things may be compared with small, the history of vaccination will furnish an illustration of this point. The discovery that the having been affected with cow-pox is a preventive of small-pox is a very different thing from the devising of means of introducing the virus of cow-pox, and Jenner's means have doubtless been altered and perhaps improved in later times. Very recently a French Physician proposed a new instrument for the purpose. But were a modifier of these means to call the alterations made by him the invention of a new and successful method of preventing small-pox, his pretensions would only excite ridicule.

It must be admitted, however, that if a new method devised for carrying out any important principle be decidedly superior to that originally proposed—if one is very difficult to practise, and the other, while equally effectual, is very easy—considerable credit is due to the deviser. How is it in the case in question? It is an erroneous statement, although it has served its purpose, that the application of the cold produced by the rapid solution of ice and various salts is a difficult process. Nothing can be more easy than to dip a bit of ice into common salt and press it gently on the skin, and yet this is sufficient to freeze it in less than the quarter of a minute. In some cases, indeed, a frigorific mixture cannot be properly applied without a cup or vessel of peculiar shape to contain it, which unquestionably involves more trouble than the projection of ether; but in several situations the part cannot be congealed by ether, and it is necessary to use either a freezing mixture, or a metallic ball or oval which has been cooled to the requisite degree by immersion in it. When deep, extensive, and long-continued congelation is required, or when it has to be used when inflammation is present, either in operations or in the treatment of disease, congelation by a freezing mixture, which can be combined with pressure and applied to any extent of surface, is the only measure which will fulfil the purpose. Simplicity and facility of application are doubtless valuable properties, but efficiency must not be sacrificed to ease.

Questions of minor importance in this inquiry are—When and by whom was anæsthesia by evaporating ether first practised? It was first practised in Paris in 1854, and about six years after the invention of local anæsthesia by cold. M. Richet dropped the ether on the part, and quickened its

evaporation by a bellows. Soon afterwards, M. Guéraud projected the ether on the part from a syringe of peculiar construction. Then followed the invention of the pulverisation of fluids, or their conversion into spray, by Dr. Sales-Girons, the principle of which was, as a matter of course, soon adapted to the construction of instruments for anæsthesia by those who had been employing ether in preference to freezing mixtures. At a discussion on the subject in the Surgical Society of Paris (reported in the *Gazette des Hôpitaux* of March 24 last), it was mentioned by M. Desormeaux that he had employed such an instrument years before, and by M. Velpeau that his pupils at the Hôpital de la Charité had used the more simple expedient of the perfumer's spray-producing tube. Dr. Richardson's instrument is constructed on the same principle, and has been followed by other instruments in France and elsewhere. But the method of producing anæsthesia by freezing mixtures, which M. Velpeau calls in the discussion referred to "*un moyen d'anesthésie locale très simple et très efficace*," has generally been preferred by French Surgeons.

In concluding this letter, I cannot but express the regret I feel at being compelled either to publish the above statement or to suffer myself not only to be deprived of the credit of an invention which I have so long endeavoured to bring to perfection, but to incur the risk of being charged with making pretensions to a discovery which belongs to another. The public, addressed in the manner they have been through the newspapers, and with no other knowledge of the subject, will not distinguish between the principle of an invention and the means of carrying it into effect; but though I have not the opportunity of explaining the difference through the same channel, I place the task of doing so with confidence in the hands of the Profession. I am well aware that though a testimonial is not always a reliable indication of an opinion, being often subscribed to from various motives, there is much force in names and numbers; yet if all the circumstances I have stated were known, I do not think that the testimonial referred to would have much weight. It would be interesting to know how many of the subscribers were aware that the principle of the "successful method" mentioned in the advertisement is identical with that which I invented eighteen years ago, and that the means of carrying it out lately introduced into England (inferior, in all important respects, to those which I had employed) is merely a slight modification of a subsequent French device. I am, &c. James Arnott.

8, St. Stephen's-crescent, Westbourne-park, March 2.

THE ACTIVITY OF CONIUM.

[To the Editor of the Medical Times and Gazette.]

Sir,—I last week observed in your columns an abstract of a paper brought before the Pharmaceutical Society by Dr. John Harley, which would seem to upset a good many of our ideas as to the activity of conium. In most men's minds there is a hazy sort of notion that conium is a drug of great potency; so that the announcement made by Dr. Harley that the only effect produced by its tincture was due to the spirit contained in it will produce something like a shock on their mental constitutions. I am aware that cases of poisoning by hemlock are rather rare, and that Dr. Christison says that it is inert when grown north of the border; but for all that I am scarcely inclined to go the length Dr. Harley has gone, and I will tell you why. I shall assume, and I do not suppose that Dr. Harley will disagree with me, that the virtues of the plant depend entirely on its alkaloid conia, and that the estimation of this gives a clue to the degree of activity each preparation possesses. I am not going to oppose a set of counter-experiments to those of Dr. Harley, but, as a plain practical man, I would ask what grounds he has for stating that the dried leaves of conium contain a mere trace of the alkaloid. He does not state what tests he employed; perhaps it may have been the rough-and-ready one I am in the way of using—that of smell: if so, Dr. Harley must have been very unfortunate in his specimens of conium. True, if the plant has been badly dried, little conia is left in it, but if dried quickly, more especially by natural means, it always retains a considerable proportion which may be liberated years after. But what, Sir, surprised me most was Dr. Harley's statement that the extract was a useless preparation. I, on the contrary, have always considered it of great value. But where did Dr. Harley get it? I have procured from Mr. Squire, in Oxford-street, samples of extract of conium which had been kept for years, and yet, compared with the succus, the advantage was on its side. In fact, the mode of preparing these things is all in all. If conium leaves be allowed to lie about and ferment before they are dried, they won't contain much conia, and if the extract be carelessly prepared it will be equally inefficacious; but if all specimens were as good as Mr. Squire's, I can hardly think that the preparation could be called inactive. I am, &c.

A Practical Man.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

Tuesday, March 19, 1867.

John Simon, Esq., President, in the Chair.

Mr. Heckford was elected a Fellow of the Society.

Mr. Hulke read a report of an examination of the suprarenal capsule exhibited at the former meeting by Dr. Greenhow, and which had been examined by Dr. Dickenson and himself. It looked medullary; anatomically it was sarcomatous, but from its cellular character it might clinically be considered as malignant.

Mr. Wood also read a report as to the condition of the toe affected with "Ainhum," which had been exhibited at the previous meeting by Dr. H. Weber, and had been examined by Mr. De Morgan and himself.

The President then, stating that it was not at all inaccordant with his position to bring forward specimens for the inspection of the Society, proceeded to narrate certain experiments which he had made as to the

INOCULATION OF TUBERCLE,

which were illustrated by specimens then brought under the notice of the Society. His attention had been called to the subject by certain experiments of M. Villemin which he had wished to authenticate. Various litters of rabbits, amounting in all to fifteen, had been procured; part (ten) had been inoculated, part (five) not. Five of the former when killed presented a fair amount of disease, but in the lung only, certainly not as much as described by Villemin. One doe inoculated had after the inoculation invariably brought forth dead litters. From the rabbits affected three others were inoculated; one soon died, but the others, when killed some months after, presented unmistakable appearances of tubercle in the lungs. One had, besides, some tubercle in the mesentery and spleen; the other had most in the mesentery. Various animals, he stated, were differently susceptible, and Vogel's experiments had thus ended in a negative result. Villemin's experiments had been repeated by two French observers, who stated that grey tubercle was best adapted for inoculation, but Mr. Simon had made use of yellow tubercle with the results laid before the Society.

Dr. Andrew Clark stated that he had been attempting to inoculate tubercle for the last five years; and he would ask the President what *he* meant by inoculation. Was the operation performed as in vaccination—by a mere scratch—or was a large wound made? (Here Mr. Simon explained that a small puncture was made, and the tuberculous matter introduced into it by a curette.) As to the substance employed, grey tubercle was a known product; yellow might be many things. In his experiments the substance produced in the rabbit was not the same as the tubercle found in man, the former having a cellular structure, the latter being entirely corpuscular. Another point was that the rabbits so affected might be kept for any length of time, as the so-called tubercle did not appear to undergo any of the secondary changes which ultimately cause death in the human lung. In the third place, the yellow tubercle found in rabbits might be produced by any diseased matter, although French experimenters say that they failed to inoculate with yellow tubercle. Further, many things might be taken for grey granulations by the naked eye, especially emboli. Altogether, the subject was surrounded with so much doubt that it would be wise to reserve opinions on it. The inoculability of tubercle was further contradicted, to a certain extent, by the comparative rarity of its transmission from husband to wife, and *vice versâ*.

Drs. Dickenson, Sibley, and Bristowe were appointed as a committee to examine the specimens.

Dr. Lichtenberg then brought forward a specimen of a congenital tumour which had hung from the mouth of a child as low down as the sternum.

The infant had both harelip and cleft palate, and the tumour was found to be attached as high up as the vomer, where it appeared to be continuous with the mucous membrane. There appeared to be no sensation in it; so a ligature was passed round it, and the mass cut away. A reddish fluid escaped, which appeared to choke the child at the time; next day the extremities were very cold, and within a week the infant died in convulsions. A post-mortem examination showed that the pedicle passed through the sphenoid, and that inside the skull there appeared to be a tumour in connexion with that seen outside. This tumour appeared to be constituted of grey brain-matter, covered with a thin membrane. The skull showed nothing particular. The tumour was no doubt an encephalocele, but when examination was made no part of the brain was found wanting. Virchow had spoken of a transplantation of grey brain-matter; perhaps this might be something of the kind. The condition of the heart was very peculiar; there was only one ventricle, but two auricles, and the Eustachian valve was very large.

Mr. Holmes inquired whether the bones of the head had been carefully examined, as the wings of the sphenoid in such cases were usually displaced, and Mr. Hewett had found that the descending horn of the lateral ventricles was the part most frequently protruded.

Dr. Lichtenberg explained that the brain had only been examined for missing portions after it had been cut up, but that there was nothing unusual exhibited about the skull.

Mr. Hulke asked if the pituitary body had been found, which it seemed had been the case.

Dr. Bastian then exhibited a growth found in the spleen of an old man brought into the dissecting-room at St. Mary's Hospital, which appeared to be fibro-cartilaginous, but was in reality an old hydatid cyst, having its external layers greatly thickened. No hydatids were found elsewhere.

Dr. Bastian also brought forward a specimen of the results of tubercular meningitis taken from a child aged 15 months. Grey granulations were found in the pia mater, but not of the same kind as those usually encountered in the lung and serous membranes. In the pia mater the masses were always connected with the arteries, and appeared to be heaps of epithelial nuclei proliferated in the sheaths surrounding the vessels of the brain. There seemed to be a series of these perivascular canals around the blood-vessels of the pia mater, and most granulations appeared to be produced in these. In this case there was paralysis of the left side, apparently depending on a tumour in the corpus striatum, and a clot in the venæ Galeni, which had given rise to softening of the walls of the ventricles.

Dr. H. Beigel exhibited specimens and drawings of a microscopic plant found on human hair. It appeared in knots round the hair, which could not readily be removed. Specimens had been examined by Küchenmeister, who pronounced it an alga belonging to the genus Pleurococcus, but of a new species, which he proposed to name after the discoverer.

Dr. Tilbury Fox said they were only gregarines, of which he knew some time ago, and of which he now had specimens germinating in a saccharine solution. He proposed to bring them before the Society at a future period.

Mr. De Morgan exhibited a two months' fœtus sent by Dr. Ross from the Cape of Good Hope, and which even at that early age exhibited ulcerations, apparently scrofulous (?) on the head and nates. The father and mother were healthy, but their offspring was scrofulous. He then narrated the case of a patient of Mr. Bury's, aged 63, and who had died of exhaustion induced by vomiting, etc. The œsophagus appeared to be melanotic—whether cancerous or not remained to be seen—and the peritoneum, when examined, was studded over with air vesicles; the air had no smell, the body being free from putrefaction, and otherwise healthy.

Mr. Bruce spoke of a similar appearance encountered in the submucous cellular tissue of the alimentary canal of a body examined by Mr. Mason.

Mr. W. Adams read for Mr. Carr Jackson an account of a very large tumour, apparently encephaloid, occurring in the head of the tibia of a woman aged 42. The tumour had existed from childhood, but had only begun to enlarge so very much some thirteen months before, when she had a fall. The limb had been amputated, and the patient was doing well. Specimen referred to Messrs. De Morgan and Hulke.

Mr. T. Smith exhibited a very large liver containing many cancerous tumours, yet retaining its normal shape.

MEDICAL NEWS.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 21, 1867:—

John George Randall, Lock Hospital, Dean-street, Soho; William Ross Jordan, Birmingham.

The following gentlemen also, on the same day, passed their First Examination:—

Richard Langford Wilson, Guy's Hospital; Clifford Crewe, Guy's Hospital; James Hird, St. Thomas's Hospital; Humphrey Lloyd Williams, St. Bartholomew's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Ball, J. A., M.B., has been appointed House-Surgeon to the Stockport Infirmary.

Berrell, C., M.R.C.S.E., has been appointed Resident Medical Officer to the St. Pancras and Northern Dispensary.

Cascaden, J., M.D. of the Toronto School of Medicine, M.R.C.S., and L.R.C.P. Lond., has been appointed House-Surgeon at St. Thomas's Hospital, *vice* Mr. Rainbow, deceased.

Jacob, Archibald Hamilton, M.D.T.C.D., F.R.C.S.I., has been appointed Ophthalmic Surgeon to the City of Dublin Hospital.

Lucas, H., M.R.C.S.E., has been appointed Medical Officer to the Huntingdon County Hospital.

Shone, R. L., M.R C.S.E., has been appointed Resident Medical Officer to the Kensington Dispensary.

BIRTHS.

Blair.—On March 2, at Denholm, Roxburghshire, the wife of W. Blair, M.D., of a son.

Cresswell.—On March 22, at Dowlais, Glamorganshire, the wife of Pearson R. Cresswell, M.R.C.S.E., of a son.

Dow.—On March 22, at Sligo, Ireland, the wife of W. G. Dow, M.D., 28th Regiment, of a son.

Grenfield-Coxwell.—On March 22, at Homefield Lodge, Heavitree, Exeter, the wife of J. C. Grenfield-Coxwell, M.R.C.S.E., of a daughter.

Hamilton.—On March 21, at Lyons, the wife of R. Hamilton, of Princes-road, Liverpool, of a son.

Hunt.—On March 25, at No. 1, St. George's-square, S.W., the wife of J. Hunt, M.R.C.S.E., of a son.

Maurice.—On March 23, at Marlborough, Wilts, the wife of Dr. J. B. Maurice, F.R.C.S., of a son.

Spence.—On March 13, at Linlithgow, N.B., the wife of R. Spence, M.D., of a daughter.

Wigg.—On March 21, at Ivy Villa, Southminster, Essex, the wife of T. C. Wigg, M.R.C.S.E., of a daughter.

MARRIAGES.

Bailey—Duce.—On March 19, at St. John's Church, Wednesbury, T. Bailey, Esq., Surgeon, Godstone, Surrey, to Eleanor, youngest daughter of the late J. Duce, Esq., Great Stanmore. No cards.

Cogan—Duffield.—On March 16, at Brighton, J. Cogan, M.D., to Agnes, youngest daughter of the late T. Duffield, Esq.

Graves—Cunningham.—On March 21, at Holy Trinity Church, Paddington, F. C. Graves, M.D., of 1, Westbourne-park-villas, to Jessie Johnstone, eldest daughter of the late C. Cunningham, Esq., Accountant, Glasgow. No cards.

DEATHS.

Bullock, E. J., L.R.C.P.Edin., at 84, Manor-street, Chelsea, on March 26, aged 47.

Drummond, H., M.D., at 62, Marine-parade, Brighton, and of 15, Westbourne-terrace, Hyde-park, on March 21.

Steele, Elizabeth Augusta, the wife of A. B. Steele, M.R.C.S.E., at Liverpool, on March 23, aged 48.

Swim, D. E., M.D., of Earlstown, Warrington Junction, on March 8.

Woodfall, J. W., M.D., at Maidstone, on March 22, in his 57th year.

VACANCIES.

Birmingham and Midland Eye Hospital.—House-Surgeon.

Great Northern Hospital.—House-Surgeon.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Builth Union.—Mr. Theodore Bloomenthal has resigned the Abergwessin District; area 68,480; population 3784; salary £42 per annum. No fees.

Ely Union.—Mr. Henry H. Pearson has ceased to be Medical Office for the Second District; area 16,550; population 4854; salary £61 per annum.

Salford Union.—Mr. George Clements has resigned the Workhouse; salary £150 per annum, residence.

APPOINTMENTS.

Amersham Union.—Frederic John Wadd, M.R.C.S.E., L.S.A., M.B.Aber., to the Beaconsfield District.

Braintree Union.—Thomas Taylor, M.R.C.S.E., L.S.A., to the Workhouse.

Chorlton Union.—George Clements, M.R.C.S.E., L.M., L.S.A., Assistant for the Workhouse.

Foleshill Union.—Francis Marshall, M.R.C.S.E., L.S.A., to the Bedworth District.

Islington Parish.—Duncan Turner, M.R.C.S.Edin., L.S.A., to the St. Peter's South District.

Pewsey Union.—Samuel B. C. Barrett, M.R.C.S.E., L.S.A., to the Second District.

Potterspury Union.—William C. Daniell, M.R.C.S.E., L.S.A., to the First District.

Toxteth Park Township.—Joseph T. W. Brass, L.R.C.P.Edin., L.R.C.S. Edin., Assistant at the Workhouse.

THE QUEEN'S COURT.—At the Queen's Court on Tuesday week, Sir Thomas and Miss Watson were presented.

THE LEVEE.—By command of the Queen, a Levée was held on Friday, March 22, at St. James's Palace by his Royal Highness the Prince of Wales, on behalf of Her Majesty. The following members of our Profession were presented:—Surgeon O. B. Miller, 14th Hussars, by the Adjutant-General; Inspector-General of Hospitals James Mouat, C.B., V.C., by the Adjutant-General; Surgeon W. Niven, M.B., Bombay Army, on promotion, by the Secretary of State for India; Dr. Edmund Waller, Surgeon R.N., by the First Lord of the Admiralty; Surgeon Major C. F. Warneford, M.D., by the Secretary of State for India. Sir William Fergusson and Doctors Atkyns, Acland, Thomas King Chambers, Edwin Howard, and C. J. Stewart, attended the Levée.

DR. LIVINGSTONE.—ADMIRALTY, March 22, 1867.—Commodore Hillyar, in a letter dated at Bombay, the 1st inst., states that Her Majesty's ship *Wasp* proceeded on January 2 to Quiloa, with Dr. Seward, Her Majesty's Acting Political Agent and Consul at Zanzibar, to endeavour to ascertain the truth of the report that Dr. Livingstone had been murdered by a Zulu tribe near Lake Nyassa.

DR. RICHARDSON'S LECTURES.—Dr. Richardson proposes to deliver a course of lectures at his own residence, 12, Hinde-street, Manchester-square, W., on the first Tuesday of every month, except July, August, and September, at 4.30 p.m. The lecturer will show some of the practical results of his physiological and pathological researches; and the first will be delivered on Tuesday next, April 2. Our pages have often been enriched by the contributions of this original and vigorous observer, and we believe that these lectures, which we hope to publish immediately, will be warmly received by our readers.

INEQUALITIES OF FORTUNE.—The rapidity of changes made in the last few years in the Medical and Surgical staffs of St. Bartholomew's has led to some remarkable results. Mr. Wormald, who has just retired, had been, we believe, for forty-nine years connected with the school and Surgical staff, during the last five of which only he was full Surgeon, whilst Mr. Savory, who was appointed Assistant-Surgeon only about five years ago, now succeeds to a full Surgeoncy. On the Physicians' side Dr. Edwards, who has not been much longer Assistant-Physician, is already full Physician, owing to the rapid succession of vacancies made by the retirement of Dr. Burrows and the deaths of Drs. Baly, Kirkes, and Jeaffreson, whilst Dr. Church, who has been but little more than two years a member of the Royal College of Physicians, has already won an Assistant-Physiciancy. For the Assistant-Surgeoncy now vacant Messrs. Morant Baker and Langton are the real candidates. Further changes on the staff are likely to be made by the appointment of Ophthalmic and Aural Surgeons.

THE annual dinner in aid of the funds of University College Hospital was held in Willis's Rooms on Wednesday, the Treasurer, Sir F. Goldschmid, in the chair. Upwards of a hundred sat down to dinner, which went off with great success in every way. More than £1300 was subscribed in aid of the Hospital, which just now is very much in want of aid. We trust it will not long remain so.

THE ROYAL SOCIETY.—The desire for the honourable suffix "F.R.S.," appears to be increasing, for sixty-one candidates have offered themselves this session for election into the Society, the largest number in any year since the new mode of election was adopted in 1847. In analysing the list, the *Athenæum* states that there are 17 Doctors of Medicine, 6 Surgeons, 8 chemists, 6 mechanicians, electricians, and civil engineers, 5 geologists, 1 mathematician, 1 entomologist, 5 soldiers, R.A. and R.E., and 1 admiral. The others may be classed as friends of science. From this it will be seen that the Council of the Society has a wide range in which to select the fifteen to be recommended for election.

THE philanthropic Hebrew baronet, Sir Moses Montefiore, has determined, since his return last spring from the Holy Land, to erect another hospice at Jerusalem for the residence of Israelitish families. It is proposed that the building shall be on a large scale, and built near to that which was erected in 1859.

ACADÉMIE DE MÉDECINE.—At the last election for a new member in the section of Medical Pathology, M. Vigla was chosen, after a sharp contest with M. Nonat. At the first round of the ballot M. Nonat received 36 votes and M. Vigla only 26, 14 votes being given to M. Chauffard, 4 to M. Bernutz, and 1 to M. Hérard. There being 81 voters present, and an absolute majority of 41 being necessary for success, and M. Nonat being 5 short of that number, a second ballot had to be taken. At this he only increased his votes by one, making 37, while to M. Vigla's 26 were now added 16 votes, which had been previously given to the distanced candidates, and these brought him up to 42, or one more than necessary for success.

THE PREPARATION OF PEPSINE.—The following method of preparing pepsine was published by Dr. Beale in his "Archives of Medicine," in 1857-58; and as it is evidently the same as that given in our last number, and copied from a *recent* number of Buchner's *Repertorium*, and praised by Professor Nussbaum, we gladly call attention to it. We are informed that pepsine has been made according to Dr. Beale's receipt, ever since 1858, by Messrs. Bullock and Reynolds, of 3, Hanover-street, Hanover-square, W. "The mucous membrane of a *perfectly fresh* pig's stomach is carefully dissected from the muscular coat, and placed on a flat board. It is then cleansed with a sponge and a little water, and much of the mucus, remains of food, &c., carefully removed. With the back of a knife, or with an ivory paper-knife, the surface is scraped very hard, in order to press the glands and squeeze out their contents. The viscid mucus thus obtained contains the pure gastric juice, with much epithelium from the glands and surface of the mucous membrane. It is spread out upon a piece of glass, so as to form a very thin layer, which is dried at a temperature of 100° over hot water, or *in vacuo* over sulphuric acid. When dry it is scraped from the glass, powdered, and kept in a stoppered bottle. A good digestive fluid may be made as follows:—Of the powder 5 grains; strong hydrochloric acid 18 drops; water 6 ounces. The fluid may be filtered easily, and forms a perfectly clear solution, very convenient for experiment. It may be taken with the salt at a meal. The powder is devoid of smell, and has only a slightly salt taste. This powder undergoes no change if kept perfectly dry. It contains the active principle of the gastric juice almost unaltered."—("Archives of Medicine," vol. i. p. 269.) On p. 315 of the same volume it is shown that "eight-tenths of a grain of this pepsine, with ten drops of dilute hydrochloric acid, and an ounce of distilled water, dissolve 100 grains of hard-boiled white of egg in from twelve to twenty-four hours."

CASE OF ALLEGED IMPOTENCY.—(Northern Circuit, Manchester: Crown Court—before Mr. Justice Shee.)—Elizabeth Milner, 37, was indicted for wilful and corrupt perjury at Bolton on August 6. The perjury arose out of an affiliation case, wherein the prisoner swore that the father of her child was a collier, named James Shepherd. Shepherd and the prisoner lived in the neighbourhood of Blackrod, and in the proceedings before the justices at Bolton the woman swore that Shepherd had courted her for two years, and she named a number of places where they had met together. A few months before the child was born Shepherd married another woman. The case for the prosecution was an entire denial of the prisoner's statements on oath before the magistrates; but the most extraordinary part of his case was the plea of impotency, and the issue resolved itself to a great extent into a Medical question. Mr. Cawthorne, Mr. Dorrian, and Mr. F. Hilderton, Surgeons, stated that they believed that it was impossible for Shepherd to be the father of the prisoner's child. Shepherd's wife also swore that her marriage had never been consummated. Prior to her marriage she had had a child. Shepherd was asked how he came to enter the marriage state. He replied that his wife did not desire any family, and that, as they had few friends or relatives, they had agreed to live together. In defence, Dr. Livey and Mr. Garstang, Surgeons, said that though Shepherd was somewhat different from other

men, it was more than probable he might have a family. A number of witnesses were also examined to show that the prisoner and Shepherd had courted, and that they had been seen together under suspicious circumstances. The Judge stopped the case before its completion. He said the Medical evidence was very conflicting, and it was impossible to convict the woman on the other evidence. The jury, therefore, acquitted her.

Proposed Memorial to Professor Goodsir.—A meeting was held in the hall of the Royal College of Surgeons on March 20, to take steps for commemorating the services rendered to the cause of Medical science by the late Professor Goodsir. Among the gentlemen present were—Principal Sir David Brewster: Dr. Christison; Dr. Maclagan; Dr. Lyon Playfair, C.B.; Dr. Smith, President R.C.P.E.; Mr. David Smith, F.R.S.E.; Dr. John Muir, LL.D.; Professor Blackie; Drs. Andrew Wood, Begbie, Littlejohn, Benjamin Bell, Seller, Sanders, Omond, Handyside, Gairdner, Matthews Duncan, Combe, Moir, Dycer, Menzies, Burn, Scott, Balfour, Crum Brown, Lowe, Millar, Hardie, Joseph Bell, Gamgee, T. G. Balfour, Turner, etc. On the motion of Sir David Brewster, Dr. Dunsmure, President of the Royal College of Surgeons, was called to the chair. The Chairman remarked that the scientific eminence and personal qualities of the late Professor Goodsir had not only secured for him a world-wide reputation, but had endeared him to all who knew him, or who had come in contact with him. He thought that there could be no difference of opinion as to the propriety of taking some steps for instituting a tribute to the memory of one so much appreciated and esteemed. Dr. Smith, President of the Royal College of Physicians, moved—"That this meeting, deploring the loss which science has sustained by the death of Professor Goodsir, resolves that steps be taken to form a lasting memorial of his distinguished career as an original investigator and teacher of anatomy and physiology." He said he had much pleasure in moving the first resolution. But before doing so, he would beg to express in a few words his hearty agreement with the object of the meeting. The name and the fame of Professor Goodsir had done much to sustain and advance the high position of the University and the Medical school. He therefore thought they were called upon to do something to mark their high estimation of those great talents and original cast of mind which characterised him, and enabled him, both as an investigator and a teacher, to do so much for his favourite science, anatomy, as well as to diffuse a knowledge and a love for it among the numerous pupils who flocked from all quarters to hear him. It had been remarked that he had left few writings behind him on his favourite science; but when they took into consideration the infirm state of his health during a long period of his professional life, it would not surprise them that he did not write more, but that he was able to accomplish what he did, both in writing and teaching. Nothing but an enthusiastic love of his science, and his great interest in his pupils, could have enabled him to go through the laborious duties of his chair. The sympathy which existed between him and them, and the enthusiasm with which he inspired them, were remarkable; so that his love for the science of anatomy and his original views would, he had no doubt, be deeply impressed upon many of them, from which they might expect the happiest results. Professor Christison seconded the motion. He said he was thoroughly convinced that a movement to perpetuate the memory of Professor Goodsir in some way or other would be most successful, from the number of his pupils that existed throughout the world. He had made a calculation, and had come to the conclusion that upwards of 4000 gentlemen had attended the instructions of Professor Goodsir; and when he thought how much esteemed he was by those pupils, he had little doubt that the present movement would meet with great success. The resolution was unanimously agreed to. Mr. David Smith, Treas. R.S.E., moved the second resolution, which was as follows:—"That the most appropriate manner of commemorating Professor Goodsir's services as an investigator and teacher is the establishment in the University of Edinburgh of a Fellowship in Anatomy and Physiology, to be called the 'Goodsir Fellowship.'" He cordially agreed with all that had been said with regard to the estimable character of the late Professor Goodsir. He might require to make some apology for taking part in the proceedings of the meeting, consisting, as it did, chiefly of Medical men; but the ground on which he thought his appearance there was justified was, that the establishment of an adequate memorial to a man of such eminence as Professor Goodsir should not be confined to the Profession to which he belonged, but should be shared in by the scientific world and the general public, who had been largely benefited by his contributions to science. Dr. Matthews Duncan seconded the resolution. Dr. Begbie moved—"That the following gentlemen be appointed a committee, with power to add to their number, to collect subscriptions for the above purposes, to frame regulations for the Fellowship, and to report to a future meeting of subscribers:—Sir David Brewster, Dr. Christison, Dr. Smith, Dr. Burt, Dr. Dunsmure, Mr. Syme, Dr. Andrew Wood, Sir James Y. Simpson, Bart., Dr. Sanders, Dr. Handyside, Dr. Maclagan, Dr. Matthews Duncan, Dr. Joseph Bell, Dr. John Muir, LL.D., Dr. Craig Maclagan, and Mr. David Smith—Dr. Craig Maclagan, F.R.C.P.E., to act as honorary secretary." Dr. John Muir, LL.D., seconded the resolution. Professor Maclagan moved a vote of thanks to Dr. Dunsmure for presiding, and to the College of Surgeons for the use of their hall. The meeting then separated.—*From the Edinburgh Courant.*

The Flight of Animals considered in Relation to Aeronautics.—Dr. James Bell Pettigrew, Assistant-Curator of the Museum of the Royal College of Surgeons, delivered a very interesting lecture on this subject at the Friday evening meeting of the Royal Institution on March 22. He began by describing the locomotion of mammals, birds, fishes, and insects, with the aid of large diagrams exhibiting the agents employed in walking, swimming, and flying. The last, the most complicated, was further illustrated by stuffed specimens of birds in a great variety of attitudes. Dr. Pettigrew stated that, after long-continued anatomical research in relation to the feasibility of constructing an aërial machine, he had arrived at the following deductions:—1. A body must be heavier than the air in order to navigate it. 2. The tracheal system, hollow bones, and air cavities of birds are not necessary to flight, because bats fly, which have none of these contrivances, and the lightest bird and insect are heavier than the air. 3. Insects and birds may be classified into those having light bodies and large wings (as the butterfly and heron) and those with heavy bodies and light wings (as the stag beetle and partridge), the latter flying by the greater muscular development and increased rapidity of oscillation in the wing. If the meagre body and broad wings of the heron be compared with the heavy body and comparatively narrow and small wings of the goose, it will be seen that there is no relation between weight of body and spread of wing. After discussing these points, Dr. Pettigrew expressed his opinion that the problem of flight resolved itself into one of weight, power, velocity, and small surfaces of flying animals against the buoyancy, debility, diminished speed, and extended surfaces of the balloon; and characterised all wings as being twisted upon themselves and more or less triangular with the base towards the body, and as conical on section from within outwards and from before backwards—this shape converting the pinion into a delicately graduated instrument, balanced with extreme nicety to fulfil the requirements of the muscular system on the one hand, and the resistance and resiliency of the air on the other. He stated that in all insect wings the nervures at the axis or root are arranged like a fan or spiral stair, whereby the wings, when in action, act like a screw propeller; and he asserted that they do not strike the air downwards and backwards, but downwards and forwards—the insect always falling through the medium which elevates it—and that they consequently act like a boy's kite or the spiralifer, flight being essentially a gliding movement. Similar remarks were made regarding the structure and the action of the wings in birds. The principle involved was illustrated by means of the spiralifer, especially by a double one of French manufacture. After a brief history of the balloon since its introduction in 1782 by Montgolfier, and referring to the failures of all attempts to steer it, Dr. Pettigrew stated that the foregoing principles, when applied to aërostation, tend to prove that the old form of the balloon is fallacious as a motive power, while animal mechanics show that the screw is admirably adapted to raise and propel an aërial machine. He considered that this machine should be constructed of hollow cylinders fixed in a floor composed of one or more flattened cylindroid chambers (filled with hydrogen or other gas to diminish weight) laid horizontally in a slightly upward direction, so as to act mechanically as the sustainers and gliders of the wings of sailing and gliding birds. He thought that possibly a motive power for the French "helicopteric machine" (to appear in the International Exhibition) might be obtained from compressed air, prepared on *terra*

firma, and stored in the machine before starting. He expressed his belief that if ever the balloon is used as a means of transit, it will most probably be effected by the conversion of a portion of its lifting power into a horizontal propelling power, which could possibly be attained by affixing a horizontal screw like a small windmill to the car. This apparatus would receive its motion from being forced against the air from beneath during the ascent, the air playing upon it from above, and it would communicate its motion to a similar smaller screw placed vertically or at right angles, which could be made to revolve with great velocity as a driving screw. The rotation of the balloon itself might be prevented by arming it with plates of some light material placed at right angles to the plane of rotation. In conclusion, after referring to the wonderful progress made in locomotion on land and water by the mechanical agency of the steam-engine and the crowning achievement of electrical science in the completion of the Atlantic telegraph, Dr. Pettigrew protested against despairing of the attainment of aërial navigation. Sir Henry Holland, the President, was in the chair, supported by the Duke of Argyll, the President of the Aëronautical Society, and other eminent persons.

Mind's Eye, *versus* Bodily Eye.—My old teacher Wilbrand protested against the circulation of the blood. "Which," he asked, on examining a candidate for honours, "is preferable, the mental or physical eye?" Woe to the candidate who replied, "the bodily eye"—he was plucked at once. Of necessity the candidate answered, "the mind's eye." "Well, then," continued the Professor, "mental inspection must be superior to physical inspection; if, therefore, you say that you have, by the aid of the microscope, seen the circulation of the blood with your bodily eye, and I tell you that I have seen the impossibility of the circulation with my mind's eye, it follows that I am right and you are wrong."—*Lectures on Man*, by Dr. C. Vogt, p. 11.

A Colossal Crab.—At the last meeting of the Academy of Sciences, M. Blanchard exhibited a specimen of the largest known crab, which had been taken in the Japanese seas by M. Siebold, the celebrated traveller. It measured more than two metres from the extremity of one claw to that of the opposite side. This giant is, however, of precisely the same species as the little "sea-spiders" which are seen running among the seaweeds at low water. On this point M. Blanchard remarked that cold-blooded animals, contrariwise to mammalia, increased indefinitely, growing larger with age, which explains how, where there is little fishing going on, gigantic specimens of species well known to us as of very different dimensions, may be met with. Thus edible muscles are found 18 centimetres long, and lobsters fished off the American coast have been met with of such enormous size as at first to have given rise to the opinion that they were of a distinct species. Unfortunately, we know of no means of determining the age of these gigantic individuals; but M. Blanchard puts the question whether these facts may not serve to explain the great size of the animals (putting mammals apart) at the epoch when man did not exist on the earth. It is certain that he is a terrible destroyer, and before he made his appearance on earth animals probably had a better chance of getting old than they have at present.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

We are sorry that our report of Dr. Andrew Clark's third lecture on Phthisis is delayed.

Dr. Lumley Earle's case shall be published next week.

Mr. Wilson.—Drs. Sharpey and Storrar are deputed by the Medical Council to attend the examinations of the University of Durham.

Newington.—We cannot prescribe for correspondents.

An Observer.—The name *North London Hospital* is by no means a new one; it was in use in Liston's time. The *Great Northern* is the junior. As for the proportion of ophthalmic and skin cases, it seems to be a full one, and highly creditable to the special wards.

The Medical Register.—With reference to an analytical digest of this production of the General Medical Council, which appeared in a contemporary last week, it is stated that out of the 19,765 registered Practitioners no less than "one-tenth of the whole number of Practitioners of the country are practising under a diploma given without examination in Medicine, Materia Medica, or botany, and without any clinical test whatever—viz., that of the Royal College of Surgeons of England." Now, if the analysis, elaborate as it appears, is not founded on more correct data than this, the whole must be taken for what it is worth, as, in a very cursory glance, a great number of these "*pures*" are known to have, although they do not register them, other diplomas than those from the College of Surgeons—in fact, several members of the Council possess the licence of the Society of Apothecaries. There are also several gentlemen in the army and navy who only *register* the Membership or Fellowship, although they possess besides a Medical qualification.

The Case of Woodhouse v. Foulds.—We really do not think that Dr. Walker was bound to repay Mr. Foulds the amount in dispute. Dr. Walker was paid by the plaintiff Woodhouse, for an attendance on an injured leg, the sum of forty-seven shillings. Woodhouse brought an action to recover the sum from Mr. Foulds on the grounds that Mr. Foulds was his club Doctor; that he (Woodhouse) had requested Mr. Foulds to attend him before he applied to Dr. Walker; and that Mr. Foulds had refused because he did not think himself legally bound to attend the plaintiff. Woodhouse thereupon went to Dr. Walker, and, when convalescent, paid his bill and brought an action to recover the amount from Mr. Foulds. The judge of the County Court decided that the grounds on which Mr. Foulds had declined to attend Woodhouse were legally invalid, and gave a verdict for the plaintiff with costs. Now we really do not see that Dr. Walker is bound by the laws of Professional etiquette to repay the money to Mr. Foulds. The whole matter lay between Mr. Foulds and Woodhouse, and Dr. Walker, it appears to us, had nothing to do with it. If Dr. Walker had decided to refund his Professional brother the amount he had been paid, it would certainly be a piece of excessive Professional courtesy, but it is not demanded by the ordinary laws of Professional etiquette.

P., Royal Institution.—John Sheldon, F.R.S., was a great patroniser of aëronauts, and was the first Englishman who made an experimental ascent. He was a Royal Academy Professor, a generous enthusiastic genius, but by no means a successful Surgeon. The following epitaph was made on him:—

"Here in the grave John Sheldon lies,
Who left a grave profession,
Deserting earth, did mount the skies,
The moon to take possession.
Adventuring in an air-balloon,
To *raise* a great renown,
Science and Art did grieve to think
How much he *let it down*."

What is the Cephalic Index?

"The proportion of the longitudinal to the transverse diameter of the cranium is so important that recent French authors term it the cephalic index (*indice céphalique*), and designate it by a single cipher, which is obtained by assuming the longitudinal diameter = 100, and reducing the transverse diameter to this denomination. Cephalic index = 80, means, therefore, that, assuming the longitudinal diameter to be 100, the transverse is 80."—*Lectures on Man* (Dr. C. Vogt), p. 47.

Fucus Vesiculosus in Obesity, and Acarus Scabiei.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Can you tell me in your next number, from your own experience or from that of your correspondents, whether the Fucus vesiculosus has any effect in checking or reducing obesity—if so, where the preparation can be obtained? Also if the Acarus scabiei can resist a heat greater than clothes can do? We know that hydatids and trichinæ resist a very great heat without destruction. I am, &c. C. L.

March 26.

*** We can say from our own experience that the Fucus vesiculosus is of use in obesity. The preparation employed was that of Mr. Rew, chemist, Regent-street.

Registration of Foreign Degrees.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I have read the effusion of Dr. James Williams, of Malvern, in your last, and the impression it produced on my mind was gratitude that Dr. James Williams was not a Medical Pope; for if he were, your humble servant and suchlike creatures would be subjected to the inquisition of the Medical Act, though I don't suppose the punishment would be as great as James Williams, M.D., would in his purist indignation wish.

Now, Sir, I ask, has not a man who has passed the College of Surgeons and Apothecaries' Hall given sufficient evidence of the quality and amount of his Medical and Surgical abilities to his examiners, brethren, and general public—that he has passed the "mental exertion," and paid all the "preliminary expenses," consequent and attending upon being admitted a regular Medical Practitioner; and if such an one afterwards (for some reason known to himself, as in my case, a simple desire to have the title of Dr. without the trouble, loss, and expense of leaving his practice) prefers having a degree of M.D. from a German University without loss of time and submitting to an examination—only a repetition of what he has already undergone—does this diminish his Medical knowledge in any way, and has he not a right to use the title which a University has legally given him?

Supposing I had gone to King's College, Aberdeen, where Dr. James Williams procured his M.D., and been trotted again over the ground I had already trod at the College and Hall, would it have made me a better Practitioner? I opine not; and, if rumours be true, King's College, Aberdeen, at one time thought so too, and consequently dubbed such men with M.D. without examinations!

I trust that instead of the Amended Medical Act inserting a clause objecting to doubly qualified men, possessing foreign degrees, having such registered, it will make provision for the registering of such degree when procured before the passing of the Medical Act.

Hoping, in justice, you will, Mr. Editor, insert this,

I am, &c.

M.D., M.R.C.S., L.S.A., and L.M.

Is there a Cholera Poison?

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I have to thank you for inserting my letter of the 16th inst. in the *Medical Times and Gazette*, and for your courtesy in replying to my question. I have also to confess that I am not a "reasonable being," as I do most certainly require further proof. When I spoke of cholera in my last letter, I meant Asiatic or malignant cholera, a disease wholly different from the cholera morbus of Sydenham. I have always considered it a misfortune that this disease, generated in India, and imported into this country, should have received the name of cholera. English cholera, or diarrhœa, never changes into Asiatic cholera, in which there is not only no flow of bile, but in which all the secretions—urine, tears, saliva, etc.—cease. This misnomer has led to endless confusion. No one doubts that English cholera, sickness, and diarrhœa may be produced by indigestible food, unripe fruit, impure water, etc.; but Asiatic or malignant cholera never can be in this climate. It is the result of an unknown and specific poison generated in India, and diffused over the world by personal intercourse and atmospheric influence. It has crossed the Atlantic and travelled to the top of the Himalayas. This poison, once introduced into the human body, is there increased and communicated to others. Healthy men may carry the poison in their clothes, ships, and caravans. I maintain, then, that though English cholera may be generated in this country, the Asiatic never can; that it is an exotic disease imported into this country, and that no impure water and no sewage can in this climate generate this disease.

I am quite unable to perceive any likeness between the so-called cholera stuff (*cholerine*) and the vaccine lymph, the one being a purely hypothetical substance—an *x* quantity—the other a well-known fluid, easily obtained to any amount, capable of being weighed and measured, and whose physical qualities have all been accurately described. So erratic is the course of the Asiatic cholera that no law has yet been discovered capable of explaining why it should visit one country or one district in preference to another. In 1832, when I was in Kidderminster, this disease prevailed almost entirely on one side of the River Stour, for which no reason could be discovered, any more than why frequently one half of a field is affected by the potato disease, and not the other. Since Asiatic cholera is diffused over the world by personal intercourse and by means of the atmosphere, I hold it to be illogical to infer that water was the means by which it was diffused at the east end of London, because last year the epidemic happened to be principally located in that district.

The only certain method of keeping this country free from cholera and cattle plague would be by enforcing strict quarantine laws; and if John Bull prefers personal liberty to health, then John Bull must suffer without grumbling. I am, &c.

53, Blenheim-crescent, Notting-hill, W., March 25. J. Jones.

** The statements in our correspondent's letter seem to us, up to a certain point, so entirely in accordance with reason and experience that we give our respectful assent to them. That there is an unknown and specific poison which causes cholera, whose existence we infer from its effects, seems undeniable; and we must bear in mind that very few of the specific poisons have been isolated and examined, although we do not hesitate to express our faith in them as positive entities. Who, for instance, has ever seen the poison of whooping-cough, or of scarlet fever? Yet we assume their existence. Moreover, we are compelled to assign to all of this class of poisons qualities which distinguish them from ordinary inorganic poisons; and those qualities are well summed up by our correspondent in the word *erratic*. Arsenic is not erratic; within certain limits it acts alike upon all human beings. Put a dose of tartar emetic into the family pudding, and every one who eats thereof will feel sick. But bring the poison of scarlet fever or of whooping-cough into the same circle, and some will take it; others will escape absolutely, though long submitted to its influence. Hence we readily acknowledge that we know not why half a field should escape the potato disease; nor why half a family should escape scarlet fever; nor one bank of a river, or ninety-nine hundredths of a population, the cholera. This apparent erraticism is a property common to all the diseases of the cholera class. The erraticism may be explained by supposing—first, that some subjects are inherently more fit to receive and develop the poison; or, secondly, that some get it in larger doses. Impure water producing diarrhœa would, it is believed, act as a predisposing cause; and, in the second place, suppose cholera to be imported by human beings, and that dried particles are diffused through the atmosphere, we aver that it is also conveyed by the water into which the dejections of the sick are discharged. Bad water, then, may predispose people to suffer from a poison generally diffused through the air, and it may be a vehicle of the selfsame poison. Whichever hypothesis be adopted, the concurrence of an outburst of cholera in the districts supplied by the East London Water Company is a phenomenon not to be overlooked. The theory that the cholera was caused by the water accounts for the whole facts, and no other theory does so. The whole argument is summed up by Mr. Liddle in his able "Report on the Epidemic of Cholera in Whitechapel in 1866." Mr. Liddle is no advocate of an exclusive water theory; but that water was *the* primary agent in East London in 1866, and is *a* possible vehicle everywhere, and *the* most frequent vehicle in England, appears to us indisputable. Will our correspondent read Mr. Liddle's report?

Corrigendum.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Will you be good enough to point out to your readers an important *erratum* in the concluding sentence of the second paragraph of my letter, published in the last number of the *Medical Times and Gazette?* I there intended to say that "the prevailing type [of skull] in that class of barrows [i.e., in round barrows] is admitted on all hands to be *brachycephalic* or round." In my letter, as printed, the word "dolichocephalic" is used instead of "brachycephalic."

March 27. I am, &c. F. P.

P. S.—I enclose my card.

Inoculation of Tubercle.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Repeated attempts have been made with a view to the inoculation of tubercle, but hitherto always with negative results. If, indeed, tubercle be the dead inorganic matter—the unoxidised waste carbonaceous residuum of the organism—which I hold it to be, how would it be possible for inoculation to take effect? Tubercle, cancer-cell structure, blood-clots, and what not, may, however, be transported, emboli wise, in the torrent of the circulation. A case of this kind is adverted to in Cohn's great work on embolism. But such an occurrence—such a transport as this—cannot be esteemed a case of tubercular deposit in the ordinary sense of this expression. In a conversation on this subject which I held with Dr. Cohn, of Breslau, before his death, he never advanced such an opinion, nor does his work countenance the inference. Tubercular, like other matter, then, may be introduced into the current of the circulation, transported to a distance, and there appear as tubercle; but this mechanical result, which doubtless often ensues in tuberculous subjects, cannot with any propriety be esteemed a case of inoculation. It has, indeed, been found that foreign matters—quicksilver, for example—introduced into the economy may become the nucleus of tubercle. This might happen with tubercle itself introduced into the economy, but it could not be considered a case of inoculation. If tubercle be the dead inorganic waste which, in my work on phthisis, I have contended it is, we might with as much propriety try to inoculate a broken leg or a dislocation as to inoculate tubercle. For things that are impossible cannot be, and very, very seldom come to pass. I am, &c.

Belfast, March 25. Henry MacCormac, M.D.

The Bengal Medical Service.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I send you an able and temperate article on the condition of the old Bengal Medical service that appeared in the *Friend of India* newspaper of yesterday's issue. With regard to the reductions in the higher ranks, noted in the first paragraphs, made by the Government of India on Lord Cranborne's despatch, published in India on October 26 last, there is no doubt that the Government have taken the most illiberal view they possibly could in carrying the reductions caused by that despatch into effect. Months back, instead of having made promotions in the administrative ranks as vacancies occurred from time to time, as they would have done in a regiment or on a general list of officers, and then, when the order came to reduce, reducing by degrees, they persistently would not make the promotion anything but temporary (*i.e.*, doing all the work on half the pay) because they knew reductions were coming.

Not only are the seniors in the service now thrown back years before they can hope to enter the administrative ranks, but they possess no safeguard that more reductions may not be made from time to time, and all hope of ever being able to finish their career is only held like a tantalising cabbage in front of them.

The article in the *Friend of India* says:—"The *Gazette* of January 21 carries out the reductions in the administrative ranks of the Indian Medical service. The officer holding the appointment of principal Inspector-General reverts to that of Inspector-General. The two Inspectors-General descend to the rank of Deputy Inspectors-General, and are dismissed from the appointment, as well as the next senior Deputy Inspector-General, having completed the new temporary tenure of five years. Three more Deputy Inspectors-General have retired, and others are made of permanent rank who were merely officiating. This treatment of the senior officers is very energetic. But is it legal, or likely to restore the confidence of the service? The 'dissatisfaction of the Doctors' is sneered at; still discontent is general, and the universal feeling is one of disgust. It is said that the interest of the service has been sacrificed to the Horse Guards, and there is no confidence that the promotions still left, or even the half-batta pay now doled out, will be continued longer than suits the convenience of Government. To these sentiments is generally added the resolution to leave the service as soon as possible, the hope of obtaining a competency in the higher ranks being now so faint. And this feeling bears practical results in preventing others from entering the service. The members propose to submit their claims to the consideration of Parliament, and to ask a commission similar to that granted to the military officers, to see how far their guarantee has been fulfilled.

"The rank and promotion of the service were guaranteed by the sign manual of her Majesty and the deliberate promise of Parliament.(a) Has that guarantee been fulfilled? Is the abolition of the first departmental prize, and the reduction of nearly one-third of the administrative ranks, in accordance with these pledges, or with the practice in England, France, and other parts in Europe, or as it was under the Company's government, when a certain ratio was maintained between the administrative and executive ranks? No one doubts the power of Government to reduce its establishments, but an establishment transferred under guarantee cannot be reduced without compensation to those who suffer. There has been no reduction in the strength of the Indian Medical establishment; merely in the number of the administrative or highly-paid appointments, by which nearly £30,000 has been withdrawn from the Indian service. The Medical administration of her Majesty's British troops was always under British inspectors, and never under Indian officers. The great increase of the economical superintendence which followed the mutiny produced no increase to their numbers, though the transfer of this duty to their own administrative officers is now the plea for the reduction of the Indian establishments. There has been a small and much-regretted reduction in the Bengal European troops to the amount of three brigades of horse, and six batteries of foot artillery, and three regiments of infantry—the charges of twelve Surgeons and some Assistant-Surgeons, 7·80 per cent. of the Surgeons, or about one-twelth; whilst the reduction of five out of seventeen in the administrative ranks is 29·03 per cent., or nearly one-third. But there has been no reduction in the executive. The strength of the service remains unchanged, and the duties are with difficulty carried on by the present numbers.

"The increase of pay is called compensation for the reduction of the administrative ranks. This is one of the delusions worthy of Sir Charles Wood when he mystified Parliament. The pay of the Medical service is granted, in proportion to rank, by the warrant of 1858, called Lord Herbert's Act, before the transfer of India to the Crown. There was

(a) If "the guarantee" means anything, the service is safe; but the guarantee appears powerless under such an axiom as this—that because the Court of Directors possessed powers to reduce establishments at any time, so has the Home Government, in spite of any guarantee to the contrary.

official and routine delay in England, and in India, in bringing this law into force; but it was so done in 1860 and 1864. When first extended to India, there were certain localities where only 'half-batta' pay was allowed, and this was applied to the British Medical officers. The half-batta order has since been abolished, and all British Medical officers draw full pay. The pay of the Indian Medical officers, under the warrant of 1858, has been carried out on the scale of half-batta, under the new and equally unrecognised name of 'unemployed pay.' Only those in charge of native troops get full pay, and these, by last *Army List*, amount to eighty-six out of a strength of 425, or one-fifth of the service. The remainder, four-fifths, only draw 'unemployed' pay, while yet performing all the duties required by Government. Military charges form but a small portion of these. There is a slight increase in the pensions of the junior Surgeons, but the highest pension of the seniors, after thirty-one years' service, is reduced from £700 to £550. The old service have the option of retaining the former rate. There is an extra allowance of £350 or £250 on removal from the appointment of Inspector or Deputy Inspector-General, after five years' tenure of office. This is a questionable compensation for losing the pay of possibly twice that period, as was the former regulation. The Indian staff allowances for Medical charges are abolished. There may be some quibble about the abolition of the first rank, formerly called Director-General, but the word allowance is plain English, and that was guaranteed on the transfer. How has that promise been kept? The long-coveted object of rendering the Horse Guards service more attractive than the Indian has been accomplished at last by the simple transfer of £30,000 a year from the Indian to the British Surgeons' pay. We congratulate the latter on this addition, but the members of that service will be the last to rejoice that their gain has been at the cost of their Indian brethren.

"Everything points to the near probability of the reconstruction of a local European army for India. To this almost all the critics of the Recruiting Commissions Report have come. The latest writer in the *Saturday Review* does not hesitate to say, 'As in the Company's time, India must have its own army.' The time will soon come when the present changes in the Medical will be as much regretted as those in the military service. At present all things are favourable for an appeal to Parliament by the Indian Doctors. Let the Doctors organise their forces, and some success may crown their efforts."

I am, &c. SURGEON-MAJOR,
Calcutta, February 8. Indian Medical Department.

COMMUNICATIONS have been received from—

Dr. HENRY OSBORN; Dr. BRAITHWAITE; Dr. ARNOTT; OBSERVER; Dr. MACCORMAC; Dr. GERVIS; Mr. POOLE; Mr. JAMES; Mr. TAIT; Dr. PETTIGREW; Mr. LINTON; Mr. SANKEY; Mr. HIGGINS; Mr. J. E. SMYTH; Mr. E. BELLAMY; Mr. J. CHATTO; Mr. C. ORTON; Rev. Dr. HAUGHTON; Dr. E. J. WARING; Mr. G. S. BRADY; Dr. BALLARD; Dr. SOELBERG WELLS; Dr. HUGHLINGS JACKSON; Mr. T. M. STONE.

BOOKS RECEIVED—

The Dental Journal, March—Nouveau Dictionnaire de Médecine et de Chirurgie—New York Medical Journal, Vol. IV., No. 23—Maudsley's Physiology and Pathology of the Mind—Lawson on Injuries of the Eye—Smith on Hay-Fever.

NEWSPAPERS RECEIVED—

L'Union Médicale—Sunday Gazette—Gazette des Hôpitaux.

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 23, 1867.

BIRTHS.

Births of Boys, 1147; Girls, 1077; Total, 2224.
Average of 10 corresponding weeks, 1857-66, 1988·1.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	832	899	1731
Average of the ten years 1857-66	717·1	688·6	1405·7
Average corrected to increased population..	..	..	1546
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,388	5	2	3	1	14	6	1	..
North ..	618,210	10	5	6	4	20	16	3	..
Central	378,058	4	4	1	..	10	4	2	..
East ..	571,158	12	2	2	..	15	7	1	..
South ..	773,175	9	3	13	4	14	16	4	..
Total ..	2,803,989	40	16	25	9	73	49	11	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·481 in.
Mean temperature	35·5
Highest point of thermometer	55·1
Lowest point of thermometer	26·1
Mean dew-point temperature	31·6
General direction of wind	E. & N.E.
Whole amount of rain in the week	0·50

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, March 23, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending Mar. 23.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending Mar. 23.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	2224	1421	1731	55·1	26·1	35·5	0·50	51
Bristol (City) . .	165572	35·3	118	74	‡74	48·4	23 2	34·2	2·06	208
Birmingham (Boro')	343948	43·9	248	167	173	47·1	21·7	33·1	1·79	181
Liverpool (Borough)	492439	96·4	388	285	337	50·1	26·3	35·5	0·37	37
Manchester (City) .	362823	80·9	245	205	‡236	50·0	20·6	34 6	0·44	44
Salford (Borough) .	115013	22·2	83	58	80	49·6	21·0	35·0	0·54	55
Sheffield (Borough).	225199	9·9	173	119	134	..	..	..	..	..
Leeds (Borough) .	232428	10·8	172	118	127	51·0	23·5	34·4	0·92	93
Hull (Borough) .	106740	30·0	68	49	47	..	..	..	..	..
Nwcstl-on-Tyne, do.	124960	23·4	80	66	87	..	..	..	..	..
Edinburgh (City) .	176081	39·8	137	85	95	41·7	25·0	34·1	0·10	10
Glasgow (City) .	440979	87·1	363	257	293	45·3	18·5	33·1	0·32	32
Dublin (City and some suburbs) .	319210	32·8	154	‡157	214	56·0	29·9	39·1	1·44	145
Total of 13 large Towns . . .	6187761	34·3	4458	3061	3628	56·0	18·5	34·9	0·85	86
					Week ending Mar. 16.	Week ending Mar. 16.				
Vienna (City) . .	(1863) 560000	..	..	..	329	..	..	§36·3	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·481 in. The barometrical reading decreased from 29·87 in. on Sunday to 29·15 in. on Tuesday.

The general direction of the wind was E. and N.E.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 34·1°.

APPOINTMENTS FOR THE WEEK.

March 30. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Mr. Pengelly, "Evidences of Antiquity of Man in Devonshire."

April 1. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

EPIDEMIOLOGICAL SOCIETY, 8 p.m. Dr. Macpherson, late Inspector-General of Hospitals, Bengal Army, "The Early Sites of Cholera in India from the Middle of the Sixteenth Century to the Present Day." Mr. J. N. Radcliffe, "The Propagation of Cholera by Water as a Medium, with Special Reference to the Outbreak at Theydon-Bois, Essex, in 1865."

MEDICAL SOCIETY OF LONDON, 8½ p.m. R. W. Dunn, Esq., "Some Observations on Infantile Syphilis."

ODONTOLOGICAL SOCIETY, 8 p.m. Meeting.

ROYAL INSTITUTION, 2 p.m. General Monthly Meeting.

2. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ANTHROPOLOGICAL SOCIETY OF LONDON, 8 p.m. Meeting.

PATHOLOGICAL SOCIETY, 8 p.m. Meeting.

ROYAL INSTITUTION, 3 p.m. Rev. G. Henslow, "On Botany."

3. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 2 p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.

METROPOLITAN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH, 4 p.m. Meeting.

OBSTETRICAL SOCIETY OF LONDON. 7½ p.m.: Council Meeting. 8 p.m.: Special Meeting.

4. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

HARVEIAN SOCIETY OF LONDON, 8 p.m. Dr. Chapman, "On Paralysis." Dr. C. Meredyth, "On Hygiene in Relation to Syphilis."

ROYAL INSTITUTION, 3 p.m. Mr. Pengelly, "Antiquity of Man."

5. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8 p.m. Mr. Pengelly, "St. Michael's Mount."

WESTERN MEDICAL AND SURGICAL SOCIETY, 8 p.m. Narration of Cases.

ORIGINAL LECTURES.

ABSTRACT OF A LECTURE
ON THE
ARTERIAL PULSE AND SPHYGMOGRAPH.
DELIVERED AT
The Royal College of Physicians,

By JOHN BURDON SANDERSON, M.D., F.R.C.P.,
Lecturer on Physiology and Assistant-Physician to the Middlesex Hospital.

THE main purposes of the lecture were (1) to explain and elucidate the relation between the form of the arterial pulse as revealed by the sphygmograph and the movements of the heart in health; and (2) to show in what way the modifications of the form of the pulse met with in disease may be interpreted, so as to afford reliable indications as to the state of the circulation; and (3) which of these indications are of the most practical importance.

In every arterial pulsation four events may be distinguished:

I. *The Sudden or Primary Expansion of the Artery.*—It was shown (by experiments on the production of pulsations in elastic tubes, the apparatus for which was exhibited) that the primary expansion, which is indicated in the tracing drawn by the sphygmograph by a vertical line, does not express an increase in the quantity of blood contained in the artery, for it can be produced by any sharp movement of however small extent, provided that it is of great rapidity and is directed in the axis of the tube. It is due to a sudden jerking forwards of the particles of liquid, and is therefore rather of the nature of a commotion or shock, in which each particle communicates its movement to its neighbour—just as, when a number of balls are freely suspended in a straight line in contact with each other, a smart rap given to the terminal ball shows its effect not in any advance of the whole number, but in the jerking forwards of the ball at the opposite end of the series.

The primary expansion is immediately followed by an equally sudden contraction, and this by other expansions and contractions, so that the artery is in a state of rapid vibration.

II. The second event consists in *the more gradual distension of the artery by impletion.* This is indicated in the tracing by a curve, the concavity of which is downwards. The moment of greatest impletion occurs at a variable interval, never exceeding a fifth of a second after the primary expansion. The time at which it occurs, and the degree in which it is marked, depend on the quantity of blood transmitted by the contracting heart to the artery. The greater the impletion of the artery during systole, the longer is the interval between the primary expansion and the acme of distension, and the bolder the curve which indicates it.

III. The third event consists in the sudden collapse of the arterial wall. This is a movement of the same nature, and produced in the same way, as the primary expansion—that is to say, by a sudden impulse of the particles of liquid contained in the arterial system in a direction towards the heart, the effect of which depends, not on its extent, but on its velocity. This was illustrated by an experiment in which it was shown that the sudden withdrawal of a single drop near the end of a closed elastic tube filled with water is sufficient to produce a sudden shrinking of the wall of the tube, not only at the part from which the escape takes place, but along its whole course. So that in this, as in the other case, the movement affords no indication of retrogression of the mass of blood, but merely that its particles receive an impulse, the primary direction of which is towards the heart. It was further shown by experiment that this event is synchronical with the closure of the aortic valve, just as the principal expansion is synchronical with their opening.

IV. The fourth event constitutes the diastolic expansion or second beat, the distinctness of which in certain morbid states gives to the pulse the character known as dicrotism. The artery, which has contracted suddenly by virtue of the shock which accompanies the closure of the aortic valve, again resumes the volume corresponding to the quantity of blood it contains at the time. The degree in which the diastolic distension takes place varies. In the dicrotic pulse of fever the diastolic impletion is nearly as great as the systolic. In the various forms of pulse which are recognised by the finger as collapsing, the second beat is absent.

The explanation given by the lecturer of the phenomenon of dicrotism may be shortly stated as follows. The injection of blood into an artery during the systole of the heart produces two effects therein, both of which are limited to the period of contraction—namely, (α) distension of the wall of the vessel, and (β) increase of the pressure of the blood against its internal surface. Of these two effects the former is directly proportionate to the *elastic yieldingness* of the artery; the latter is inversely proportionate to this property—that is, the more elastic the artery, the more is its area increased during the ventricular systole, and the less the augmentation of blood pressure. According as the one or other of these effects is in excess, the pulse assumes different forms. If α predominates, the collapse of the artery at the close of systole is complete, and is followed by no appreciable reaction; if β, the pulse is dicrotous; if the two balance each other, the pulse is normal. This implies that in the normal state of the circulation the force of the heart is only partly expended (as regards the arteries) in carrying on the circulation during the period of systole. The remainder of the force is stored up in parietal tension, or, in other words, thrown into reserve to be used in maintaining the flow of blood after the heart itself has ceased to act.

According to this principle diseased pulses may be classified on either side of the normal as follows:—

I. Pulses of which the characters indicate that the arterial blood-tension produced during systole is less than natural, and consequently that the resistance is diminished, and the duration of the systole shortened. These effects may be due either to diminution of the quantity of blood discharged by the heart at each stroke (mitral disease, spanæmia), or to an increased susceptibility of the heart to stimuli, whereby the ventricle contracts *too soon*—that is, before it has received a sufficient supply of blood from the veins. This condition of the heart characterises what may be properly designated as the *nervous* pulse, or the pulse of emotion. Here, as before, the quantity discharged by the heart is unnaturally small.

II. Pulses of which the characters indicate that the blood-pressure produced in the arteries during the contraction of the heart is excessive, and that, in consequence of increased arterial resistance, the ventricular systole is prolonged.

Under this head three distinct forms of pulse are comprised, viz.:—

1. *The Hyperdynamic Pulse.*—This form, which arises from increased resistance dependent on structural changes in the arteries or their capillary terminations, indicates that during the contraction of the heart the arterial system is *over-distended.* In this case, even if the artery retains its elasticity, the force exerted by the heart is mainly transformed into blood-pressure (β). In such a pulse the curve which indicates the systolic distension is boldly projected, while the diastolic reaction is comparatively feeble.

2. *The Senile Pulse, or Pulse of Inelastic Arteries.*—This pulse resembles the preceding, for senile degeneration is always associated with some degree of hypertrophy; it differs in the complete absence of diastolic reaction.

3. *The Adynamic Pulse of Continued Fever.*—Here the systole is prolonged, not because the resistance is too great, but the heart is too weak for its work. The arteries are comparatively empty, and consequently their elastic yieldingness is unnaturally great. Hence the diastolic reaction is in excess, and the pulse becomes sensibly double, the second beat being often quite as distinct as the first.

In conclusion, the lecturer remarked that the form of pulse to which he attributed the most practical significance was that which he had ventured to designate hyperdynamic. For the structural changes in the arteries and arterial capillaries, of which it afforded unquestionably the earliest indication, were of the gravest importance, not only with respect to prognosis, but in their bearing on the estimation of the expectation of life.

The lecture was illustrated by sphygmographic tracings on glass, which were exhibited by means of the lime-light magic-lantern.

DR. RICHARDSON'S LECTURES.—The first of a course of lectures given by Dr. B. W. Richardson, illustrative of his physiological and pathological researches, was delivered on Tuesday, April 2, at 12, Hinde-street, Manchester-square. The lecture was exceedingly well attended, and went off very successfully. Its substance will, ere long, be in the possession of our readers.

ORIGINAL COMMUNICATIONS.

A CASE OF

ACUTE INFLAMMATION OF THE LEFT SHOULDER-JOINT ON THE FIFTH DAY AFTER DELIVERY—RECOVERY.

By LUMLEY EARLE, M.D.,
Accoucheur to the Queen's Hospital, and Acting Physician to the Children's Hospital, Birmingham.

The following case, interesting from its rarity in the puerperal state, deserves specially to be placed on record at the present time, when the Princess of Wales is slowly recovering from an analogous, if not similar, affection. I shall merely give the facts of the case, without committing myself by entering into the question of the nature of the poison which set up the inflammation of the joint. It was looked upon at first as pyæmia. Whether it was acute rheumatism, or synovitis occurring as a coincidence after labour, or an incipient pyæmia averted, I prefer to leave to those more experienced to decide.

Mrs. T., the patient in question, has been pregnant eight times, but has only one child alive. Nearly all the deliveries have been complicated in some way or other. In the first two the children presented with the feet, one at the seventh, and the other at the eighth month; both had been dead for some time *in utero*. The fourth had to be completed by craniotomy, after attempts had been made in vain with the forceps. In the fifth the infant presented with the feet, and was delivered and resuscitated with considerable difficulty. The sixth, in the absence from town of her Medical attendant, Mr. Cornbill, I had to terminate by craniotomy, after having failed to deliver with the long forceps. In her seventh pregnancy, premature labour was induced at the eighth month, and she recovered without a bad symptom. On this occasion, also, the labour was induced at the same period of gestation, the patient being previously in excellent health.

On Monday evening, January 21, at 8 o'clock, Mr. Cornbill passed one of my india-rubber tubes between the membranes and uterine wall. Two were introduced and left in. Slight pains came on during the night, and she was delivered on the following evening (Tuesday) at 10. The feet of the infant presented, and no difficulty was experienced until the greater portion of the child had been delivered. My friend, Mr. Cornbill, made several attempts for some time to extract the head, but, finding that it would not descend, he sent for me. By placing the head in a more favourable position I at length, with some difficulty, succeeded in extracting it. The placenta came away almost immediately, and the uterus contracted without hæmorrhage. The pulse was quick, but I attributed that to the extra exertion and anxiety of mind resulting from the tedious extraction of the head. Next morning the pulse was, however, still frequent, and the patient complained of a general feeling of *malaise*. She was very thirsty. The uterus was not particularly tender. On Thursday she was about the same. On Friday she was better; the pulse was not so quick, and she had had a better night. On Sunday I was asked to see her again, as in the morning a severe pain had come on suddenly in the left shoulder. I found her very much worse; the countenance was altered, and the skin had assumed an earthy hue. The forehead and the skin generally were covered by a clammy moisture. The pulse was 130, and the tongue dry and rather brown in the centre. There was no pain in the uterine region, or anywhere else except the shoulder. The pain there was very severe and cutaneous, the patient not being able to bear the slightest pressure with the finger, or to have the elbow removed from the side. The conclusion we arrived at was that it was pyæmia, and, taking that view of the case, we felt it our duty to explain to the relatives the grave character of the disease, and to prepare for an unfavourable result. On Monday midday she was somewhat better, but had passed a bad night. On Tuesday she was much worse again. The pain during the night had been very bad, and she had had a long shivering fit. The skin was still clammy, and there was free perspiration. Respiration was quickened, and she said that during the night she could hardly get her breath. She had suffered from this temporary difficulty of breathing a day or two before. The breath had a sweetish odour. The patient also complained of pain about the anus. On examination, a pile, partly external and partly internal, was found in a state of slough; in fact, everything seemed unpromising. The next day she was about the same, if anything a little better. The day after (Thursday) there was a decided improvement, and from that time the constitutional disturbance rapidly vanished. The pulse gradually fell, the thirst disappeared, the appetite returned, the brown hue of the skin diminished, and the tongue became clean and moist. The slough was very slowly thrown off from the pile, which contracted and healed.

The pain in the shoulder did not improve with the symptoms for a long time, except that it did not get worse during the night, as before. Pressure could not be borne, nor the arm to be moved. Even the separation of the elbow from the side sufficient to allow a layer of cotton wool to be passed between gave her pain. There appeared to be a slight effusion of fluid in the joint, but never very much during the whole illness.

Mr. Cornbill and I called upon her last month (seven weeks since her confinement). She had been downstairs more than a week, and feels quite well. There is no pain in the shoulder on pressure. The joint is left somewhat stiff. She can move the elbow from the side several inches, but she cannot touch the face with her hand. The mobility of the shoulder has been daily improving. She showed us a small abscess about the size of a walnut cut in half, situated in the axilla of the other arm, which does not trouble her at all, and will probably be well in a few days.

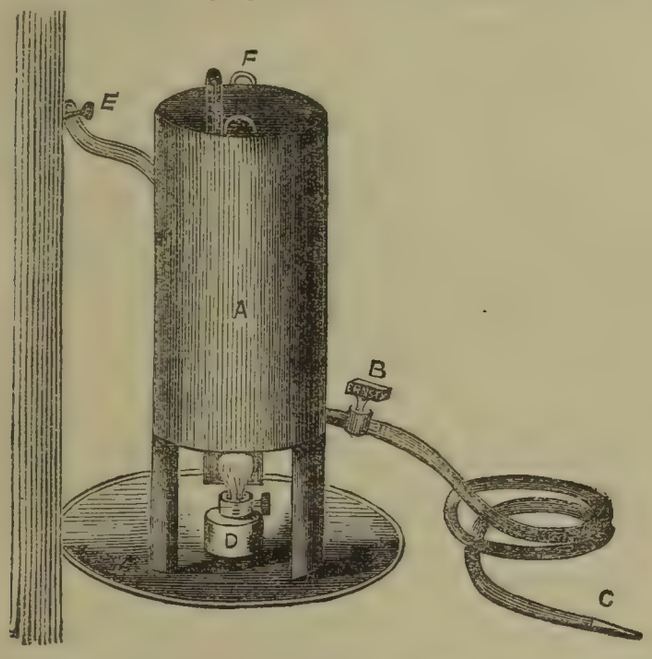
The treatment, before the shoulder complication appeared, consisted in the administration of an ordinary stimulant and opiate mixture every four hours, and beef-tea principally as diet. When the shoulder became affected, a mixture containing two grains of quinine in each dose was given every three hours, and a grain of opium every four hours. In two or three days the dose of quinine was increased to three grains, with the addition of two grains of iodide of potassium, and wine and water almost *ad libitum*. At various times during the illness she had a chlorate of potash drink, and soda water to relieve the thirst. At first the appetite was very bad, and the diet was confined to fluid and easily digested food, such as beef-tea, milk, jelly, etc. As soon as she became somewhat better she had some chicken, and then gradually returned to her ordinary diet. The vagina was syringed a few times, although the discharge was neither very offensive nor copious. The sloughing pile was washed several times a day, sometimes with plain warm water, at others with brandy and water. A rag dipped in a solution of chlorinated soda was constantly kept applied to it, and over that a linseed-meal poultice. Every care was taken to prevent the formation of a bed-sore. For the first week or so a linseed poultice, upon which laudanum had been sprinkled, was applied all over the shoulder-joint, and afterwards, in the place of the poultice, the joint was surrounded with a layer of cotton wool.

ON THE INTRODUCTION OF FLUIDS INTO THE VEINS IN CHOLERA BY GRAVITY.

By L. S. LITTLE, B.A.,
Assistant-Surgeon to the London Hospital, and Surgeon to the National Orthopædic Hospital.

Fluids have hitherto been introduced into the veins with a syringe, as the term "injection" would indicate, although, as the older writers on the subject used the word infusion, there is some doubt about the instrument used by them. In the first few cases of cholera where I tried this method of treatment I used a syringe, and experienced the trouble and risk attending the operation, but latterly have employed the force of gravity alone. For this purpose I had made by Ernst the apparatus figured. It consists of a zinc vessel holding eighty ounces, with a lamp underneath, a thermometer hanging within, and a tap near the bottom, from which proceeds an india-rubber tube four feet long, with a silver nozzle at its end. When this instrument is placed at the bedside, about on a level with the patient's head, and the nozzle inserted into a vein at the bend of the elbow, its contents flow in in about twenty minutes. The bend of the elbow is the most convenient place for the operation. There is generally little trouble in finding a vein, but often some in introducing the nozzle, as in cholera collapse the veins of the extremities are much contracted, and pressure on them above has little or no effect in distending them below. I find it best, in order to avoid injecting the cellular tissue, to expose the vein freely and pass a probe under it; then, having made a longitudinal slit in the vessel, to turn on the fluid. This washes away any blood which may

obscure the opening, and makes it easy to place the nozzle in the vein, with the certainty that no air can enter it. The fluid in the india-rubber tube, if it has stood some time, is likely to be cooler than that in the vessel; care should be taken to avoid this, as a temperature below 100° is decidedly injurious. The advantages of this method—by gravity—are that the fluid is introduced in any quantity at a uniform pressure and temperature in a continuous current, as is natural in a vein. The rapidity of the current is easily regulated by raising or lowering the reservoir or instrument, according to the symptoms manifested by the patient during the inflow of the fluid and its admixture with the rest of the circulating medium. The operation is much more easily done than with a syringe. The Surgeon requires much less assistance, as when the operation has been commenced it may be regarded as automatic, and the Surgeon can at his ease watch the patient, record the symptoms, and attend to the further supply of fluid and to its temperature, as the progress of the case demands.



The nozzle used should be fully as large as the vein when distended will admit, and if the nozzle be not sufficiently large, the vein must be pressed or tied round it. I have heard of one case where, whilst the fluid was passing into the vein, a gurgling was felt in the arm. The Surgeon immediately compressed the part, and after some little time he allowed the operation to proceed. There was no immediate unusual effect, but after death, which took place in three hours, air mixed with blood was found in the heart. In this case, if any air really obtained access, it must have done so along the side of the nozzle, probably during some movement of the patient.

Occasionally there is some difficulty in the operation, and the fluid will not flow at all. I have only noticed this once at a first injection, and in this case, after death, clots were found extending from the heart into all the larger veins, including the axillary, so that the attempt to inject was made too late, and only distended the veins of the arm, none of the fluid having traversed the axillary so as to reach the heart. This difficulty has occurred twice to me when attempting to inject a second or third time, and on these occasions the cause must have been a local clotting in the vein, and not generally in the large trunks, as the injection in these cases succeeded afterwards in the saphena vein at the ankle, and one of the patients is now alive.

I have injected defibrinated blood, serum of sheep's blood,(a) saline solutions of different strengths, and saline alcoholic solution, the latter the only one with success. It consisted of

Chloride of sodium	60 grains
Chloride of potassium	6 ,,
Phosphate of soda	3 ,,
Carbonate of soda	20 ,,
Alcohol	2 drachms
Distilled water	20 ounces

The alcohol should be added only at the last moment, and the fluid should never be allowed to rise in temperature above 110°.

It is very difficult to determine any fixed rules for guidance as to the quantity of fluid to be injected, and the rapidity with which it should be introduced. The respiration is, I think, the most important and best guide; it is always very frequent in cholera collapse, and if it becomes more so during the injection, the operation should be retarded and suspended if the increased frequency continues. This very rarely happens; the breathing usually becomes much slower and deeper during the injection, coincidently with the return of pulse at the wrist and general improvement. It does not do, however, to stop directly there is a fair pulse, which often returns after a few ounces have passed into the veins. I do not think I ever injected too much, but sometimes not enough, and, as a rule, never inject less than eighty ounces at a time in an adult. Theoretically, perhaps, the quantity of fluid injected should be proportional to that lost by the evacuations; practically, it is difficult to determine the amount of the latter, as the statements of patients or their friends as to the history before admission into the Hospital are most indefinite. When a patient has vomited and been purged little, his belly may be full of fluid, which fact is important in the consideration of this subject.

The necessity of repeating the operation again and again directly the pulse fails cannot be too strongly impressed on any one intending to try this treatment. In one ultimately successful case, after injecting sixty ounces with exceedingly good result at the time, the state of collapse with pulselessness returned so soon that I injected 80 ounces more with only an interval of a quarter of an hour.

The Surgeon should never give up hope or think the patient too nearly dead, the effect of the entrance of warm fluid into the heart being very striking, even after death. A child which I was about to inject died just as I was ready to begin the process. Of his death there could be no doubt whatever. Nevertheless, two minutes after his heart had ceased to beat and the last respiration had taken place, I injected as a physiological experiment and attempt at resuscitation. As soon as the first few ounces had passed into the body, the heart recommenced action so strongly as to cause a pulse at the wrist. The injection was continued for ten minutes to the extent of forty ounces, the heart acted on for five minutes longer—*i.e.*, for fifteen minutes after death, with no restoration of breathing, although artificial respiration was tried. This fact will lead me to try saline or water injections on an emergency in any case of death from chloroform, hæmorrhage, or drowning.

I have injected twenty cases of cholera at the London Hospital, all considered hopeless by Dr. Fraser and Dr. Jackson, the Resident Physician, and myself, unless so treated; in fact, the injection treatment has only been adopted as a last resource, and has not had for that reason a fair trial. Of these five have recovered, and in one other after eight weeks(b) the result is still doubtful, owing to the complications—abortion, and abscesses with symptoms resembling pyæmia. If merely a low mortality were aimed at, by discarding unpromising cases, an apparently much better and more showy result might doubtless have been obtained.

The patients generally came under this treatment from eigh to twenty hours after the setting-in of urgent symptoms. They were at that time all pulseless at the wrist, livid, with a temperature in the axilla of 92° to 95°, with purging, vomiting, and cramps in the limbs and abdomen, with frequent respiration (sixty to the minute in one successful case), voiceless, and with the anxious cholera countenance. In several cases the operation was performed so late that little improvement took place, but in all a pulse returned, as a rule, during the injection. The voice, also, was restored; the colour and expression improved, the cramps were relieved, and hope, for the first time since the commencement of the disease, led them to believe themselves half recovered already, and to have no doubt as to the future. In most cases, shortly after the injection the temperature in the axilla rose about 5°. This rise was accompanied by a severe rigor and profuse perspiration, the cramps, thirst, and vomiting ceased, and the patient was "comfortable." The rigor is the most extraordinary symptom noticed, and it occurred in the most promising cases. All those who recovered had one or more severe rigors. This attack was in some very sharp; the teeth chattered, the bed shook, the patient complained bitterly of cold; at the same time the temperature rose several degrees in the axilla, and but for the cold the patient expressed himself as infinitely better, and was so.

It is worthy of remark, that the patient who had the most severe rigor had the greatest rise in temperature. She was a

(a) See *London Hospital Reports*, vol. iii., 1866.

(b) This case has since made a good recovery.

stout woman, aged 28, was taken suddenly ill with cramps, purging, and vomiting, at midnight, and had had no premonitory diarrhœa. She was admitted into the Hospital in the morning, and by midday was thoroughly collapsed, with frightful cramps, pulseless and livid; respiration 42; temperature in the axilla 92·2°; in the vagina 101°. She was injected to the extent of 120 ounces; the pulse returned at 98; the respiration fell to 86; the temperature in the axilla was 95·2°; in the vagina 100°. The cramps lessened, but she had a severe rigor, and two hours after the injection the temperature in the axilla was 102·6°, being a rise of over 10° in two hours. Certainly, in this case the injection had some effect, and threw the disease quite out of its course. I do not remember a case of cholera (unless injected) where the temperature was at any time above normal. At six the next morning the temperature had fallen again to 94°, the pulse was very small and very frequent, and the patient was reinjected. She went on well subsequently, and made a good recovery, without reactionary fever or other bad symptoms.

The rigor never came on before the injection was over, but generally a few minutes afterwards. Hot-water beds, hot brandy and water, and lots of blankets were employed, and made the patient more comfortable, but probably had little effect on the duration of the shivering. The perspiration was sometimes very profuse for one, two, or three days after the injection, and although the temperature kept up in the axilla, the skin was cold, wet, and sodden, and the application of external heat and rubbing seemed necessary to evaporate the sweat. Although sometimes during the injection the vomiting was profuse, apparently excited by the operation in patients too weak or too nearly dead to vomit before, still it almost invariably ceased after the injection, and the patients were at once able to take a little fluid food, stimulants, or any medicine thought useful for any particular symptom. The purging often continued after the operation to a less extent than previously. I generally tried to check it, or else a state of prostration seemed to continue (not collapse), which proved fatal in two cases which were apparently in a fair way to recovery.

The saline injection invariably relieved cramps, and in most cases entirely removed them. If the injection had no other effect than this, I would practise it merely for this purpose—viz., to relieve the pain of the cramps, which is most distressing to witness, and certainly a cause of extreme suffering to the patient.

Another noteworthy result of injection was the cessation of thirst; for whereas previously the patients drank with avidity cold and iced fluids, afterwards they liked warm drinks, beef-tea and meat, brandy and water.

Of the twenty cases mentioned above, besides those who finally recovered, three others seemed for a time to promise well, one living six days, another five, the third nearly three after the first injection. The first of these was for two days considered quite convalescent; he had no reactionary fever, and was thought out of danger. Profuse purging came on again, which he attributed to fright caused by the removal from the ward of a violent case of delirium tremens. He again became collapsed, refused to be reinjected, and died. He was a weak sickly man, and the father of the subject of the second case of temporary recovery, a boy, whose death is attributable to his strumous constitution. The third case was that of an old man who had Bright's disease. Previous organic disease is frequently, as it was in this case, one cause of a fatal result in cholera. This is conclusively shown by Dr. Woodman in his unique report of the cases in the Wapping Cholera Hospital.(c)

The risk of the operation of introducing fluids into the veins is doubtless very slight, and it is clear that in cholera the fluid does no harm when received into the circulation. In no case did any accident occur, or was death accelerated, nor was there after death any alteration either in the naked-eye or microscopic appearance of the blood and textures. Does the fluid do any good, and what is the value of saline injections in cholera? If the answer to the first question is affirmative, then in what cases and at what stage of the disease should this treatment be adopted?

This is a subject more properly belonging to the Physician; but as, through the kindness of my colleagues, I have had cases of cholera under my care, and have necessarily formed an opinion, I may be permitted to state it. At least fifty in one hundred of all cases of cholera collapse die; the other fifty get well, and no drug or so-called remedy has the least effect; even if it could be beneficial, it is not absorbed, and has no time to act. There must, however, be of the fifty fatal cases some few whose life is for a time on the balance, and art might hope to turn it the right way. Injection of fluid is the only thing that has any effect whatever either in relieving suffering, beneficially modifying urgent symptoms—*e.g.*, the pulse, temperature, thirst, spasms, and vomiting. Whatever temporarily relieves dangerous symptoms—*i.e.*, tendency to death, is entitled to more confidence as a remedy in this fatal disease than drugs which are proved to be absolutely inert. I believe the cases healed at the London Hospital by injection were amongst the fatal 50 per cent.; therefore, every case which recovered is a life saved. This was also the opinion of Dr. Fraser, Senior Physician, and Dr. James Jackson, Resident Medical Officer, under whose eyes all the 700 cases of cholera admitted into the Hospital this autumn passed.

In any future epidemic, to try this treatment more satisfactorily, a given number of cases of true collapse entering the Hospital consecutively should be taken, every one injected, and an attempt made to see whether the present high mortality could not be lowered. With any other method of treatment, whether castor-oil, camphor, or calomel, the drug is given to every case, whether slight or severe, and the nnmber which recover are called cures. In trying the saline injections treatment I do not propose to give it the same favour, and that every case should be injected, but every one which reaches the stage of decided collapse, and before it has been long in it, and not after drugs in large quantities have been put into the stomach, which begin to act injuriously as soon as the patient is roused and his circulation restored by injection. On the other hand, this plan of treatment is one of great labour and difficulty, and he who undertakes it in any case must never leave the patient until the sufferer is either dead or out of danger.

By the introduction of this gravity-action apparatus one difficulty is removed, and that which is material in a cholera epidemic—a saving of Medical labour—is effected, as one Surgeon can undertake the case during and after the operation.

(c) "London Hospital Reports," vol. iii., 1866.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0

Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

Terms of Subscription for India, £1 15s. per annum.

The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.

Post-office Orders and Drafts on Army or Navy Agents, should be made in favour of Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d.	A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d.	A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, APRIL 6, 1867.

THE OBSTETRICAL SOCIETY AND MR. BAKER BROWN.

I. The Charges.

The deed is done. Mr. Baker Brown's name is removed from the list of Fellows of the Obstetrical Society of London. The Profession has spoken out, and in such a way that so painful a proceeding will hardly need to be repeated.

As our readers know, the Council of the Obstetrical Society, at the meeting in March, notified to the Fellows that there existed just cause, in their opinion, for the removal of Mr. Baker Brown's name from the list of Fellows. That cause was stated to be "the published matters in relation to the performance of clitoridectomy by Mr. Baker Brown." Those "published matters" were shortly afterwards circulated amongst the Fellows, with a few remarks by the Council;

and each Fellow received from Mr. Baker Brown, a few days later, an answer to each numbered paragraph of the "published matters."

The charges implied in, or deducible from, the published matters may be thus summed up :—1. "That clitoridectomy has been performed by Mr. Baker Brown on married women without the knowledge and consent of their husbands, and upon both married and unmarried women without their own knowledge of the nature of the operation. It will be seen from the case related by Dr. West, and supported by the authority of Mr. Paget, as well as by the statements of the ordinary Medical attendant, the patient herself, and her husband, that the clitoris was removed without the knowledge of her husband, and without the ordinary Medical Practitioner being consulted as to its propriety, although he was present when the operation was performed. These facts stand admitted by Mr. Brown. The lady herself, 53 years old, declared she had never practised self-abuse, and that the operation was performed without her being cognisant of its nature. Mr. Brown, it will be observed, accuses the lady of malpractices, and endeavours to throw discredit on her testimony, but he does not plainly and directly contradict her declaration that the clitoris was cut off without her knowing anything of the operation until after it was performed."

2. "That Mr. Brown has amputated the clitoris entirely on his own responsibility, and without the concurrence of the patient's ordinary Medical attendant, who was, notwithstanding, present at the operation. Conduct so directly at variance with the rules that govern the mutual intercourse of Professional men meeting in consultation, cannot fail to compromise the ordinary Medical attendant, and to place him in a degraded position."

3. There is quite a minor charge, as to whether Mr. Brown did or did not offer to submit the operation to the judgment of the Council of the Obstetrical Society. On which the Council say "no available request to appoint a committee ever came before either Council or Society, while, on the other hand, the whole of this correspondence goes to show that, while professing to court inquiry, Mr. Brown was really taking considerable pains to avoid it."

4. The charge of "want of credibility as to matters of fact and detail." As an instance of which may be taken Mr. Brown's letter to the Commissioners of Lunacy, in which he states that the Surgical Home "is not open for the reception of females of unsound mind," coupled with the fact that his book is entitled "On the Curability of Certain Forms of *Insanity*, etc.," and that some of the cases of insanity were treated in the Surgical Home.

The answers which Mr. Brown circulated to these charges, or to the evidence from which the charges are deduced, are in substance as follows :—

"1. I entirely deny operating upon this patient" (viz., the patient referred to by Dr. West) "without *her* cognisance. She had been under treatment for some seven years. The clitoris was cut away by her express sanction—she binding me to secresy both from her husband and her Medical attendant—for, although she may not have been acquainted with either '*the name or nature of the vice to which she was addicted*,' yet she confessed that she was in the habit of rubbing the clitoris and labia. Moreover, the nurse can attest that she even continued this practice after the operation. That the operation has done her good, even at this distance of time, is clear, from a report I heard but three or four days ago, to the effect that, whereas before she was a confirmed invalid, now she goes about in comparative health.

"I now regret that I was induced to keep the husband in ignorance of the cause which led me to operate ; but it must be remembered my position was an awkward one. When a patient has put implicit confidence in her Medical attendant, and has made most painful revelations, and then begs for secresy, it is next to impossible to refuse attention to her plea ; though experience makes you feel that, should she on any subsequent occasion find it necessary to screen herself, she may unhesitatingly make a 'scapegoat' of her best friend."

2. As to the second charge, Mr. Brown says :—"In all my operations, I never shirked, and I never will shirk, taking the entire responsibility. In my opinion, a consulting Surgeon is bound to do so, having regard both to the welfare of the patient and the position of the Practitioner."

3. The third is a complicated question, and one too long for present discussion. There is no doubt but that Mr. Brown wrote to the Council on January 7, offering facilities for investigating the subject of clitoridectomy.

"Immediately after writing this letter," he says, "I was taken seriously ill, was confined to my room for three weeks, and consequently heard nothing of what was going on in the Professional world. A very intimate and personal friend, a 'Fellow of the Society,' at the end of this time, called on me, and said, 'I hear that your enemies in the Council do not intend to treat you fairly, and will not allow a fair investigation of your cases ;' indeed, he said, 'it is a matter of general conversation that several Councillors are agitating your removal from the Society.' He advised me, therefore, to withdraw my letter to the Council, and, subsequently obtaining further confirmation of these reports, I accordingly wrote the following :—

"'*To the President of the Obstetrical Society.*

"'January 31, 1867.

"'Sir,—As I have received no acknowledgment of my letter on the subject of clitoridectomy, although some weeks have elapsed, I now beg to withdraw that letter.

"'Yours truly,

"'I. B. Brown.'"

4. On the fourth charge, says Mr. Brown :—

"Now, the next subject is as to my credibility on matters of fact and detail. In relation to the correspondence with the Commissioners of Lunacy, I here repeat that, if I had been called before the Council to explain, I could have satisfied any disinterested parties that there was no want of veracity on my side, and no desire to suppress the truth. But I would briefly state that, having received a letter from the solicitor to the Commissioners of Lunacy, I placed the matter immediately in the hands of my own solicitor, and acted under his direction."

Let us, before quitting this part of the subject, call attention to the following extract from Mr. Baker Brown's work "On the Curability of Certain Forms of Insanity, etc. :"—

"It is curious that a Physician, for many years connected with one of our largest metropolitan Hospitals, and recognised as a standard writer on female diseases, has, in writing, condemned my practice in not very measured terms, but is himself constantly in the habit of trying to subdue this peripheral irritation by continual application of the strongest caustics to the seat of the irritation."

Next, to the following extract from the *Lancet*, amongst the "published matters" issued by the Council :—

"If I am correctly informed, Dr. West has had under treatment a lady afflicted with hysterical fits of an epileptoid character, which he attributed to masturbation, and for the relief of which he applied caustics to the clitoris without any good results. He then recommended the lady to come to London for the purpose of undergoing the operation of clitoridectomy. Further, in another case brought to me by an eminent Physician in London, Dr. West had given his opinion to the effect that that case was a suitable one for my operation."

Next, to the following extract from a letter of Mr. Brown to the *Lancet*, December 22, 1866 :—

"I have in my possession a prescription signed 'C. W.,' written early in 1865, which I have shown to several Medical friends, and there is no doubt that it is in the handwriting of Dr. West. Amongst other items is the following :—℞. Argenti nitratis gr. v. ; aquæ dest. ℥j. M. ft. lotio."

The graduated series of assertions—beginning with "*constantly* in the habit . . . *continually* applying the *strongest caustics ;*" then, "a lady afflicted with etc., etc., for the relief of which he applied *caustics ;*" and, lastly, the one bottle of solution of nitrate of silver, five grains to the ounce, is very fine. Mr. Brown, in his Reply, states that he put the case on the supposition "If I am correctly informed," and that "his only authority was the nurse." He further intimates that there may have been two patients treated by Dr. West,

and that Dr. West may have been mistaken in the identity of the case which we have quoted above.

Such is an outline of the charges, and some of the facts alluded to at the meeting.

II. The Meeting.

At last the evening came. The Fellows, as they entered the well-known doors of the Medico-Chirurgical Society's house, were startled at the unusual sight of a strong force of policemen, and of stout barriers for the purpose of letting the visitors enter slowly, so that each might sign the book and be identified. Any one who remembered the turbulent attempt of a clique of visitors to browbeat the Council and interrupt the proceedings of the former meeting, was satisfied with the wisdom of this arrangement. A passage from a well-known oration flashed spontaneously across more than one mind, "Nihilne te nocturnum præsidium palatii, nihil consensus bonorum omnium, *nihil hic munitissimus habendi senatûs locus* moverunt?" Heaven knows, though, that the feeling with which the Fellows regarded the unhappy subject of the meeting, as he walked into the room at a quarter to eight and took his accustomed seat for the last time, was not that with which the Roman orator regarded Catiline. "Imo vero etiam in Senatum venit;" but as he came, it was, if not commiseration, certainly regret, which filled the thoughts of the Fellows. Here was a man of undoubted ability—nay more, of undeniable originality and genius—who has kept himself prominently before the Profession for nearly thirty years; who has, to his credit, risen from the ranks, from the status of the general Practitioner to that of the Hospital Surgeon; whose boldness and originality in experiment certainly conduced much to the present successful treatment of ovarian disease by operation; whose skill in plastic operations is undoubted; who has identified a considerable portion of Surgical practice with his own name; who has enjoyed high patronage and association, and been able to found a considerable institution—and yet that such a man, with such a career open to him, should absolutely publish and do things that drive his oldest friends and colleagues to remove him from a Professional society, and that he should defend himself by statements which only serve to clinch the original charges! There seems such a want of harmony in the mental operations—such a want of power of perceiving the relation which words bear to facts, and the incongruity of different versions of the same fact, as belong rather to the category of intellectual deficiency than to that of wilful misdoing—to suggest, "*Quem Deus vult perdere prius dementat.*"

The room slowly filled, and by eight o'clock standing room was in request. Altogether, 237 out of the 530 Fellows were present, including many who had come long distances.

Not only were the barricades at the entrance thoroughly calculated to secure the Society from intrusion, but the elaborate arrangements for enabling the Fellows to deliver their votes in an accurate and uninterrupted manner were a good augury of the order which characterised the proceedings. The President and Council took their seats punctually at 8 o'clock, and the business began with befitting gravity and seriousness. Dr. Routh rose, as on the former occasion, "to ask a question," but the voice of the meeting was against interruption as unmistakably as the wooden barricades at the door.

After the President and Secretary had opened the business, Mr. Seymour Haden moved the resolution of the evening amidst profound silence. His speech was pungent, and quite to the point. In one passage we must caution our readers that they are to take it as a statement of what might be possible rather than of actual fact. So it was understood. We may say that it relates to no part of the "published matters," and so may pass it over. One thing is clear, from the speech of Mr. Haden and from that of Dr. Barnes, who followed, that the movement against Mr. Baker Brown emanated from no jealous rivals, but from men quite out of Mr. Brown's way, and who represent the Profession in its nearest relation to family life.

Then came Mr. Brown's speech; of which all that can be said is to express regret that he had not disconnected himself from the Society voluntarily, rather than show himself so little able to maintain his position in it. He spoke with a feeble and disheartened air, reiterating commonplaces about the opposition all new operations meet with; affirming the purity of his own intentions, and demanding that he ought to have a fair trial and a patient hearing—that the Council ought to have pointed out in what he was wrong, and so on. At one point he met with a good deal of interruption, which was appeased by an appeal to the Chair, although the feeble reiterations which he subsequently uttered, amidst the profoundest silence, showed that his best friends might well have wished for the most noise.

After Mr. Brown's speech followed the only one voice which really did Mr. Brown service. Dr. Robins, of Charlotte-street, an elderly man, not a practised speaker, and not in any way acquainted with Mr. Brown, claimed the indulgence of the meeting for him, on the ground of the skill and success which had attended his operations, and the fact that Professional enthusiasm might have carried him on to perform some which were not strictly justifiable.

Then followed Dr. Squire on some matters of fact relating to Mr. Brown's alleged proposal to submit the operation of clitoridectomy to investigation by the Council of the Society. Dr. Savage next spoke, chiefly in vindication of himself from the charge of having acted out of order at the last meeting, with a very few words not so much in Mr. Brown's favour as commending him to the mercy of the Fellows. Dr. Wynn Williams, who, like Dr. Savage, had spoken rather prominently in the foregoing meeting, rose to vindicate himself for demanding the publication of the documents, but wound up his speech with a hearty commendation of the Council. Then came Dr. Routh, whose ill-wishers only, if he have any, could have wished him the patient hearing which he craved, and which thoroughly enabled him to damage himself and to ruin his client's case more hopelessly than ever. With the worn-out commonplaces about the fallibility of human opinions, Dr. Routh combined a display of casuistry, only not painful because ridiculous, the gist of which, if any, was, that because Medical men might become the depositaries of unpleasant secrets, or because difficulties might arise in which a just and prudent man might have doubts as to his conduct, that, therefore, clitoridectomy is justifiable without the patient's knowledge.

Dr. Routh was more successful when he appealed to the meeting on the score of what Mr. Brown had done for science, and of his position as a middle-aged Practitioner and father of a family.

Dr. Tyler Smith followed with a crushing rejoinder. A "sporting circular, about the obstetrical hunt" and its "meets," had been circulated a few days before, urging the Fellows to take pity on their fellow whip, who had been run away with by a vicious mare yclept Clitoridectomy; and describing Dr. Routh as the "Good Samaritan." Dr. Smith, amidst the roars of the audience, described him as the Samaritan who lavished his care on persons who had wounded him, and left the traveller lying wounded by the wayside. He urged the necessity of protecting women and children. He averred that no promises could bind Mr. Brown, who, whilst publicly promising to desist from clitoridectomy, really performed it after a manner described in a letter which was read from Dr. Locking. A letter from Dr. Locking containing an account of that very clitoridectomy by the actual cautery was sent us for publication three weeks ago, but we declined to insert it in the *Medical Times and Gazette*, from the desire not to accumulate charges against a man who had more than enough on his shoulders already. Our

readers will not fail to note the unhappy dubiety as to matters of fact which marks this, as it does every other part of these lamentable transactions.

After some further discussion, the Fellows evidently considered it superfluous to call on Dr. Barnes for his reply on the whole case, but at half-past ten they proceeded to vote. Nearly an hour passed before the scrutineers handed in the result, when it appeared that the removal was carried by a large majority; the President accordingly pronounced Mr. Brown removed from the list of Fellows, and the proceedings terminated with a vote of thanks to the President and Council.

So ended one of the most memorable days in the history of the Medical Profession. We feel, as public journalists, that the whole Medical body lies under infinite obligation to the Obstetrical Society. The task they undertook was in itself troublesome, anxious, repulsive, and such as would subject them to obloquy. But what they undertook reluctantly they have done thoroughly. We know not whether most to praise the President's calm firm attitude, the admirable arrangements for the comfort and security of the meeting made by the Secretaries, or the healthy moral sense and unmistakable sentiments of the Fellows.

III. The Moral.

The moral of the matter is this. Hitherto Physic has been what we may call an unspotted Profession. People may laugh at the blunders or at the differences of Doctors, or even occasionally, in joke or earnest, affirm that we kill our patients. But all this does us no harm. True, some of our work is nasty in itself: there is the dissecting-room, the post-mortem, the necessity of attending to many physical evils disgusting in themselves, and arising from vices more disgusting still. Moreover, we have been suspected of occasionally carrying with us the germs of infection—of being the vehicles of puerperal fever or scarlet fever. But for all this we were a pure Profession; none of the nastiness was of our own making, and none of it stuck to us. In this respect we are happier than the Catholic priesthood. They have to deal with moral evil; their vocation as confessors forces them to know the lowest forms of depravity; their books are said to enumerate unmentionable vices; and they are popularly, although we believe quite wrongly, accused of suggesting to their female penitents the existence of sexual depravities of which every decent woman should be ignorant. We say emphatically that we disbelieve these accusations against the Catholic priesthood; anyhow, valid or invalid, and although they are the results of a system centuries old, which they have inherited and not created, they suffer from the imputation in the eyes of a certain section of the population. It is the common cry (and, like all dirt thrown often enough, some of it sticks) that women are contaminated by the questions of the confessional.

But, unhappily, as things are, our Profession is losing, or liable to lose, this very stamp of purity which is so precious, and to acquire now, quite gratuitously, by our own fault, that same odium which the Catholic priesthood inherit without any fault of their own. When a Hospital Consulting Surgeon, with baser imitators in his train, can publish a long list of maladies, including those indefinite hysteric and other diseases of nervous debility, from which few young women are exempt, and can assert that a vice, too odious to name, is at the bottom of the symptoms, and that he can diagnose the existence of this vice by inspection, what father can be certain but that if his young and pure daughter seek ordinary Medical aid for the commonest ailments, she may be subjected to a string of insidious questions, with the aim of fastening on her this odium and stigma, and subjecting her to a cruel and disgraceful mutilation? Thank God, as yet the accusation does not come from without. It is our own body that is conscious of the impending disgrace, and healthy enough to throw it off. The Obstetrical Society has saved us.

ARMY MEDICAL DEPARTMENT.

We have to congratulate the Profession generally, and the members of the Army Medical Department in particular, upon the important changes which have taken place since the date of our last number.

There is a new Director-General and a new Royal warrant for the Army Medical Service!

We prepared our readers for the first when we urged the claims which Dr. Logan undoubtedly possessed. While we quite concur in the opinion that mere seniority should not be the sole ground upon which to select a Director-General, we ventured to express our condemnation of the premature advocacy of the claims of a junior officer for that post. We did this for what appeared to us, at the time, to be very good and sufficient reasons. At the present crisis it was all-important that a courteous and popular, as well as an able, man should be selected. We presume the members of the Department best understand their own interests, and there can be no doubt that the selection made by the authorities is the popular one. But this was not all. Dr. Logan possessed great experience of the service; he had served in almost all climates; he knew very intimately the official routine of the Department; he enjoys the credit of having identified himself with the best interests of the Medical officer, and he ought to be acquainted, if any one ought, with the wants and wishes of his subordinates. However, there is no need to pursue this subject. It only remains for us to congratulate him, and wish him success. The undertaking requires courage, temper, and ability, no doubt; but Dr. Logan is fortunate in taking the helm at a good time.

The next point is the new warrant! Without circumlocution, we will say at once that it is a good one, and ought to satisfy reasonable men. That it will satisfy everybody we need not expect. But we have taken some pains to inquire of men in the army and out of it, and the verdict has been a favourable one. No doubt it is, to some extent, a compromise, but it is none the worse on that account. Neither Reformers, Conservatives, nor Medical officers are likely to get *all* they want—indeed, we question if it would be possible to satisfy all parties. There are two sets of officers in the Army Medical Department, and these hold opinions which are so antagonistic the one to the other that they cannot be reconciled. The first, and, we trust, a very small, section look to the advantages of military rank as everything. The other, and, as we think, the men of a truer instinct, count upon the recognition of their Professional claims—their characters as men of education, thought, and scientific training—as the main object to be gained. They believe that they see an evident tendency towards an elevation of the Profession as such; that it is daily putting forward new claims which are gradually becoming recognised as just and good; and they think that if we are only true to ourselves, honest in our efforts at reform and improvement, and frank in our conduct, the Profession of Medicine will occupy a higher and better position in the political and social world than it has yet done. A Medical officer's position must be fixed and determined by some rule, and that of relative military rank has been adopted as the only practicable one. By all means let the Medical officer be treated with the consideration due to his rank and position. But we never desire to see Medical men transformed into mere officers. We have no sympathy with the very military type of Doctor. He is too apt to ignore his Professional status, and to ground his claims to respect upon the light reflected from the *insignia* of military rank. So long as the public thinks that it perceives this tendency in Medical men, just so long will our Profession suffer injury and loss in public estimation. A Medical man, as a man of scientific education, ought to sail under true

colours. If the Profession, as such, has not sufficient claims to public respect and esteem, we may rest assured that it will not obtain these by appearing in the garb of the military one. We have said thus much because we think that we have perceived the injurious influence exerted by a small but noisy class of men in the public services. With the tone adopted in some of the letters which have appeared from time to time in the newspapers and journals, we have been irritated, and we believe that all the really good men of both services have concurred with us.

But to proceed to the warrant. It unquestionably makes many concessions. There is an *adequate*—we had almost said a *liberal*—scale of pay for the youngest men; there is a slight increase for the Surgeons and senior officers; an earlier retirement is granted—not at a high retiring allowance, certainly, but still it is granted—and provision is made for those cases in which the retirement is compulsory or due to sickness; honorary ranks and distinctions have already been fairly bestowed, and to these good-service pensions have been added; merit and ability, as opposed to mere seniority, are even more plainly recognised; and, lastly, power is given to the Secretary for War to employ half-pay officers in sundry situations at such rates of additional pay as may be determined on.

We presume that the warrant has been framed in anticipation of a plan for re-organisation of all the departments. It comes under the head "Finance," and Medical officers are denominated "officers of the Medical branch of the Hospital Department of our army."

We gladly adopt another tone in speaking of the Army Medical service. It was our duty to indicate and condemn its many defects and shortcomings; we need do so no longer, and we hope that the number of candidates at the next competitive examination may prove to the authorities that their concessions have not been unrecognised.

One word, in conclusion, to the authorities. Carry out the warrant honestly and fairly, and there is no reason why you should not bear away from our Medical schools a good many very able and enterprising young men—men who have received a good education and a careful scientific training. To succeed thoroughly in private practice requires not only considerable ability and industry, but it often demands courage under failure, patience, and long-suffering, and there are many very able men who are glad to avoid the trial. To such the army is open, and we venture to prophesy that, if the Medical Department obtain a good sprinkling of such men, it will speedily undergo vast improvement, not only in itself, but still more in its estimation by the other branches of the service and the public generally.

THE WEEK.

NEW MEDICAL BARONET.

The Profession will learn with gratification that the veteran Surgeon, Mr. Lawrence, has received the honour of a baronetcy. We believe that on a former occasion Mr. Lawrence declined the same distinction. We are glad, however, that he has now consented to accept it, as it will be welcomed by the Fellows and Members of the College, the fame of which he has during the past fifty years contributed in no small degree to support and extend, as a fitting State recognition of the important services he has rendered to the progress of Surgical science.

THE NEW DIRECTOR OF THE ARMY MEDICAL DEPARTMENT.

The *Gazette* of Friday, March 29, contains the following important announcement:—

Inspector-General of Hospitals Thomas Galbraith Logan, M.D., C.B., Honorary Physician to her Majesty, to be Director-General of the Army Medical Department, *vice* Sir James Brown Gibson, K.C.B., M.D., whose period of service expired on March 7, 1867.

We are certain that Dr. Logan enters upon his high and responsible duties with the best wishes of the whole Medical Department. Judging from the golden opinions he has won from all who have come in contact with him, we have never had any doubt that his appointment would be thoroughly acceptable to the mass of gentlemen who are to serve under him. We heartily hope that it, together with the new Warrant, the provisions of which now come into action, will be found effective, because substantial, measures for allaying the discontent which has hitherto thinned the ranks and diminished the usefulness of the Army Medical Service.

THE PATHOLOGICAL SOCIETY.

At this Society on Tuesday night there was a very keen discussion as to the inoculability of tubercle, and the nature of the products of this inoculation. The President had brought forward certain specimens at the former meeting, and Dr. Andrew Clark now brought forward some of his, which led him to entertain a different belief from that adopted by Mr. Simon. We propose referring to the subject again.

THE EMPLOYMENT OF SOLDIERS.

We may refer our readers to the debate in the House of Lords on this subject, on the 1st inst., as a healthy sign of the times. The discussion arose out of a petition, presented by the Earl of Hardwicke, from several residents in Colchester. The meeting at which the petition was framed was presided over, we believe, by a member of our Profession. Every soldier ought to be taught a trade in the army, if possible. Nothing would better tend to raise the army in public estimation. Idleness is the root of many of the evils which at present exist. That is the opinion of most Medical officers. A soldier on leaving the service might have saved up a little money as an addition to his pension; at any rate, he would be fitted to increase that pension by some daily occupation of a remunerative character. We should not then see so many of those warnings against recruiting as we do now in the persons of miserably poor discharged soldiers. At present, with "Fenianism" in Ireland, a regiment is never sure of remaining a week at one station; but, under ordinary circumstances, regiments are moved too often at great expense to the State, and much personal discomfort to the soldier.

THE BRITISH KNAPSACK.

Of the many troublesome things connected with our military service few give greater annoyance to the private soldier than the present regulation pack. Nor is annoyance the only consequence, for, according to a report made in 1865 by a committee constituted of Generals Eyre, Rumley, and Horsford, and Drs. Logan and Parkes, there could be no reasonable doubt of its being the prime cause of that excessive prevalence of heart and lung disease which is so disastrous to the interests of the service. To recognise the source of the evil, however, was one thing—to find a remedy, another. Many systems were considered, but the great difficulty of obtaining a light, convenient, and serviceable article was not so easily overcome. Four systems were selected for experiment, but all failed to satisfy the demands of the occasion, more especially when they came to be looked at by the light of last year's wars. The principle of one of these (Sir T. Troubridge's) has, however, been accepted as a foundation. In it the load is so distributed as to fall as nearly as possible on the centre of gravity, the ammunition being carried in front, so as partially to balance the pack behind, the weight of the latter being further distributed over the sacrum, the shoulders, and the waistbelt, leaving the chest entirely free. From the trials already made great hopes are entertained of the complete success of the

plan founded on the above, and as the Duke of Cambridge has ordered them to be made on a more extensive scale, we may at last look for a solution of the difficulty. At all events, the committee, especially their chairman, General Eyre, deserve our hearty thanks for their arduous researches, now extending over a period of about three years. We hope their efforts will be crowned with success, and that we shall see no more young men wandering about unfit for service as soldiers or anything else, and that we shall hear no more of the milk spot on the soldier's heart.

ELECTION OF A PHYSICIAN AT BURY ST. EDMUNDS.

A QUESTION is being discussed at Bury which must soon arise in every country town where a Hospital exists. The rules of these establishments usually provide a staff of three Physicians and three Surgeons. But in country towns the pure Physician is rapidly becoming extinct. Where formerly three or four practised, scarcely one now appears; and he is usually a middle-aged man who does not care much either for fees or for work. Under these circumstances what is to be done? Are we to allow the vacancies for which no pure Physician appears as a candidate to remain open until the present order of things is reversed, or shall we yield to the logic of facts, and appoint graduates in Medicine who practise Surgery also rather than none at all? The latter alternative is chosen, we are informed, at Winchester, Lincoln, Derby, and elsewhere, and is proposed to be adopted on the 9th of this month at Bury, where the intended change has caused much difference of opinion. We look on the change as inevitable, and think all regrets on the subject merely thrown away. It is clear that the managers of every Hospital are bound to make the best provision possible for the care of the sick, and that their authority is absolute.

THE ANTHROPOLOGICAL CONGRESS OF 1867.

A CONGRESS for Archaic Anthropology is to meet this year at Paris. The meeting is likely to be eclectic, and liberal enough, for all persons taking interest in the progress of science are invited to become members, and the only passport required is the receipt of the Treasurer for the sum of ten francs. The managing committee have fixed on the following six questions, which are to be discussed on alternate days, commencing—with a curious disregard of the manners of Northern Christendom—on Sunday, August 18:—

"*Sunday*, 18*th*.—1. Under what geological conditions, and amidst which *Fauna* or *Flora*, have in the different parts of the globe the most ancient traces of the existence of man been met with?

"What are the changes which might since that period have taken place in the distribution of lands and seas?

"*Tuesday*, 20*th*.—2. Was habitation in caves universal? Is it merely the fact of one and the same race, and does it relate to one and the same period?

"If the contrary be the case, how can it be subdivided, and which are the essential characters of each subdivision?

"*Thursday*, 22*nd*.—3. Are the megalithic monuments due to one population who have successively occupied different countries?

"If this be the case, what has been the march of this population? What their successive progresses in arts and industry?

"Finally, what are the relations which may have existed between this population and the lake habitations of which the industry is analogous?

"*Saturday*, 24*th*.—4. The appearance of bronze in the West—is it the product of native industry, the result of a violent conquest, or of new commercial relations?

"*Monday*, 26*th*.—5. Which are, in the different countries of Europe, the chief characters of the first iron period?

"Is this epoch anterior to historic times?

"*Wednesday*, 28*th*.—6. What notions have been acquired concerning the anatomical characters of man in prehistoric times from the most remote epochs to the appearance of iron?

"Can, especially in Western Europe, the succession of races be proved, and can these races be characterised?"

The Secretary of the Congress is M. G. de Mortillet, Rue de Vaugirard 35, corner of the Rue de Madame, Paris, who will doubtless be glad to give any information to inquirers. The questions of the influence of climate, race, and habits of life on menstruation, and the acclimatisation of the races of Europe in hot climates, will about the same time be discussed in the International Medical Congress.

ILLEGAL RECEPTION OF A LUNATIC PATIENT.

THE extreme importance to Medical Practitioners of a knowledge of the danger to which they expose themselves by receiving into their houses insane patients without obtaining the necessary certificates from the Commissioners of Lunacy induces us to publish the following judgment of Lord Chief-Justice Bovill in the case of the Queen *v.* John Finch Smiles, which was tried at Maidstone on March 14:—

"You have been indicted under an Act of Parliament for an offence which has been stated. Under the advice, the very proper advice, of your learned counsel, you have pleaded guilty to the offence of which you have been charged. This Act of Parliament is of a very important nature. It was intended not only for the protection of persons who, unhappily, become lunatics, and to secure for them proper and humane treatment, which frequently they did not formerly receive, but the object also was that there should be such a supervision and superintendence, and such a security for persons in that unhappy condition, which formerly they did not enjoy. That was one of the main objects of the Act of Parliament, and with this view it was necessary that this provision should be introduced into it. The importance of it was felt to be so great that the Legislature determined that any infringement of the Act should be a criminal offence amounting to a misdemeanour. But the Act of Parliament was also of importance in another point of view. It was known that on many occasions even the most intimate relations and friends of persons were induced to place them in confinement without sufficient cause, and that this was a constant source of mischief and litigation. It was thought that one very great security against any act of that kind would be a provision of the very stringent nature of this Act of Parliament under which you are charged with the offence imputed to you. Under ordinary circumstances where a complaint is made, one might expect to find that there had been some improper motive or some improper treatment; but the depositions, which I have carefully looked through, inform me, and I am glad also to find the same from the statements of the learned counsel on both sides, that there is no cause of complaint, that I can discover, in any shape or way as to the treatment of the person who has been placed under your charge. I find everything which induces me to believe that proper attention and consideration of the very best description have been bestowed upon the unhappy lady. I find also not the slightest ground to suppose that the relations or friends have done otherwise than exercise a wise discretion in placing her under control. Although I am satisfied that in this case there are not those circumstances of aggravation which are sometimes met with, yet there are many others in which the provisions of this Act of Parliament, if infringed, might lead to very serious consequences. I believe that it does become necessary for the Commissioners to take notice of every case in which the provisions of the Act are infringed, and that it was their bounden duty in this case to bring it prominently before the Court. You have endeavoured, as far as possible, to atone to the law for having infringed it by obtaining the necessary certificates. I feel it is necessary, however, for the security of the public and as a warning to others, to pass a sentence which, if the offence be repeated, will not be by any means the measure of the punishment of those who may hereafter infringe the law. I certainly feel, under the circumstances, the provisions of the Act of Parliament being, in my opinion, so very important, that I cannot do less than sentence you to a fine of twenty-five pounds."

The case of Mr. Smiles, who is, we believe, a highly respectable Medical Practitioner, will, we are sure, meet with sympathy from his Professional brethren. Surely, under the circumstances detailed by the Chief Justice, a nominal fine

*

would have been sufficient to impress the lesson the Commissioners, in instituting the proceedings, wished to teach.

THE CATALOGUE OF THE UNIVERSAL EXHIBITION.

We have just received a proof copy of the English version of this catalogue, which is about to be published by J. M. Johnson and Sons, Castle-street, Holborn. It is a somewhat large volume, enclosed in a finely chromo-lithographed paper cover, but of course a great part of its contents are advertisements. Turning to that portion of the volume which affects us most nearly, we find that the promised display of Surgical apparatus is by no means very extensive, as far as regards exhibitors at least. From many of the countries lately engaged in war, ambulances and means of aiding wounded soldiers in the field occupy a prominent place. Even Spain sends some such inventions. But by far the most numerous of Surgical appliances exhibited are those relating to dentistry and orthopædics. We even observe that the Earl of Caithness has sent an artificial leg. But, neither in this list, nor in that of exhibitors of mathematical instruments, do we find the names of many we should have expected to meet—in fact, we must say that, speaking from the list alone, English Surgery is unrepresented, so far as instrument-makers are concerned. So also with Pharmaceutical products, we do encounter such well-known names as those of Squire, Morson, and Savory and Moore, but the list of exhibitors contains but the smallest moiety of those we should have encountered had England made up her mind to be completely represented. What is the signification of this? Are our manufacturers tired of continually recurring exhibitions? Are the profits which accrue more than balanced by the losses sustained, or has the French eagle been giving the goose with the golden egg rather too tight a squeeze? Be that as it may, Messrs. Johnson have won credit by their handiwork, but why have they marked the price at five francs outside, and five shillings inside? They do not mean to say that the sums are identical, do they? If they do, we fear we could not do much business with them.

FROM ABROAD.—M. BROCA ON DEGENERATION OF RACE IN FRANCE—M. PETER'S RESEARCHES ON ANIMAL TEMPERATURE.

During the recent discussion on infantile mortality in France, it was stated that the stature of the population of that country was in a state of progressive diminution. Against the accuracy of such statement M. Broca entered his protest, and promised on a future occasion to make this good. This he has endeavoured to do in an interesting memoir which he has just laid before the Académie de Médecine. In fact, the statement that it has become necessary to lower the standard of height for recruits is an erroneous one. Under the first Empire this was fixed at 1·52 metre, and under the Restoration, when fewer troops were wanted, it rose to 1·57. At a later period it again descended to 1·54, but since 1832 it has invariably remained at 1·56. From an anthropological point of view, M. Broca considers this standard as too high, soldiers being no longer, as under the Restoration, wanted as ornaments for palaces, and therefore not required to be so tall. Men of small stature, when exempt from deformities, possess great military aptitude, support fatigue well, and manifest great bravery during battle; and the arms of foot soldiers, being now much more manageable than heretofore, do not require men of such high stature for their successful employment.

The alleged degeneration of the French race has been attributed in turn to various causes—as the prevalence of syphilis, the extension of vaccination, debauchery, the abuse of tobacco and alcoholic drinks, and to the forced celibacy which the conscription condemns the male population to during seven years of its greatest activity. It was in the year 1854 the alarm was first sounded, as in that year the number of deaths exceeded that of the births by 69,300; but that year was an exceptionally unfavourable one, owing to the prevalence of war and cholera and the high price of bread. The number of marriages also for that year diminished by 10,000. With respect to marriages also it has been truly stated that they have become less fertile than heretofore; but this is not the case to the extent supposed, the number of children per marriage having, in fact, only declined from 4·02 to 3 16. It is to be remembered that the age at which marriage takes place is much later than formerly; for while it used to be at from 20 to 25, now, although some do still marry at between 25 and 30, the great bulk do not do so until between 30 and 40. Soldiers are, indeed, prohibited marrying before 27.

The mere number of births is a bad criterion, and it is of more importance to ascertain the numbers that arrive at adult age. In this respect France has been progressively increasing, so that she can show an increase of 10,000,000 in a half-century, notwithstanding wars, revolutions, and other disasters. As contemporaneously with this increase there has been a slight decrease of births, it is evident that the increase is due to increased vitality. According to the calculations of M. Bertillon, there has been a gain of ten years since the commencement of the century. The number of infants surviving at 5 years and that of adults surviving at 20 have undergone a similar progression. But not only have they survived, but they are well constituted, as shown by their military aptitude; for, according to the late M. Boudin's calculations, this has increased from 63 per cent. in 1831 to 67 in 1864, although the examinations of late years have become much more rigid. The number of exemptions for deficiency of height diminished from 928 per 10,000 in 1831 to 533 in 1864. The exemptions for infirmities amounted to 3196 per 10,000 in 1831, and only to 2762 in 1864. As to the increase or decrease in height of certain regiments, which sometimes seems contradictory, this is often explained by the parts of France whence they are derived. That country is divisible into two distinct zones by drawing an oblique line from the Department of the Ain in the south-west to that of the Manche. In the north-east or Belgic zone we find tall and fair men, with blue eyes and oblong heads; and in the south-west or Celtic zone they are short and dark, with black or brown eyes and round heads—a division indicated by Cæsar when he divided the inhabitants of Gaul into Belgians and Celts. Accordingly, as contingents are drawn from one or other of these zones, their mean height will vary.

The results noted would not be of any significance if the increase of stature did not also indicate a corresponding physical and mental development. But, in consequence of improved social conditions, advantageous changes have been operated in the state of the people; and, without supposing that an indefinite amelioration is attainable, much remains that yet can be done. The non-fertility of marriages in France remains an awkward fact, inasmuch as it admits of little interference; but encouragement to more frequent marriages should be held out. In this view M. Broca cannot but regret the celibacy of 146,000 of the priesthood; while the proposed new laws for the army only augment the mischief already existing in that quarter.

M. Peter laid before the Academy the results of his researches on animal temperature. (A.) With respect to the modifications of the general temperature in their relations to modifications of certain functions or changes in volume of certain organs. 1. There is no constant relation between the variations of temperature and those of the circulation. Thus the increase of frequency of the pulse in disease is not necessarily attended with increase of temperature (taken in the axilla); and when this is raised, while there is increased frequency of pulse, there is no constant relation between the increase of pulse and elevation of temperature. 2. There is

no constant relation between variations of temperature and those of respiration. 3. There is no constant relation between variations of temperature and changes in the volume of the liver. 4. *But there is a constant relation between the variations of the volume of the spleen and of the temperature.* Thus, whenever during illness the temperature of the body is increased, there is augmentation in the size of the spleen, and the relation of these changes is almost always constant. For one or more degrees of elevation of temperature, for example, the spleen generally increases one or more centimetres in its vertical diameter. The corollary to be drawn is that the spleen is an organ of hæmatosis, and that it actively concurs in the production of animal heat.

(B.) With respect to the modifications of local temperature and those of sensibility. There is a constant relation between the variations of these, when the alterations of sensibility are derived from a material lesion of the nervous centres. 1. The increase of temperature of a region is, within certain limits, inversely proportionate to the degree of sensibility. When the sensibility is morbidly diminished the temperature rises. Thus, when a limb is anæsthised, its temperature is higher than is that of the corresponding limb; while, when there is hyperæsthesia of the limb, its temperature is lower. 2. The temperature may vary from half a degree even to 2° C.; but it frequently rises or falls only to the extent of half a degree, and for its perception a delicate thermometer is required. 3. It is probably from want of having observed the conditions of sensibility in limbs paralysed from affections of the nervous centres that contradictory accounts of their temperature have been reported. When the sensibility remains intact, there is no change of temperature; when it is diminished, the temperature rises; and when it is increased, the temperature falls below that of the sound limb. Sometimes an increase of heat of a part having its sensibility paralysed is subjectively perceived by the patient and complained of. 4. These observations prove that the sensibility to heat is distinct from general or tactile sensibility. 5. This modification of temperature is sometimes accompanied by a corresponding disturbance of function in the anæsthised parts. Thus, owing to the excitement of the sudoriparous glands, the sweat may cover the surface. 6. This increase or diminution of the temperature of a region exhibiting diminished or increased sensibility leads to the supposition of a modification in the innervation of the capillary vessels. There may be *asthenia* of the vaso-motor nerves, and consequently dilatation of the capillary vessels, whence a more considerable afflux of blood and correlative increase of temperature in anæsthesia. Or there may be *hypersthenia* of the vaso-motor nerves, with contraction of the capillaries and a diminished afflux of blood, and a diminished temperature in hyperæsthesia.

PARLIAMENTARY.—THE DUBLIN UNIVERSITY PROFESSORSHIPS BILL—FLOGGING IN THE NAVY—CATTLE DISEASE IN CORNWALL—CHOLERA CONGRESS AT CONSTANTINOPLE—FLOGGING IN THE ARMY—CRIMINAL LUNATICS BILL—EMPLOYMENT OF WOMEN AND CHILDREN IN AGRICULTURE.

On Thursday, March 27, in the House of Lords, the Dublin University Professorships Bill was read a second time.

Mr. Corry gave notice that he intended to move in Committee on the Marine Mutiny Bill an amendment of a nature similar to that proposed by his right hon. friend the Secretary for War, relative to corporal punishment in the army.

In answer to an inquiry by Mr. H. Surtees, Lord R. Montagu said that a disease did break out among cattle in Cornwall, and Professor Symons was sent down to the spot. That gentleman stated that on his arrival there he found that the disease first appeared on March 8, and between that time and the 13th eighteen cattle were attacked in a herd of forty-six. In the course of nine days twelve of the cattle died. The disease was entirely confined to that herd, and the fact that only eighteen out of forty-six were attacked was a sufficient proof that the disease was not of an infectious nature. A post-mortem examination did not lead to the detection of any poisonous agent, mineral or vegetable.

In answer to a question by Sir J. Jervoise, Lord Stanley said that the Cholera Commission at Constantinople closed its sittings in October last. An abstract of the report, but not the report itself, had been sent home by the British Commissioner, and it would be better to wait for the arrival of the report before laying any paper upon the subject on the table.

In Committee on the Mutiny Act the controversy on flogging in the army was renewed, when

Sir J. Pakington brought up a new clause (in place of clause 22) limiting the infliction of corporal punishment to soldiers in the second class, which, he said, comprised only 9 per cent. of the army, and for three offences—mutiny, insubordination with violence (adopting a modified definition suggested by Mr. Whitbread), and indecent conduct. This large concession, as Sir John Pakington described it, to the vote of the House the other evening, had the entire approval of the Commander-in-Chief.

Mr. Otway, admitting that the concession was considerable, repeated his arguments against corporal punishment, and moved an amendment abolishing altogether the power of inflicting it.

Mr. Headlam objected to the classifications in the clause, and thought it better to confine the punishment solely to mutiny and violent insubordination, to be inflicted on all alike.

Mr. Herbert insisted that the punishment might be dispensed with if commanding officers had power to dismiss bad characters; and Major Jervis urged the same argument, and laid the blame of the retention of the punishment on the mistaken economy of the House of Commons, which grudged the money for getting fresh recruits instead of men who really cost more money, and, passing most of their time in prison, did little or no service.

The clause was supported by Colonel North, and opposed by Mr. Horsman, who thought the punishment hardly worth retaining, when 91 per cent. of the army was to be exempt, and quoted from the returns to show that it had no deterrent effect.

Mr. Mowbray defended the clause.

The Marquis of Hartington, though not prepared to vote for the total abolition of the punishment, was of opinion that it was hardly worth retaining if only to be applied to one-tenth of the army.

General Peel, adverting to a remark of Mr. Otway on the introduction of the Duke of Cambridge's name into the discussion, maintained that, being responsible for the discipline of the army, it was right that his opinion should be made known to the House. He was opposed to the classifications, and thought that if the punishment were retained for mutiny and aggravated insubordination all soldiers ought to be liable to it.

Sir J. Pakington replied, and on a division the second reading of the clause was carried by 225 to 131.

An amendment by Sir G. Grey to omit the classifications was negatived.

Several verbal amendments were moved, but much confusion apparently prevailing as to the precise position in which the question stood, the Chairman was ordered to report progress before the clause was finally agreed to.

On Monday, April 1,

In Committee on the Mutiny Bill, the controversy on Flogging in the Army was resumed.

Sir J. Pakington brought up a second clause to be substituted for clause 22, in lieu of the new clause which was under discussion on Thursday night. This latest clause, following the suggestion of Sir G. Grey, retains the punishment of the lash in time of peace for the two offences of mutiny and aggravated insubordination, and, discarding the classifications, makes it applicable to soldiers of the first and second classes alike. It was strongly opposed by Mr. Otway, Mr. Whitbread, Mr. Horsman, and others, as a retreat from the original concession of the Horse Guards, and was supported by Sir G. Grey, General Peel, Mr. Mowbray, and Colonel North. On a division the original clause was negatived by 175 to 162, and the new clause introduced to-night was added to the Bill.

Mr. Otway gave notice that he should renew his opposition to the punishment in future years.

In the House of Lords on Tuesday,

Upon the question of the second reading of the Criminal Lunatics Bill,

Lord Shaftesbury called attention to the fifth clause, which authorised the Secretary of State to discharge absolutely or

conditionally any criminal lunatic—a power which, he remarked, should be exercised with very great caution, now that the plea of insanity was so frequently set up as an excuse for the commission of crimes.

The Bill was read a second time.

The Dublin University Professorships Bill was read a third time and passed.

Mr. Dent moved a resolution, which was ultimately agreed to, affirming that the employment of women and children in agriculture should be regulated as far as may be by the principles of the Factory Act. He called attention to the recent report of the Children's Employment Commission, and particularly to the moral and physical deterioration produced by the gang system on the women and children employed. He contended that the hours of labour should be restricted, that children only of a certain age should be employed, that gang masters should be licensed, that the sexes should be separated, and that attendance on school should be compulsory.

Mr. Walpole, in acquiescing in the motion, expressed himself in favour of the re-appointment of the Commission to obtain information on the subject of private gangs, in order to legislation next year.

LUMLEIAN LECTURES.

DELIVERED BEFORE THE ROYAL COLLEGE OF PHYSICIANS.

By J. RUSSELL REYNOLDS, M.D., F.R.C.P.,
Holme Professor of Clinical Medicine in University College, and Physician to University College Hospital, and to the National Hospital for the Paralysed and Epileptic.

ON SOME OF THE RELATIONS BETWEEN MEDICAL AND LEGAL PRACTICE.

Lecture II.

The object of the first lecture was to show that Medical testimony sometimes fails of its legitimate effect because it is not scientific; that of the second lecture is to explain why and how it may fail when it is. It was shown in the former lecture that when evidence is incomplete, inaccurate, or uncertain, it does not meet the requirements of the case; the purpose of this lecture is to prove that when scientific testimony is complete, accurate, and definite, it passes beyond or through the lines of legal precedent.

The points now to be considered are those which indicate the existence of a radical difference between the tendency of scientific study and of legal practice, that of the former being to destroy artificial lines, that of the latter to create and use them. 1. That science in all its departments is obliged to make temporary use of artificial distinctions. 2. That as it advances these distinctions are swept away, and new lines of difference are substituted for them. 3. That, together with the discovery of previously unobserved distinctions, there is that also of unrecognised similitude. 4. That the tendency of scientific growth is such as to show that likeness is greater than unlikeness; that the points of distinction are relatively trivial, while those of agreement are essential. 5. That this is true of the simple, as well as of the complex, sciences; true of physics and of chemistry, as well as of physiology and pathology. 6. That science being guided by a law of growth, and legal practice governed by a law of precedent, or past agreement, there must be collision between them when they attempt to express or expound each other. 7. That, resulting from the adhesion to an agreement based upon antiquated science, wrong issues must be raised in cases of Medico-legal investigation. 8. That the illustrations of this are frequent in regard of the mode of dealing with the insane, with cases of infanticide and rape. 9. That common sense and legal technicalities are at variance in relation to the treatment of those who are admitted to be "mad." 10. That the Medical witness may give some information on a case from his special knowledge, but that in the majority of instances he does not act upon scientific, but upon common grounds. 11. That there is no universally applicable and valuable test of insanity. 12. That "delusions" have only a relative value, guided by the readiness with which their nature can be appreciated. 13. That the frequently employed tests with regard to "responsibility" are unsatisfactory. 14. That the questions of respiration and of independent life are irrelevant to the cases of infanticide, although they may be valuable in regard of the birth of an heir. 15. That in criminal assault the points often raised have nothing whatever to do with the guilt of the accused, or the injury inflicted upon the accuser.

The object of this second lecture was thus to show that some of the reasons for dissatisfaction with the results of Medico-legal inquiry are to be found in the fallaciousness of the tests to which science is submitted, and not in the nature of science itself, which, although it may and must change its ground, is ever advancing towards a more accurate appreciation and valuable application of the truth.

WIGHT *v.* WIGHT AND FIELD.

The meeting which we announced last week to be held at the Marylebone Rooms, Edwards-street, Portman-square, under the presidency of Dr. Copland, took place on Tuesday last. The objects of the meeting were to express, in a public and practical manner, the sympathy felt for Mr. Field in consequence of recent proceeedings in the Divorce Court, and the undiminished confidence reposed in him by his Professional brethren and others who know him. About 120 gentlemen attended, and the expression of esteem for, and confidence in, Mr. Field, was unanimous. The following resolutions were adopted:—

Moved by Mr. George Sandeman, seconded by Dr. C. J. B. Williams—

"That this meeting desires to express its sincere sympathy with Mr. Field for the great annoyance and anxiety to which he has been subjected by the proceedings taken against him in the recent action of Wight *v.* Field, and, while congratulating him on the successful issue of the cause, wishes to convey to him an assurance of the undiminished regard and esteem in which he is held."

Dr. Sibson and Mr. Aitkin addressed the meeting.

Moved by Mr. Prendergast, seconded by Dr. Wight—

"That, in order to demonstrate the feeling which this meeting entertains towards Mr. Field, a fund be raised, with the view of reimbursing him for the heavy legal expenses which he has been compelled to incur."

Mr. Hill addressed the meeting.

Moved by Dr. Markham, seconded by Mr. Page—

"That a committee be appointed to carry into effect the object of the second resolution, and that Dr. Langmore and Mr. Curgenven be requested to act as Treasurer and Honorary Secretaries."

Dr. Langmore and Mr. Curgenven addressed the meeting.

Moved by Sir W. Fergusson, seconded by Mr. Propert—

"That the thanks of the meeting be given to Dr. Copland for his kindness in occupying the chair on this occasion."

Dr. Copland returned thanks.

GENERAL CORRESPONDENCE.

THE PREPARATIONS OF CONIUM.

Letter from Professor John Harley.

[To the Editor of the Medical Times and Gazette.]

Sir,—If the "Practical Man," who seems to have tested the extent of my observations on the preparations of conium in the same "rough-and-ready way" as that by which he tests the potency of hemlock leaves, will turn to the *Pharmaceutical Journal* for the months of January, February, and April of the present year, he will, provided he gives a little more attention to the particulars therein detailed than he has done to the partial abstract of them in the *Medical Times and Gazette*, gain therefrom all the particulars which he asks for. He says, my "observations would seem to upset a good many of our ideas respecting the activity of conium." He means *some* of the preparations of conium. I would not have this slip mislead any one; for the abstract above referred to was chiefly designed to show what a potent agent, and consequently valuable medicine, we possess in the succus conii. The tincture of the dried leaf and fruit were, indeed, only incidentally mentioned.

The anonymous correspondent speaks of comparative trials of the extract and the succus, showing the superiority of the former. I beg of him, if he has any wish to advance our knowledge of these drugs, to bring forward his facts, and give them such weight as will attach to his name.

I am, &c. JOHN HARLEY.

78, Upper Berkeley-street, W., April 1.

OPERATIONS ON LIVING HORSES IN FRANCE.

[To the Editor of the Medical Times and Gazette.]

SIR,—As I feel sure that those of your readers who concur in the sentiments expressed by your Paris correspondent in your issue of February 16, can do so only through want of knowledge of the facts, I hope you will allow me sufficient space to give a brief *résumé* of the revelations made from time to time by visitors to the Alfort Veterinary School, which led to the unsuccessful appeal of the Royal Society for the Protection of Animals to the French Government in 1863. As I trust a second effort to suppress or mitigate the cruelties complained of will be made, and as much will depend upon the feeling expressed by members of the Medical and Veterinary Professions at the approaching Medical Congress, it is only just that this should be done. Paris has been playfully termed the paradise for women, purgatory for men, and hell for horses. How far the French capital has deserved the latter designation may be judged of by the following facts:—In 1836 Mr. Rogers, a Veterinary Surgeon, wrote to the editor of the *Veterinarian*, complaining of the cruel practices at the Paris Veterinary School; he stated that sixty-four operations were performed upon the same living horse, that twelve horses per week were thus tortured to death, that it took two days to go through the list, and some of the animals were left alive, half mangled, from one day until the next, only then to be subjected to additional torture. Mr. Murdock, who visited the School in 1844, confirmed these statements, observing: "Upon entering into what appeared to be a place for dissection, I found myself surrounded not by dead but living subjects; it was a building or shed open to the air, on one side furnished with many strong pillars, rising from the floor to the roof; here lay six or seven living horses fixed, by every possible mechanical device, by the head and feet to the pillars to prevent their struggling, and upon each were six or seven pupils engaged in performing the different Surgical operations. The sight was truly horrible. . . The operations had begun early in the forenoon; it was nearly three in the afternoon when we entered the place, so that the poor wretches, as may be supposed, had ceased being able to make any violent struggles; but the deep heaving of the panting chest, and the horrid look of the eyes, when such were remaining in the head, while the head itself was firmly lashed to a pillar, was harrowing beyond endurance. The trunks were there, but the tails, ears, and hoofs were removed, and the operators were then engaged in trephining the cranium, exposing various nerves, which they pinched and irritated, so that they might see the retraction of the muscles supplied by them; one animal had one side of the head, including the eye and ear, completely dissected, and the students were engaged when we entered in laying open and cauterising the hock of the same animal. What I have described was the result of the observation of a few seconds, as I grew absolutely sick, and hastened away from this abode of cruelty." From 1844 up to the present date similar accounts have been furnished by English Veterinary Surgeons who have visited that school; one of them observed a French student carefully firing the nose of an unfortunate horse; on inquiring why he selected such a sensitive part for so painful a procedure, the amiable operator calmly replied—"*C'est pour passer le temps.*" Another relates the following thrilling anecdote:—A well-bred little bay mare, formerly a beauty and favourite, but at that time worn out in the service of man, one of the eight on a certain day for operations, having unfortunately retained life throughout the fiendish ordeal, and looking like nothing ever made by the hand of God—with loins ripped open, skin torn and ploughed by red-hot irons and riddled by setons, tendons severed, slashed, scarified, dripping with blood, hoofless, toothless, sightless, and defenceless, was exultingly reared on her bleeding feet, just when gasping for breath and dying, to show the operators on the other seven horses what dexterity had done in completing its work before death took place. Another eye-witness, writing to the *Veterinarian* of December last, observes that sixteen horses per week are thus tortured to death. There are eight students to each horse, and each student has to perform eight operations upon the same living animal. The horse is placed in the standing position, and they commence by bleeding and pinning up again in five or six different veins. At the same time the windpipe is cut open, and large setons and rowels are forced along the back and chest; the poor brute is nicked first by one and then another, and in a similar manner the tail is cut off and seared with a hot iron by the pupils in succession. If a horse, the penis is amputated, and castration performed; if a mare, the abdomen is opened and the ovaries extracted. In any case the bladder is incised, and a stone, previously inserted, searched for with long forceps; meanwhile, the carotid artery is being tied, and as an important nerve is often accidentally included in the ligature, the animals frequently at this stage scream with anguish. The gullet is now opened, and the horse, up to this period standing, is cast and hobbled. The operations commence about five in the morning, and it is usually three in the afternoon when the victim is thrown; various acutely sensitive nerves are then dissected out and cut across, the cartilages of the hoof are removed by one student, another stabs the sole to its centre, and then carefully cuts the piece out, while a third is engaged on another hoof in cutting deep grooves and removing the intervening portion of the sole. All these foot operations are eminently painful, but the climax of suffering is not reached until the pupils cut deep grooves close to the leg, and then with powerful pincers tear the whole of the four hoofs off. The body is now gashed in various places, and the wounds stitched up for practice; the eyes pricked with needles, and then extirpated; the teeth punched out, the ears dissected and removed, the large bowel stabbed with a trocar, and the sinuses of the skull opened with trephines prior to the injection of acids. To conclude this sad history, each pupil has a separate part to fire with a red-hot iron; not only the legs, but every inch of the body is thus deeply burned. The operations last from eight to ten hours, and at the conclusion most of the wretched victims are dead, but some of the stronger animals live through it all, firing included; and Mr. Broad, from whose paper the preceding account is simply abbreviated, states that he has known them to be alive the evening after. Mr. Broad witnessed all this in 1860; and as the appeal to the French Government was made in 1863, a lingering hope prevailed among the humanitarians in this country and in France, in spite of the rejection of the appeal by the Academy of Medicine, that these horrible cruelties had been modified, and that the practice of vivisection had to some extent diminished.

You can understand, therefore, with what regret we read, in your Paris correspondent's letter, that "the intervention of the Society for the Protection of Animals has not exercised the slighest influence on the practice of vivisection so largely adopted at the present day in France. It must be confessed that in a time of almost universal warfare, when thousands of human beings are wantonly sacrificed for questionable ends, there seems to be a slight tincture of exaggeration in that philanthropy which deprecates all suffering inflicted on the brute creation for the advancement of science. Might it not be suggested that hunting is fully as cruel and far less justifiable a persecution of brutes?" Hunting as cruel!—but I will not insult your readers by any arguments on this point. They know as well as I do that it would be gross flattery to call this horrible and useless mangling and burning of living animals for hours together mere butchery; indeed, I have seen a butcher shed tears at the recital; and how gentlemen and men of science can be induced to defend such practices passes my comprehension. Cruel as they are, they are not more cruel than unnecessary and unjustifiable.

A Veterinary Surgeon's operations are restricted to a degree simply because not one horse in a thousand is worth enough to pay the fees and loss for keep during convalescence after a serious operation. The merest tyro might learn to do them all by a few weeks' practice on the dead subject, and if we can acquire our art and science without such cruel experiments, it is simply nonsense to aver that they are necessary for the education of students of an inferior Profession. I trust this feeling, which I do not doubt will animate all who peruse the above plain statements of repeatedly proven facts, may be freely expressed when the matter is again discussed, and that the Society for the Prevention of Cruelty to Animals will have the earnest support of every member of our Profession.

I am, &c.

March 2. M.D.

P.S.—I enclose my card.

*** We fully share in our correspondent's abhorrence of

unnecessary cruelty, and we believe that operations on the living horse are most unnecessary and most cruel. At the same time, whoever loves horses and desires to put a stop to these barbarities should remember that the least likely way of effecting this laudable purpose is to wound the *amour propre* of the French, and get up a sort of international recrimination. Besides, we have no right to throw stones. Steeplechasing and hunting are methods of extorting recreation out of animal suffering, which have little intrinsic superiority to bull-fighting; whilst as for that slaughter of tame pheasants which royal and noble personages indulge in under the name of a *battue*, it inflicts on the poor birds in many cases a lingering death, without the excuse of the excitement of bodily exercise and personal risk. Walter Savage Landor describes the English as devouring putrid game covered with a bread poultice by way of penance for these barbarities. Anyhow, we are not responsible for the French; and till our own hands are quite clean, let us observe some moderation in exposing the misdeeds of our neighbours.—Ed.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, April 3.

Dr. Hall Davis, President, in the Chair.

SPECIAL MEETING.

The President: Gentlemen,—We are met here this evening specially, in pursuance of the notice which I read at the last meeting of the Society, to consider and vote upon a resolution which was notified at that meeting. On that occasion, you will recollect that it was the wish of the Society that the grounds of the Resolution should be circulated among the Fellows of the Society in a connected form. That was promised to be done, and that promise has been fulfilled; and it will now be for the Society, by their vote, to express their opinion as to whether the charges are well founded or not. Before proceeding further with the business, I should mention that the vote will be taken at 9 o'clock this evening. In the first place, the Resolution will be proposed by Mr. Seymour Haden, and will be seconded by Dr. Barnes; then the reply of Mr. Brown will be heard, and any other remarks from other Fellows of the Society. Shortly before the time of the ballot, Dr. Barnes will reply upon the whole case. The ballot will be taken in the next room, and it must be distinctly understood that those gentlemen who do not vote must be considered as voting for Mr. Brown. The vote will be according to the rule which I have referred to.

Dr. Murray (Hon. Sec.): The rule is this:—"Whenever there shall, in the opinion of the Council, appear cause for the removal of a Fellow, the same shall be notified by the President of the Society at the next ordinary meeting, and a notice forthwith sent to every Fellow of the Society, making the next meeting special, for the purpose of considering such removal. If, on a ballot taking place"—(this is the part now which bears upon the present vote)—"two-thirds of the Fellows present shall vote for the removal, the President shall declare the Fellow in question removed accordingly." Therefore, those gentlemen who are present will be considered as voting.

Dr. Routh: Allow me to ask you one question before you proceed. (Cries of "No, no," "Order," and "Chair.")

The Chairman: I now call upon Mr. Seymour Haden to propose the resolution.

Dr. Routh: Mr. President, I wish to put one question. (Cries of "Order," "Chair," "Sit down.")

Mr. Seymour Haden: Mr. Chairman, as you have not read the resolution, perhaps I had better do that before I proceed with what I have to say. It is this—"That in pursuance of the resolution of the Council, notified to the Society's general meeting, March 6, Mr. Isaac Baker Brown be and is removed from the Fellowship of the Obstetrical Society of London." Now, if it should be asked, and it will be very naturally asked, why a Fellow—like myself—who has never taken a part in any of the discussions of the Society, should come forward to move this very important resolution, I think, perhaps, the best answer can be found in that very fact that I never have taken any part in any of the discussions of the Society, and especially with regard to the question before us. I may add to that that I have positively no knowledge of Mr. Baker Brown—none whatever; that I have therefore no prejudices to blind me, nor any animosities to gratify. I think, also, it will be as well to state that I have had no better means of forming a judgment upon this case than any other Fellow of this Society. I have simply read various publications upon the subject, many of which have been contributed by Mr. Baker Brown himself, and I think I may say that upon the indictment drawn up against himself by Mr. Baker Brown, and upon that alone, I came down to the Council and moved a resolution for his expulsion. I wish to take at once upon myself the whole responsibility of moving that resolution, because I am perfectly conscious of having done it upon broad Professional grounds, and without the smallest reference to Mr. Baker Brown, or to any member of the Council whatever. It has never been my habit to mix in any angry discussions in the Council, and I came down here perfectly unbiassed to move this resolution. Indeed, so entirely is this the case that I may say I came without concert—without speaking even upon the subject to anybody. Now, if, as I think after what I have said it will be admitted, I am not an improper person to move this resolution, I think also that this Society is the fittest place in which it can be brought forward. We have to remember, gentlemen, what we are as the Obstetrical Society of London—we have to remember that, in choosing the particular branch of Medicine which we follow, we have constituted ourselves, as it were, a body who practise among women (because I suppose that nineteen-twentieths of us do so practise); we have constituted ourselves, as it were, the guardians of their interests; and, in many cases, in spite of ourselves, we become the custodians of their honour. (Hear, hear.) We are, in fact, the stronger, and they the weaker. They are obliged to believe all that we tell them. They are not in a position to dispute anything we say to them, and we therefore may be said to have them at our mercy. We, being men, have our patients, who are women, at our mercy; and I think, under those circumstances, that if we should depart from the strictest principles of honour—if we should cheat and victimise them in any shape or way, we should be unworthy of the Profession of which we are members—("Hear, hear," and applause)—and certainly unworthy of being Fellows of this Society. (Loud cheers.) Now, feeling this, and feeling the urgent necessity for some such movement as we are engaged in to-night, I think, without any breach of confidence as to what took place at the Council, I cannot do better than state what happened when I brought the resolution under their notice. I came down, as I have said, wholly on my own responsibility, having mentioned it to no one. I found the Council engaged in endeavouring in every possible way, apparently, to meet Mr. Baker Brown upon less serious grounds than those which ultimately became necessary. I sat for two hours at that Council, and became perfectly convinced that there was no way of dealing with Mr. Baker Brown except by the resolution which I have just read. It was under those circumstances that I proposed the resolution, and that the Council adopted it *nemine contradicente*. At the same time, it is only fair to the Council to state that after a couple of days' interval they, feeling the extreme importance of the measure that had been proposed to them, called another meeting of the Council actually with a view, if possible, to hear objections and to arrive at some other result. But it was impossible. After sitting for two hours more, and twenty members of the Council being present, they came to the resolution that there was nothing to be done but to expel Mr. Baker Brown. (Applause.) Now, having carefully stated the action of the Council in this matter, I must contrast it with what took place at the last meeting in this room. The room contained, besides the Fellows, some twenty-five or thirty or more visitors, who were engaged the whole time in making a disturbance and browbeating the Council. I wish I could say that that had been entirely confined to the visitors. I am sorry to add there were one or two Fellows who, upon most unwarrantable grounds, almost attacked the President by invective, by appeals to the rights of the British subject—(cheers, and cries of "Order")—by every conceivable argument that was not relevant to the matter under discussion at the time, and perfectly illegal. The Council were absolutely tongue-

tied in the midst of all this interruption; they could not, without breaking the law, open their mouths, and the meeting actually began and ended by a display of what I should be sorry to call unfairness, but certainly of illegality, on the part of the meeting. (Cries of "No, no," and "Order.") I repeat it—we were tied by the law, and we had not the power of speaking; and it was explained at the beginning of the meeting that the resolution was only notified as a resolution to be brought forward at the next meeting, and that there was to be no discussion on the subject. Therefore, the Council, sitting quietly themselves—forced to sit quietly under the law before them—were browbeaten in the way I have described. I can state that with perfect safety, for I know that was done by three or four Fellows only. It cannot occur again, for I am persuaded that the sense of this meeting will prevent any such interruption of the proceedings to-night. The time of the Society is not at the disposal of orators of that stamp. ("Hear, hear," and applause.) We are here on our own matters, and we do not want discussions on matters which have nothing to do with the subject in hand. Now, having said that I think this Society is the right place in which to bring forward the resolution, I will state what are the broad motives under which I have thought it my duty to move it. I have already stated that they are not in the least personal. The motives which have induced me to bring it forward may be included, perhaps, in what I might call the growing insensibility on the part of the Profession to the inroads of quackery, and its consequent decline in public opinion—those are the reasons which have brought me here to-night. The quackery of former days was comparatively innocent to the quackery of the present time. It was executed, whatever it was, by mountebanks outside the camp, who blew their trumpet *extra muros*, as it were, and made bad jokes, and gathered up a few halfpence, and there the thing was at an end. But now, the quackery of the present day is dangerous in this respect, that the quack of the present day has found out that he can base his operations upon an actual legitimate professional footing. He can obtain a degree, and from that moment, if he does become a quack, he becomes a quack of the most dangerous character. (Cries of "Question.") It is the question. It is one of my reasons for bringing forward this resolution. Now, to show that I am not so entirely wide of the mark when I speak of the prevalence of the quackeries of to-day, I may perhaps—and every Fellow of the Society will recognise the picture—be permitted to draw attention to at least two forms of quackery which strongly affect the Society. One of them consists in this—in the diagnosis of disease which has no existence—(applause)—in the laying of women upon their backs for weeks and months together, and in daily ministrations, cauterisations, and leechings to people who have literally nothing the matter with them. ("Hear, hear," and applause.) I say that that is a form of quackery certainly not rife in this Society, thank God! but a form of quackery carried on with great success by at least one, if not more, Fellows of this Society. (Hear, hear.) The other form of quackery, and the only other form which I shall think it worth while to allude to, is the one under our immediate consideration. That form consists in this, if I understand it, in the pretended cure of real disease by means which have no foundation in philosophy or in fact, and which, in addition, have more or less of a secret, unpunishable, compromising character. I think that is a fair definition of the form of quackery which we are called this evening to consider. Now, the way this is brought about is really very simple, and if the Fellows present recognise the other form, I am persuaded they will with still greater ease recognise this. The plan is this: a small house is taken—this may be done by one man—some name is given to it at once. It is a "Hospital for Women," or it is a "Home," or something of that kind; it does not matter what it is as long as it contains an appeal to women. We will say in this instance it is a "Home." Then three sets of appeals are sent out in the form of circulars, and they are of this kind. One is addressed to the middle classes, principally to women; that appeal is for money. Another is sent out to the upper classes, to the titled people; that is for patronage; that is for the long list of great names, headed, in this instance, by the Princess of Wales—so little do these patrons know what they are about. That is the way in which this long list of patrons is obtained. The third appeal is to the clergy, and it is always couched in these words—"for their co-operation in the good work"—that is invariable. (Laughter and cheers.) The next thing, all being compared, is to call a general meeting—which consists, of course, of the promoter of the scheme, and a few—a very few—other people, and some weak clergyman is sure to be put into the chair—that is certain. (Loud laughter.) After certain speeches have been made, which have very little point in them, and really refer very little to the matter in hand, the promoter of this grand scheme has to speak himself, and unless he can announce to that meeting something that nobody else can announce, why he has taken all his pains in vain. So that he announces this—he begins in this tone—recollect he has got something to announce which I have called a quackery. Now this is the way he announces it. "Two or three years ago I mentioned here that I thought we had discovered a fact so startling that it almost made one afraid to think of it. I stated that we thought we had discovered a cure for a class of suffering hitherto regarded as perfectly hopeless. I did not allude to the particular class of disease then, but I may mention it now. It comes under the head of epileptic fits and hysterical mania. We have had many cases brought here which have been, almost without exception, cured. The fit has vanished under Surgical treatment, having been proved to depend upon physical causes. And so with regard to mania. We have had cases of epilepsy and catalepsy where the patient has been cut off from all social pleasures and habits, excluded from their own friends, put away to distant places, and yet, by God's mercy, we have proved them in this institution to be curable. If we had done nothing more, I should bless the day this institution was formed. (Laughter.) We are never free from these forms of epileptic fits, in which the patient falls down two or three times a day, often literally falling into the fire. A Surgical operation is performed, and the fit never returns." (Laughter.) Of course, this is a speech not made to Medical men—it is made to the clergyman in the chair, and to two or three other clergymen who are listening. "Let us in this instance recognise the hand of God's great goodness, proving that there is nothing incurable if we seek the proper remedy." (Much laughter.) Now, gentlemen, if I really ceased to speak at this point, after such impious balderdash as this—("hear, hear," and cheers)—I think I might sit down satisfied with what I have said. But it is my duty to go a little further. [Having made these specious promises, what wonder that some poor weak woman, or even that some weaker man, should take a wife or a daughter to the Home, and place her under the promoter of this scheme? It is sure to happen; and what occurs is simply this. The patient is put under chloroform—the inducement, of course, has been enlarged upon—the operation is so very trifling; it is a mere nothing, perhaps, except the cutting of a fibre or the excision of a nerve—it is nothing. The husband remains downstairs. The patient is taken up and put under chloroform, and her clitoris cut out before she has recovered from the anæsthetic. Down comes the promoter of the scheme to the expectant victim below, invites him to write a cheque for 100 or 200 guineas, or whatever it may be before he leaves the house. Now, if he objects to this, which he is very likely to do, I do not say that he is informed, but, at all events, he is made to feel this—"Your daughter," or "your wife," as the case may be, "has undergone a disgraceful mutilation because she has been given to disgraceful practices; if you can afford to tell your friends this, and to tell the man who is to marry her that she has had her clitoris cut out, and that for disgraceful practices, well and good; but if you cannot afford to tell them this, I think you had better pay the money and say no more about it."] (a) (Cries of "No, no," "Oh, oh!" and great uproar.) Yes. (No, no.) What! (Cries of "No, no," "Chair," and great uproar.) Yes. The nature of this quackery is that—[interruption.] I have not said that this is done; I have said that the nature, and the end, and the aim of this particular form of quackery is an operation which is in itself a mutilation. I will not call it an operation—it is a mutilation; and it is in itself questionable, compromising, unpunishable, and therefore secret. Now, if I went so far as to say that there was no difference between that and the practice of the Messrs. Goss, or some such name, M.R.C.S.—(a laugh)—who stand between their patient and the door, and tell their patient they will expose him unless he pays a certain fee, I should be going a little further than the facts would warrant me. I do not go so far as that, but

(a) In justice to the speaker and to Mr. Brown, we must ask the reader to compare this bracketed passage with Mr. Haden's explanation, a little further on, by which it appears that he did not state this as an actual occurrence, but as a thing which might happen, or which would be sure to happen, if the operation of clitoridectomy became common, and which might happen in private houses—not in the "Homes."—Ed.

I say that by implication this is the nature of this mutilation —that there are many women, ladies in this city, who are dying to speak upon the subject, and dare not for their honour. ("Hear, hear," and sensation.) That is what I mean. I do not mean to be unfair, or to go one step beyond what the circumstances warrant; but as a fact I have positively stated that there are many women who dare not speak of this, and that Mr. Brown knows it well when he cuts out their clitoris. (Cheers.) Well, but after all the question still remaining is this—Is this quackery? I shall prove before I sit down, which will be very shortly, that Mr. Brown himself confesses it to be quackery, and in this way: he states all that I have read to you, but he goes much further and states a good deal more that I need not read to you; but the end and aim of all that he states is, that he cures insanity by a Surgical operation. There can be no doubt of that, and that the "Home" is of all places the best; indeed, it is the only place at which this beneficent treatment can be obtained. Mr. Brown undoubtedly says that which nobody can gainsay, that he makes also a return of cases which are actually treated in the Home. There is a table somewhere or other where you have that return given, and it is, perhaps, just as well that I should read a few entries. It is headed, "Idiocy and Insanity, with Cases"(b) (those are cases treated in the Home), "Incipient Insanity, Suicidal Mania; many years' gradual illness—operation—cure. R. P., æt. 39, single; admitted into the London Surgical Home, October 22nd, 1861. Several years' illness. Two months' insanity—operation—cure. 'I was authorised to admit her.' Acute hysterical mania—operation—cure; admitted into the London Surgical Home. Epilepsy with dementia—operation—cure; admitted into the London Surgical Home. Epileptic fits with dementia—operation—cure; admitted into the London Surgical Home." Very well, then, Mr. Brown has distinctly asserted that he cures insanity, in many of its forms at all events, by means of this operation. But that does not prevent his writing a letter to Mr. Phillips, the Secretary of the Lunacy Commissioners, to declare that in no papers or advertisement issued or published has it ever been stated that females of unsound mind had been operated upon, or admitted even into the Home. (Hear, hear.) Now does not Mr. Brown himself admit that what he said previously is untrue? Either he has cured these people, or the whole thing is a sham. If he has not cured them, and if it is true that they have not even been admitted into the Home—as one must believe him in something—I choose to believe that when he wrote to the Lunacy Commissioners to say that no cases of insanity had ever been operated upon, or even admitted into the Home—I choose to believe that in that single letter Mr. Brown states the truth; and therefore I think we have convicted him of quackery, and that clitoridectomy is a quackery. I have very little more to say. I think I have proved that I am not an unfit person to have moved this resolution. I think that I have proved that this Society is a fit place in which to have brought it forward. I think I have shown that there existed strong motives for any one interested in the honour of his Profession to bring it forward. I think that if any of us have sons to bring up to this Profession we shall ask ourselves before we do so whether it is capable of maintaining its own honour, and what the position in after days of those sons will be. As things stand now, if the vote of the Society this evening is adverse to the Council, I can say for my own part that I would not dream of bringing up sons to the Profession. (Hear, hear.) On the part of the Council, I think I am warranted in saying that, after all the pains they have been at, after the scrupulous pains they have taken, after the labour they have been engaged in, all for the honour and the welfare of this Society, if the vote to-night is adverse to them, they will be obliged to regard it as a vote of want of confidence. (Hear, hear.) They will not do less—it is impossible they can do less. Now, the point is simply this: If this meeting should support Mr. Brown, it endorses his principles, and accepts his acts. (Hear, hear.) That is the point. I entreat you to let no casuistry of Mr. Brown's, or, indeed, of any other speaker, interfere with your healthy understanding of that point. That is the point: you endorse his principles and you accept his acts if you do not support the Council to-night —(hear, hear)—and in future, Professional honour and truth will be measured by the standard that you thus deliberately set up. (Loud and long-continued applause.)

(b) On the Curability of Certain Forms of Insanity, Epilepsy, &c. &c., in Females. By Baker Brown, F.R.C.S. London, Hardwicke, 1866. Chapter viii. p. 67.

Dr. Barnes: Mr. President,—I think I never in my life rose on a more painful occasion to myself, and never have I listened to any argument more convincing to show the necessity of the steps that have been taken than the speech that we have heard from Mr. Haden to-night — a man who cannot for a moment be supposed to be actuated by any other than disinterested motives, and motives concerning simply the honour of the Profession. Of course, it may be said—and we have had rumours about—that this movement has been started by Professional rivals of Mr. Brown. Now, if it were possible for me to express in words the utter scorn which I should imagine any man of honour would feel in rivalling Mr. Brown—(laughter) —I would try to do it, if possible. There is no motive of the kind, and I may state this, that one or two members of the Council, who may have been in personal conflict with Mr. Brown, took no part whatever in the proceedings; they were not present, or, if present, they took no part in the matter. It was the spontaneous expression of opinion forced upon the Council, which they had no means whatever of evading if they did their duty. As for this imputation of personal motives, I say, once for all, that we repudiate them *in toto;* and not only that—if there is any imputation at all, it must lie with the friends and sympathisers of Mr. Brown. Our opposition is directed entirely against a gross infringement of Professional honour, a most shameless and abandoned course of profligacy and falsehood; and if these things are associated with any individual, our opposition is against him, and our hostility goes no further than that. Now, is there anything personal in this matter? I say that Mr. Brown's friends are the persons who are actuated by personal motives, because they prefer the screening of an individual to the honour of the Profession. (Hear, hear.) Now I would say a word or two, for the time will not permit me to go fully into this matter. I will call the attention of the meeting carefully to the charges made by the Council against Mr. Brown, and to his attempted replies. I may say in the first place that the reason why it was not thought necessary to publish these matters was, that they had already been published, and those published matters contain Mr. Brown's own replies. The charges were made distinctly by Dr. West in language which no man could mistake, and by a man of the most unimpeachable honour and integrity. No man in this country is more honourably distinguished for his moral courage, for his truthfulness and accuracy, than Dr. West, and to place a statement of Dr. West's against a statement of Mr. Brown's is the most astonishing thing that ever occurred in my Professional experience. (Laughter.) Dr. West distinctly made a charge, and that charge was deliberately and carefully answered by Mr. Brown in the quietness of his own study, and of course with all the appliances of leisure and thought to make the best case he could. There it was; it was part of the published matter upon which we went, and that published matter was Mr. Brown's own defence, and that own defence I consider to be his condemnation, or a part of it. Then there was the correspondence with the Lunacy Commissioners. There was an accusation, and there was a defence—anything more complete than that could not possibly be. Now this thing must occur to every one. There was the defence. Was that defence true or false? If it was true, it did not require another explanation; but if another explanation were made, one or the other must be false. Now, Mr. Brown, on his own showing to the Lunacy Commissioners and the others, was already on the horns of a dilemma. He had already stated, as Mr. Haden showed, that he had published cases of cure which had never been admitted into the Home at all, according to his statement to the Lunacy Commissioners, or else he has told a falsehood to screen himself from legal proceedings; one or the other must be false. Then there is a third statement. He is tossed upon the two horns of a dilemma of his own creation, and now how will he be better off by falling upon the horns of a trilemma of his own creation? The thing is this: the truth is the only thing that has the property of oneness. Any deviation from that must be subject to difference. We were told in our younger days that if each of two things were equal to a third thing, they were also equal to one another. Now, here we have had three explanations, and they do not agree; therefore there is falsehood somewhere, and it does not concern us, the Council, to determine exactly where that falsehood lies—the bare fact cannot be denied. Mr. Brown says, in case No. 1, "I beg distinctly to state" (but I must say I never saw a distinct statement from Mr. Brown on any occasion whatever—it is always couched in something dark or something mysterious, or

something admitting of some doubtful explanation)—"that no such attempts have ever been made by me." Those "attempts" relate to the accusation by Dr. West that he had used means to excite the attention of non-Medical persons, and especially of women, to the subject of self-abuse in the female sex. Mr. Brown denies that. Then he goes on to say, in the next line, "My writings have always been addressed to the Profession"—as if he made a distinction between his writings and his other publications. Are not his speeches to those weak-minded clergymen that we have heard of, and to others that Mr. Haden has referred to, publications? Have we not had the most distinct appeals made to them? Have we not had pamphlets sent round to the Profession and speeches made containing the most disgusting particulars, circulars sent round from his own house—a thing that no Professional man that I know of has ever yet ventured to do--(hear, hear)—begging for subscriptions, and enclosing prospectuses, and even enclosing this paragraph of the *Times*, with an alteration of a few words? Then he has the assurance to say—"I beg distinctly to state that no such attempts have ever been made by me." That is the first point, and I might go through them all, and show that there is not a single point brought forward by the Council in their charge that has been honestly and straightforwardly denied. The next point is too important to pass over. He says—"I entirely deny operating upon this patient without her cognisance." That refers to the case in which he was accused of doing this by Dr. West. Upon that point Dr. West reiterates from his own personal knowledge that it was the case, and I think Mr. Brown will hardly get out of the matter by saying that he had a private compact with his patient without the cognisance of her Medical attendant or her husband, and that she "sold" him. (Sensation.) I think that would hardly meet the difficulty of the case. More than that, Dr. West does not base his accusation upon that point. He says—"I state this deliberately, because I know that this is by no means a solitary instance of the removal of the clitoris by Mr. Brown without the consent, without the knowledge of the patient and her friends." How does Mr. Baker Brown think to escape from that? He simply states that that most direct, most positive affirmation of Dr. West is a vague statement, not worthy to be gone into. I ask Mr. Brown here if he will deny that fact in this room—if he will say here that he never operated upon a patient without the knowledge of the patient herself, or of her friends, or of her husband? I think he dare not say it, and if he did, I think twenty men in this room would confute him on the spot. And yet he ventures to say that this cannot be answered because it is too vague a statement, and that Dr. West has an *animus* or malice against him. Here, again, there is the same want of veracity in this matter, when he accuses Dr. West of having recommended clitoridectomy—of having cauterised the clitoris of a woman—of having in fact, by carrying on analogous practices, sanctioned the principle of Mr. Baker Brown's own operation. Is that true? Dr. West emphatically denies it, distinctly, and without the slightest equivocation. Dr. West, we know, is a master of language; he knows exactly the force of what he says, and there is no mistake about what he means when you have his words before you. And I may say here that accuracy of language is often simply the exponent of accurate ideas of truthfulness and accuracy, and in that respect there is a remarkable contrast between Dr. West and Mr. Baker Brown. He says here that he distinctly denies that statement; and when Mr. Brown is driven into a corner to explain this point, he says, "If I am correctly informed," and his correct informant is a nurse. (Laughter.) Now I do not say that a nurse may not tell the truth, but it does not rest upon the statement of a nurse; it rests upon Mr. Baker Brown's evidence when he comes to the point. It is this. He has a prescription of Dr. West's, "5 grains of nitrate of silver in an ounce of water." (Loud laughter.) And that is the cauterisation which he accuses Dr. West of applying. There is no mistake upon that point; it is not the statement of the nurse. It is simply a wilful—or at least, a misstatement—or, at least, a statement which Mr. Brown has not had the manliness to view in the proper manner. Then there is the case of Mrs. Peaty. We need not dwell very much on that point, because it is really not very important. The great reason the Council placed it in the published matter was this, that it had gone before a public court of law; it had got into all the daily papers that this form of clitoridectomy—mutilation without the knowledge of the patient or the husband—had become a matter of public scandal, and that was one reason why the Council could not pass it over—why we were compelled, in vindication of the honour of the Society, to bring it before it. But Mr. Brown cannot even make a reply without some equivocation or some indirect statement which amounts to a falsehood. He says here that the operation was performed in the usual way at the Home in the presence of her own Medical man, Dr. Taylor, with whom she had resided before her marriage. Now, we have a letter from Dr. Taylor, which I will ask the Secretary to read.

The Secretary: This letter is dated 139, Queen's-road, Bayswater, April 3, 1867. "To the President of the Obstetrical Society.—Sir,—May I take the liberty of calling your attention to a mistake of Mr. Baker Brown's in Nos. 12 and 13 of his reply to the remarks of the Council of the Obstetrical Society? Mr. Brown there states that I was present at the operation performed on Mrs. Peaty as 'her own Medical man,' thus implying that the operation was with my consent. Now, I never attended Mrs. Peaty either before or on that occasion, and my presence at the Home as a student in ovariotomy was no unusual occurrence. Indeed, I was surprised at seeing Mrs. Peaty there, not having seen her since the time of her marriage, nearly twelve months before. May I ask the favour of your making this known to the Fellows of your Society? and believe me to be, with much respect, your obedient servant, J. Taylor, M.D."

Dr. Barnes: Now, there was another point on which we insisted very much, because it goes to the root of all honourable Professional intercourse. When one Medical man meets another, no matter whether consulting professionally or in any other way, we expect to find perfect confidence and candour between those two men as to what is going on. (Applause.) No man should venture to perform an operation in the absence or without the knowledge of the other person who is there; and yet Mr. Baker Brown attempts to justify that charge by saying, "I operated entirely on my own responsibility," for that is what he says, "and, in my opinion, a Consulting Surgeon is bound to do so, having regard both to the welfare of the patient and the position of the Practitioner." That might be so under certain circumstances, but the cases are very different in some respects. If a Medical man is in a room with another, who is the ordinary Medical attendant of the patient, and who, perhaps, enjoys the patient's entire confidence, and is her personal friend as well as Medical attendant; if an operation of this serious nature—mutilation, for it can be called nothing else—is to be performed without the consent of that Medical man, when it is all over, and by-and-by disappointment arises, then the patient and friends begin to find fault and consider who was in fault. She says, "There was my friend, my ordinary Medical attendant—why did not he protect me from this mutilation?" The Medical attendant says, "It was done by Mr. Brown on his own responsibility; I had nothing to do with it." Is that an answer? I ask if any woman, or any person in the world, would accept that as an answer or a vindication of a Medical man who had been deceived or compromised against his own will. (Applause.) The proper course is, it appears to me—and it must appear so to every honourable man—that if a Surgeon feels that he is morally bound by his own convictions to carry out his own practice and his own operation, he should say so plainly to the Medical attendant, and give him an opportunity of retiring, or protesting, or placing the case fairly before the friends of the patient, and leaving them to decide whose advice they will follow. But that is not the case. Here we have it, on Mr. Brown's own statement, that he compromises the Medical man by his own presence—does it in secret—on his own responsibility, in fact—and entirely ignores the presence of the Medical attendant who was there. That, I think, goes pretty nearly through the main points. The explanation with regard to the Lunacy Commissioners is one which I can hardly venture to characterise among a society of gentlemen. (Hear, hear.) I hardly know how to refer to it in terms which are sufficiently within the bounds of conventional speech, and yet to do justice to the matter. Mr. Baker Brown is written to by the Commissioners of Lunacy to ask for an explanation of a paragraph that appeared in the *Times*, and he writes to them, saying that this paragraph appeared without his knowledge and consent—was furnished by a person indifferent to him, and that he took means, which he hoped would be successful, to correct the mistake. Now, was there any correction in the *Times*? Was the editor of the *Times* ever written to, calling upon him to explain that the Surgical Home was not open for the reception of females of unsound mind? No, the editor of the *Times*

was written to by the anonymous author of this paragraph, whom we do not know; he was plainly connected with the press, but he is evidently not a responsible editor of the *Times*. But whether that be so or not, the answer is given that he has taken steps, which he hoped to be successful, to correct the serious error; but upon that the Commissioners—knowing their man probably—say, "This will not do for us; we want a distinct denial that those patients are admitted to the Home, and that we must have, because we have it from your own Resident-Surgeon that these cases have been admitted into the Home." There is the fact. The Resident-Surgeon says they have been admitted—his own book says they have been admitted—and yet he answers coolly, "No case of the kind has been admitted, except one which was sent off immediately to Hanwell." Then an attempt is made to say that this statement refers to a particular period, and that what was meant was, that no such patient was admitted within a year. Is that the case? The *British Medical Journal*, quoting that very paragraph, says, "The Profession will now understand that no case of insanity has been admitted to the Home or cured by this operation of clitoridectomy." That was in the published prints. Did Mr. Baker Brown deny that? Did he say, "Yes, there have been cases there." He did not venture to say that, because that might not even suit the Commissioners. Therefore, he was silent upon that point. And he took credit with the public of having cured cases of insanity, yet, to screen himself from legal proceedings, he denies it before the Commissioners. He thinks he is safe by a sort of travesty of the plea of not guilty. A man is accused of a heinous crime, no matter what it is, and before the jury or judge he pleads "not guilty;" and Mr. Baker Brown thinks that a fiction of that kind will serve him here, because he has applied to his attorney who advises him to write and say he has had no cases of that sort in the asylum. (No, no.) I will read the letters. We will have that very clear.

The President: I wish to remind you that the ballot will commence at nine o'clock, for the convenience of those gentlemen living at a distance who may wish to leave the meeting at that hour.

Dr Barnes: I will not detain the meeting one minute more.

The President: I am reminded by the Secretary that I must give the names of the scrutineers. They will be Dr. Parson and Dr. Tanner, if they will kindly consent.

Mr. Baker Brown: But you cannot pretend not to allow me to make a single observation before that. You cannot pretend to go to the vote, having heard the charges, without hearing my reply to them?

The President: Your reply will be heard directly.

Dr. Barnes: Mr. Baker Brown will allow me to say, he has already made two replies—they do not agree one with the other; and he may make a third, if he pleases, but I doubt, if he does, whether it will agree with the others. (Laughter.) Now I was saying that the solicitor advises him to tell a falsehood, and he told that falsehood to screen himself from the heavy charge. For his answer was taken in that sense by the whole of the Profession and the world; and he ought then to have answered these points, if he could fairly have answered them. I will say one word more, before I sit down, on the quotations from the Medical journals, on which he insists very much. We have inserted here the leading articles from several Medical journals—the *Medical Times and Gazette*, the *Lancet*, and the *British Medical Journal;* these were parts of the published matters which undoubtedly guided us in framing this charge—they were published matters long ago, before the meeting of this year. They contain distinct charges, and they were expressions of Professional and public opinion which showed us that there was no alternative but to bring this matter before the Society. It threw the matter upon our honour, therefore we could not resist it.

The President: The scrutineers will retire in order to examine the ballot papers.

Mr. Baker Brown: But, Mr. President, may I not be allowed to say a word in reply, after the speeches from the mover and seconder, which have lasted an hour?

Dr. Robins: I think it would be a monstrous unfairness if you allow the advocates of the proposition to have the entire say. (Cries of "Order" and "Chair.")

The President: It is not so. I said at the commencement that Mr. Brown would have a reply, and that Dr. Barnes would have the final reply on the whole case.

The Secretary: I may mention that the ballot box will not close until every speaker has spoken. It is only for the convenience of those gentlemen who wish to go into the country, and who have made up their minds one way or the other. (Hear, hear.)

Dr. Barnes: One word more. That article in the Medical Press insisted upon so much was published after our proceedings; therefore it was not part of the published matters, and we could not possibly have anything to do with it. I have only one word more. If we have any regard for the honour of the Profession and for the expression of public opinion, if we desire to have the Society held in the slightest respect, we must act in this matter. It is impossible not to see that. It is impossible that those who have devoted most time and most attention to the affairs of the Society can go on if this imputation of appearing to sanction proceedings of this kind rests upon them. There is no doubt of this fact, that the Society is used by Mr. Brown in encouraging the public to think that his is a Professional and legitimate practice. (Hear, hear.) The Profession will judge by the voice of the Society in this matter. They cannot do otherwise. We have put ourselves forward as the exponents of Professional opinion in this matter, and as we pronounce so will be the judgment of the public; and I say that we cannot, unless we are prepared to bow our heads in shame and degradation, go on as we have been doing without speaking on the subject. (Loud applause.)

Mr. Baker Brown: Mr. President and Gentlemen.—I am glad, at last, that I have an opportunity of speaking, for I think you will agree with me—all those who have not made up their minds already what to do before they have heard my reply—that never in the whole history of Medicine was such an unfair proceeding taken as has been taken by the Council in this matter. I have been charged with all sorts of offences. They have met in secret council again and again. They have never intimated to me in the slightest degree what their charges were. (Cries of "Oh, oh.") They have never, if you observe, called me before them to ask what explanation I could give. (Loud cries of "Oh, oh," "Chair," and confusion.) I appeal to the sense of the meeting for common fairness. (Hear, hear.) I say they have left out, to-night, one of their gravest charges; and why? Because my answer completely upsets their accusation against me of want of truth. The whole of this hinges upon the neglect of the Council in investigating the subject of clitoridectomy, as scientific men. Instead of examining the subject, which I challenged them to do again and again, they have neglected it, and tried to get rid of it by expelling me. Now, gentlemen, it is not a question that concerns me. It is of no moment to me whether I am in this Society or not. I repudiate the insinuation, which is as unfounded in fact as it is ungenerous of Dr. Barnes. I made nothing from the Obstetrical Society, and I should apprehend, after what has passed to-night, that it will not tend to the honour of anybody to belong to the Obstetrical Society. (Cries of "Oh, oh!") I say so distinctly. You have heard the mover to-night say that there are other men, Fellows in our Society, having their secret practices. Why do you not fix upon them? [A voice: "One at a time." ("Hear, hear," and a laugh.)] Why not cleanse your own Council of secret operations and make them pure before you attack me? I have not received fair play. If you had called me before your Council and said, "We do not think this is right—we will pass laws which we think better," while I remained a Fellow of the Society, I would have obeyed those laws or have left the Society. But if it had not been for the last meeting of the Society, what would have been the consequence? I should never have heard the charges until to-night. You would never have known what they were. They would have been mysterious charges made against me affecting my honour, and I never should have known them if my friends had not come down at the last meeting and insisted on their being published. They have been published, and you have all heard them, and are there any charges amongst them which can justify expelling a Fellow from the Society? I maintain there are not; and if I may judge from the sympathy which has been manifested for me, and from the number of letters that I have received from men whom I do not know, and whom I have never met, I believe that if you were to poll the Society by proxy papers they would be with me, feeling that I have not had common fair play as an Englishman. You never yet heard of any man being condemned without being heard. You never heard of any man being called a thief, a liar, or a murderer, without his being called up to state whether it was true or not; but you heard to-night from Mr. Haden, whom I have not the honour of knowing, that he made up his mind

to move this motion of expulsion without ever having heard one word of my reply.

Mr. Seymour Haden: Not at all. I have read your reply.

Mr. Baker Brown: It was known in London a fortnight ago that you were the mover of this resolution, and you never heard my reply.

Dr. Barnes: This is your reply—(holding up the printed replies). (Loud laughter.)

Mr. Baker Brown: I hope you will maintain order, sir, when I am speaking. (Hear, hear.) My friends have kept order during the speeches of the mover and seconder of this motion. I maintain that I am standing in a position no man ever occupied in this Society before. (Ironical cheers.) I say there is not a single man—not even Dr. Barnes himself—who has been as open in his practice as I have been. There is not one man in the Profession who has stood up as I have done, and shown his practice openly. Look at this "Home" which Dr. Haden has scandalised and slandered in the most shameful way possible. I say that the way in which he has described the proceedings there is untrue from beginning to end. (Mr. Haden: "No, no.") (Great uproar.) I maintain that my late colleagues in the room have all performed this operation. I maintain they will all assert that I never did the thing that I have been accused of doing; that I never went down and demanded a fee from a husband or father. There were no fees demanded at the Home. It is a gross scandal upon the Home, and upon all those gentlemen associated with me. In that Home there have been, according to the entry book, 3417 entries of Medical men who have visited it in the last seven years, since its formation. I do not consider that they are the signatures of 3417 individual men, for many gentlemen have been there again and again—much oftener than they state; but if I did the thing in secret—if I had practised quackery—why should I invite all the Profession to come and see me? Why should they come without an invitation? Why have they come from the north, from the south, the east, and the west—from the antipodes, from Australia, from Sydney, and from Melbourne, and from every State in America—why have they come? They would not come unless they saw everything really Professional. Has not my work been open? Has it been secret? I deny the charge. I have done nothing in secret. I deny the charge of untruthfulness. My writings have been as open as Dr. Barnes's have been, and as practical as his have been; and it is not true to state that I have been secret and had an object in being secret. I have been open. I have come to the conclusion that the operation of clitoridectomy is a justifiable operation—not my operation, recollect, gentlemen, but an operation that has been practised from the time of Hippocrates, and has been mentioned by all writers since that period again and again. Why, at your own very Society's meeting there were instruments in the room, I think, of Dionis, invented on purpose for clitoridectomy. (Cries of "Oh, oh.")

Dr. Barnes: For circumcision.

Mr. Baker Brown: Clitoridectomy is nothing more nor less than circumcision. (Cries of "Oh, oh.") You may say "Oh, oh," but I maintain that clitoridectomy is neither more nor less than circumcision. (Loud laughter, hisses, and groans.) I have heard the same noises before in this room. I have heard the same noises before within ten years, when a man dared to get up and say that the speculum ought to be used. Why, look how my friend Dr. Henry Bennet was met in this room, because he dared to used a speculum in examining a woman's uterus. How did they treat him? Did not these very men try to ruin him? Did not they condemn him, and write him down? (Cries of "No, no.") They did; and yet Dr. Bennet's practice has proved to be a standing practice in the Profession. (A voice, "He is not your friend.") (Order, order.) At all events, he is a distinguished member of the Profession.

Dr. Barnes: I admit that. He is my friend, and cannot therefore be yours.

Mr. Baker Brown: There is no personality at all manifested by the seconder of this motion!—Then, again, take the case of ovariotomy. Who has forgotten the attacks that were made in this room upon ovariotomy, and the manner in which the men were scouted from the Profession who dared to perform that operation? And was not I browbeaten in my own Hospital?

The President: This is not the question.

Mr. Baker Brown: Not the question?

The President: We shall be all night if we are to go into these matters.

Mr. Haden: It is no answer to the charges.

Mr. Baker Brown: It appears to me to be *the* question.

A Fellow: No; it has nothing to do with the question.

Mr. Baker Brown: I say that I have stood the brunt before that I am now standing. I have been accused of doing unprofessional acts in ovariotomy, and my own immediate colleague in St. Mary's Hospital threatened—so I was told—that the bodies should be exhumed, and yet, gentlemen, has he not become an ovariotomist?

Dr. Tyler Smith: It is untrue; I say there is no foundation for that whatever.

Mr. Baker Brown: Is it true or not that you did not sanction ovariotomy in the Hospital while I was there? ("Question, question.")

The President: That has nothing to do with the question.

Mr. Baker Brown: I am at a loss to understand why it has not. It appears to me that it has a great deal to do with the question. I say, if you discuss the question whether clitoridectomy is an operation founded upon pure physiological facts, investigate it like men. Dr. Tanner brought a paper forward in a scientific, proper way, and he declared it was a question which must be considered, and which could not be passed by in the Profession. (Cries of "No, no.") Did not he say so? and did not everybody then present give him credit for honesty of work? That has been all lost sight of now. If clitoridectomy is so bad, have a meeting of the Society like men; call a meeting especially to consider it, or have a special council; have a committee. ("That is not the question.") I asked for a committee again and again. I asked for a committee, and it was not granted. Is that the way to meet the subject? If the operation is so bad, and so unfounded in practice, then ignore it, and come to a proper determination upon it. If you, as a Society, say it is a subject which cannot be treated—it is not an operation which can be performed—then come down and say so, and, if I perform it afterwards, expel me.

The President: It is the manner in which you perform it. It is the manner in which the operation is performed, not the operation itself.

Mr. Baker Brown: Who is to decide it? ("We are to decide it.") Will you tell us what your ethical laws are? Will you tell me that my practice has been different from that of any man in this room now who performs clitoridectomy? Have I differed from them? I have not done so. Talk about examples! look at craniotomy; look at the man who destroys a child. He does not send down to ask the father if he may do it, but he does it if he thinks it right. [Mr. Haden: "Question, question."] It is the question, Mr. Haden. I say, if you condemn the operation of clitoridectomy and call it quackery, be honest men, and have it investigated scientifically. I am no more a quack than you are, or any one in this room. I am as highly educated, and have done as honest work, as any of you have done in this room. I am not the founder of a small "Home." I founded St. Mary's Hospital, or, at all events, I took the largest share in it, and this little Home that you speak of has fifty beds in it, and it is open to the whole Profession. You, sir, came in; the seconder came in.

Dr. Barnes: I beg to say I went there once, and did not go again.

Mr. Baker Brown: It is not a secret place; everybody can come in who is a qualified man and who writes his name down, and many come in who do not put their names down, but that is not my fault. If I do wrong condemn me, but not without hearing me. If I am not fit to be in this Society, give me your reasons. Why, you have given me no reasons. (Oh, oh!) That is a matter of opinion. I say you have given me no reasons. You have given me twenty pages of matter of other men's accusations, but have you put one single word in my favour in these charges? Have you put one single reply of mine to the charges made against me? Why am I to be condemned about what Mr. Haden says? Surely I know as much about the physiology of the female genitals as Mr. Haden does. Have I not done it openly? Look at St. Mary's Hospital. Who was the first that performed ovariotomy and all other operations on the female genitals publicly? I contend I was. Am I a quack and a worker in secret? I scout the charge. I am an open and honest worker. I have fought the battle for the Profession in a great many things—not only in ovariotomy but other things too—and have had to bear the brunt and burden of the day. There are men in this room

who will continue the practice in spite of what you are doing. I know one man in a Hospital says he will do it in defiance of you, and he is a Fellow of your Society, and one of your own Council is Consulting Physician to it. He is doing the very things for which you condemn me. (Name, name.) I hope the gentleman is here; he is not ashamed of it, and is able to give his name himself. I tell you as a fact. (Loud cries of "Name, name.") There is no confidence at all. I will give you the name if you think it necessary. (Give the name.)

Mr. SAVAGE: Speaking on behalf of some gentlemen who are sitting round me, I may state that we desire that Mr. Brown should have an uninterrupted hearing. With regard to names it is a matter of opinion whether they should be mentioned. There were no interruptions made to the previous speakers, and I think we ought to hear what Mr. Brown has to say.

Dr. WYNN WILLIAMS: Mr. Brown should not make assertions that he has no means of proving.

Dr. OLDHAM: I think it will be a wise thing on the part of the Society to allow Mr. Brown to speak without interruption. (Hear, hear.) And we shall finish what we have to do to-night far better. It will be better both for Mr. Brown and for ourselves if we listen to his statements.

Mr. BAKER BROWN: I am glad at last I have an opportunity of being heard quietly. I need not tell you I stand here in a very painful position, and it is not kind to interrupt me, it is not manly to interrupt me, for no man can talk when he has been interrupted so repeatedly as I have been to-night. I thank Dr. Oldham for his generous interposition, and will detain you as shortly as I can. I have performed this operation because I believed it to be a justifiable operation. I have done it to the best of my judgment, and in a way which I considered professional. I may err—we all may err; but if I have erred call me before you, and show me where I have erred. You have not shown me yet. Show me laws which shall govern your Society—ethical laws—and I will promise, while I remain a Fellow of the Society, to obey them; but do not condemn me upon something which does not exist. The opinions of the Council are not the opinions of the Profession. I was asked to believe that there has been no injustice and no personality. Why, gentlemen, I have in my pocket a letter from a gentleman who was written to by a member of the Council to ask him to come up and vote, and his remark was, "The case must be a very bad one if it wants whippers-in." It is well known that every effort has been made by the Council to bring voters up, and they now put forth a threat, which we have heard twice repeated to-night, that if the motion is not carried the Council will resign. Surely their case must be a very weak one, and they must have a sense of injustice in their hearts towards me, if they can throw out those threats. If the case is so plain, there surely can be no need for using those extraordinary measures against a Fellow of the Society. The proceedings have been most unjust against me from the beginning to the end, and I have not had a fair opportunity of defending myself. I should not to-night have had an opportunity if it had not been for my friends; and I have not even to-night had a fair opportunity, for I have been interrupted again and again while speaking. I did not interrupt Mr. Haden once when he spoke, and used language which, I think, he will regret. I made no observation upon what Dr. Barnes said, and really, if I am not to be allowed to speak, I will sit down and leave myself in the hands of the Society. I am quite content to say no more. If you will persecute me, I will be persecuted; but do not condemn me unheard. No malefactor was ever treated as I have been treated, I maintain. But I go back to the subject, and say that I have been an honest and open worker, that no man in London has been more open than I have been. I have brought forward my cases as truthfully as other men have done; and if they had not been truthful there have been opportunities of judging them. I published the truth; and as for matters of opinion they have quoted, and as for the Commissioners of Lunacy, I had answered the letter, and had said—"Excepting those cases already published in my book." My solicitor who advised me—for, recollect, I had internal evidence that those Commissioners were put upon me by the very parties that are mixed up with this motion—(Cries of "Oh! oh!" and "Chair, chair.") Then you are told there was no writer of the article in the *Times*. Is a man a forger? Are we all liars, according to Dr. Barnes's statement? I never knew the gentleman until he came to ask permission to go over the Home. He is an *attaché* of the *Times*. I have shown the letter to a friend of mine, and they will bear me out that he is a *bonâ fide* man who writes to the *Times* regularly. I did not know anything about what was going to be in the article until I saw it in the paper, and I wrote to him the next day. In my reply you will see the letter written by himself, and I will show the original to the President. One of the great points of the accusation was that while I was endeavouring to say that I was trying to court investigation, I was doing all that I could to avoid it, seeing that I did not mean honestly to have a Committee of Inquiry. You have not heard a word from the mover and seconder to-night on that point; and I think my reply must satisfy you that I did all that an honest man could do to have that Committee appointed. That accusation has gone out against me, and I had hoped that it would have been retracted to-night. You accuse me of a deliberate lie, but my reply must convince you, and every one who reads it, that I have not told that lie. Neither the mover nor seconder has had the good faith to withdraw that accusation. It would have been better if they had. And so with the whole thing. I know that there are gentlemen who would like to speak on my side, and I hope they may be allowed to speak. I would have said much more, but I tell you frankly the interruptions have prevented my saying what I would have said. ("Oh, oh!" "Go on, go on.") I say then, sir, as an Englishman, I stand upon the rights of an Englishman, and I say that I have been prejudiced without a hearing; and I ask you to-night in this room—I put it to your consciences—whether I have done that which deserves the punishment only accorded to a malefactor, for your law never intended that a man should be expelled from the Society because of his opinions—because his opinions differed from those of the Council. If that is to be law, I ask you where you will stop. If you pass a vote to-night expelling me, you must go on to other members of the Society. You must go on to members of your own Council who have been convicted of want of truth, and who have been convicted of unprofessional acts. And Mr. Haden himself, by his own showing, must go on with it, for he would not dare to say I was the man who laid the women on their backs and used the speculum, and applied the caustics, and so on. He must go on with it. Then, who are to be the judges? Are the Council to be the judges? They must clean themselves first. Where are you to stop? It is a grave Professional question, and I maintain again it is a question that will not bear the light of the open day; and I know of my own knowledge, from the amount of letters I have received from men all over the country, that I have the kind sympathy of a great many men in the Profession not in this Society. You may pass a vote condemning me to-night. I do not think you will. I do not think there are so many against me in this Society; but if you do, I tell you frankly I shall not consider it a stigma, and as it will apply to myself, I am surely the best judge of what I consider a stigma, because I feel that I have not been treated honestly and fairly. (Hear, hear.)

Dr. WYNN WILLIAMS: May I be allowed to ask Mr. Brown, as he has introduced the name of Dr. Brown-Séquard into his defence, whether Dr. Brown-Séquard did not write to Mr. Brown, after seeing a copy of the work dedicated to him, requesting that his name should be removed from the advertisement?

Mr. BAKER BROWN: I beg to say that he did, and that moment I gave orders that his name should be removed, and Mr. Hardwicke will testify that the order was given within twenty-four hours from the receipt of the letter. I was promised by the Chairman, I think I may be allowed to say, that some of my friends should speak this evening.

Dr. ROBINS (of Charlotte-street, Fitzroy-square): I have never spoken to Mr. Brown in my life, but I do feel, having listened to and watched all that has been said in this matter, I observe they are extraordinary. (Laughter.) But I cannot believe that Mr. Brown has acted in *mala fides*. I will ask the whole Obstetrical Profession, has not Mr. Baker Brown given as many hostages as any other person to the Profession? (Interruption.) Has he not performed more public cures than any other member of the Society? ("Question," and laughter.) I do not mean of clitoridectomy, I mean of ovariotomy. I must admit Mr. Brown, no doubt, is "*owdacious*." (Roars of laughter.) I admit Mr. Brown is very strong in his opinions, and there cannot be a doubt—and, in fact, I have no doubt—the success of his operations has led him that way. (A voice:

"What way?" and laughter.) In the direction of the opinions he has carried further—in ovariotomy. His success in that class of operations I believe to be unequalled. I say these few words in "corroboration" of the unadvised conduct of the Committee—(a laugh)—in attacking a man who, by his very powers, skilfulness, and activity, has perhaps brought this upon himself. I do not consider that we have a proof of any *mala fides* on the part of Mr. Brown. I have never spoken to Mr. Brown, but this is the spontaneous effect of the action of the Council, and I think it ought to be "corroborated" by many here. (Loud laughter.)

Dr. Squire: As no other member of the Council has risen upon a question of fact, I, whose only merit may be that I attended every meeting of the Council, deny that Mr. Brown asked for a committee. It seems to me that the way in which the Council were forced into action was that it was published in two Medical journals. I myself saw, to my great astonishment, a publication that the Council had been already asked to inquire into this matter, when the Council had received no such request; and at the next meeting of the Council we found in the mean time a letter had been sent, but withdrawn, and never came under our notice at all. And here Mr. Brown to-night, and Mr. Brown, jun., at the last meeting, say this committee had been demanded. I must say, having been present at every meeting, that I wish publicly to state that it was not asked for, and that it is in consequence of publications in the public prints saying that there was a committee inquiring into the matter that we felt bound to take up the question. I will also correct another matter of fact. Mr. Brown says no opportunity was allowed for him to come before the Council. I myself moved a resolution, which was carried; and as soon as the Council came to a determination, I believe more than a fortnight before the March meeting took place, that determination was sent to Mr. Brown. It was sent forthwith, and Mr. Brown never asked to come before the Council.

Mr. Baker Brown: Did you write to ask me to come before the Council?

Dr. Squire: It was surely open to you to take whatever course you thought proper then, as well as a fortnight afterwards.

Dr. Savage: Mr. Seymour Haden, besides addressing us in the most powerful manner, in the way he did, on the part of the prosecution—(cries of "Order, order," and great uproar)—I repeat, on the part of the prosecution; because you must remember that, in answer to our express wish on the last occasion for the grounds of your recommendation to be circulated, we wanted not only the grounds of your recommendation, but also, parallel to those grounds, any answer which Mr. Baker Brown might have to them. That wish was founded on a desire and anxiety to keep up the credit of the Society, that every possible matter should be brought forward. But, in fact, what has been produced has been this—an abstract with everything that could possibly be turned in favour of Mr. Brown carefully abstracted from it. I do not consider that quite fair. However, Mr. Brown has had the opportunity of replying, and has sent round a circular which may be considered parallel to the one sent round by the Council, so that I have little else to say. But there were a few remarks of Mr. Seymour Haden's just now—and I am not at all disposed to quarrel with him with regard to his speech and his anxiety to vindicate the position of this Society—but I am very much disposed to quarrel with him for the introduction of what was unnecessary for him to introduce. He said there were two or three individuals who, at the last meeting, interrupted very much the business of the meeting, and, in fact, they were disorderly. Now, I happen to be one of those gentlemen on whom such a reflection would fall rather strongly. My friend, Dr. Routh, I think, commenced being disorderly; but all I requested—and I refer to those very excellent notes which were taken by the *Lancet* reporter—all that I asked for was, that the grounds of your recommendation should be fairly laid before us, and long enough, previous to the present meeting, for us to take them into consideration. Now, that is all I ever said, and if you will refer to the report of what I said, you will see that I asked, not for an abstract, but for a full report. Now, I heard a little cry from Dr. Barnes when I asked it—a very small voice, but very significant. It said "Partisan." (Loud uproar.)

Dr. Barnes: You must not say that. (Great uproar, and cries of "Chair, chair." Continued confusion, during which Dr. Barnes vainly endeavoured to make himself heard.)

Dr. Savage: For being a partisan of Mr. Brown.

Dr. Barnes: I did not use the word.

Dr. Savage: "Friend," you said. (Cries of "Oh, oh," and uproar.) Then I only have to say that at the last meeting the Fellows all held up their hands for the amendment. It was carried without a dissentient voice that we should have the facts in as full a form as you could supply them laid before us. I therefore hope Mr. Seymour Haden will, as far as I am concerned, withdraw any sort of imputation, if he meant it, with regard to my disorderly conduct; for, I repeat, that is all I wished, and I put it to the Society whether the course I adopted was not consistent, if not with your rules, at all events with justice—that the facts should be circulated amongst us—not an abstract, but a complete statement of all the grounds on which you proceed to ruin a Fellow of this Society. (Hear.) Mr. Brown may say what he pleases. He may say he does not care. He may say it will make no difference; but I know it does make a difference. I should be ashamed to be connected with this Society if I did not feel that if I had misconducted myself in such a manner as to deserve to be sent out of it I should forfeit my position in the Profession. My object in joining the Society was simply to contribute my mite of information to the advance of obstetrical science. I cannot follow Mr. Haden in his statement of our out-of-door ethics at all. I know what we owe to each other, and that is fairness and common honesty. There has been much acrimony displayed against Mr. Brown. I am very sorry indeed that Mr. Brown undertook his own defence. I am sorry he ever uttered a word. I am very sorry indeed for Mr. Brown that he ever offered the Society an opportunity of inquiring into his conduct with regard to clitoridectomy. It had better have remained just as it was—to be estimated by the Profession according to the results as they turned out from time to time. There can be no doubt about it that Mr. Brown is very much mistaken with regard to the motives for performing clitoridectomy, and this assumption of the unnameable crime supposed to be conveyed is a great pity, and no one can regret it more than myself. Clitorotomy—I will not say clitoridectomy—is as old as the hills. It is not impossible, as some of us perform clitorotomy, that you may think fit to ask us why we do it. All I can say is, the motives were never a supposition that the person on whom the operation is performed had been guilty of a vice at all. There is no such supposition of the kind. (Hear, hear.) There have been cases which seemed to require it. I am not prepared to say that I can support Mr. Brown's view in that, but I am particularly anxious to set myself right with the Society, and it is that anxiety that has caused me to speak. So long as an imputation, such as Mr. Haden seemed to let drop, exists against us, I think we have a right to be heard, and I should hope Mr. Haden will avow that what I did at the last meeting was not unusual and not unfair.

Mr. Seymour Haden: I shall not have the least objection to avow exactly what Dr. Savage did. What he did was this. In the first place, all the speakers at the last meeting were out of order, speaking against the law. No one at the last meeting had any right whatever to speak, and therefore they interrupted the meeting from beginning to end. That is a sufficient answer; but if I add, that all we got from Dr. Savage was, that this thing really might depend upon nothing more than an east wind, and all that we got from Dr. Routh was that we were invading the rights of British subjects, I think the meeting was unnecessarily interrupted.

Dr. Wynn Williams: I had not intended to speak on the present occasion; but, in the first place, let me say I am not a friend of Mr. Brown's or a partisan, and I am not a friend of clitoridectomy; but if it is stated that I interrupted the last meeting, I did hold up my voice and my hand in favour of having the cause shown to us; and I am quite satisfied that you, Mr. President, and all the Council ought to thank the men who did stand forward and have the cause given; because if you had not had the cause given, it would have been a hole-and-corner affair, and it would have done the Society more damage than anything that could possibly have happened. If it could have been said that it was done in a hole and corner, it would have greatly damaged the Society.

Mr. Seymour Haden: The Council have published nothing but what was published before; therefore there has been nothing done in a hole and corner.

Dr. Wynn Williams: Sit down till I have done. I asked a couple of barristers what was the meaning of the clause, and they said "It is borrowed from our law, and the meaning of it is, that when you apply for a criminal information against a man you must show cause why you do it, and then it is for the man to give an answer." If the matter had not been pub-

lished as it has been published, the Profession at large would never have had Mr. Brown's most damaging answer. I think great credit is due to the Council for having brought the matter to this issue, and I also think that every man who wishes well for the Profession and for this Society should support the Council in the action they have taken. I say this because I have got up now to vindicate what I did, because I considered it would have been a hole-and-corner job if it had not been so. I shall say no more.

Dr. Routh: I really do think, and am afraid, that Mr. Brown has damaged his cause by having spoken in the way he has done, and I am sure that there is much to say in his excuse, inasmuch as when a man is put in the very difficult, painful, and unenviable position in which Mr. Brown has been placed, if he is not listened to with that attention which he ought to be listened to, and if he is constantly interrupted—("No, no")—then, sir, that gentleman is sure to become confused, and his reply, instead of being one which will be in his favour, may be construed to be one which is just the reverse. This is a plain statement of fact. On the last occasion I took up the defence of Mr. Brown upon the broad and English position that I felt I ought to take it up. I have been accused by Mr. Haden, a gentleman whom I do not believe I ever saw before, of having come to the Society and created a disorder in the Society, when I believe that I was merely doing that which, as Dr. Williams has said, has put you in a proper position, and has enabled you to come forward and state that your proceedings were not proceedings in a hole and corner. And, sir, I appeal to you—I wish the Society to know I was not here as a person wishing to create a disturbance, but you, sir, gave me the privilege of getting up and speaking. Dr. Tyler Smith opposed me to the utmost of his power; the Society was with me, and they heard what I had to say. Now, sir, I hope that in this state of facts the Society will listen to me as I endeavour to make a few observations to show why I think it would be wise in you and in the members of the Obstetrical Society generally not to carry out this severe and harsh sentence against Mr. Brown. Now, sir, in the first place, I must start with this proposition. I do not care what the press generally may say. I am now speaking in general terms as to the conduct of A., B., and C. It is perfectly well known in these days that a particular class of papers take up a particular bias of doctrine, and upon that bias of doctrine they write. I will take an instance. Supposing any one of us wanted to form an opinion on John Bright—("Question," and uproar.) I do hope, and I appeal to the Society—I stand here really with a wish to do justice towards a fellow-man who is in great distress, and I stand up here as a man, to say a word in his favour. Now, sir, I say, if you wanted to form an opinion of John Bright, would you take that opinion from the *Standard?* If you wanted to form an opinion of Lord Stanley, would you take it out of the *Evening Star?* Certainly not. Why? Because those papers have peculiar doctrines, and it is part and parcel of their doctrines to oppose Mr. A., B., or C., because he holds different opinions to themselves. In the same way, I say you are not justified in taking, as grounds of justification, the opinions in the Medical articles of any journal; and so far I believe that that document which has been issued by the Council has been formed in accordance with those articles. Mr. Brown has spoken in the strongest terms of Dr. West. Now, I have had the pleasure of meeting Dr. West on a great many occasions: I know he is a man whose name will be handed down to posterity as a great name in our Profession. But, sir, would I pin my faith to Dr. West as to any matter of doctrine? Have I not got the right given to me, thank God! that I can always use my knowledge of right and wrong to know whether Dr. West is right or wrong? It appears to me to say that because Dr. West says such and such things are so, it does not follow, because Mr. Brown says such and such things are not so, that therefore Dr. West is right and Mr. Brown is wrong. The inference is perfectly illogical. But, sir, there is another point. Dr. West stated that he does not know a single case of insanity that has been produced by the particular practice which was believed to prevail amongst some people, and yet, so far from that being the case, in this very document itself Mr. Brown has brought forward an opinion of Dr. Forbes Winslow himself, and the opinion of Dr. Esquirol, and of Dr. Copland, which are dead against Dr. West. You see to what point you come when you come to individual opinions, and if they are to form the groundwork of your opinions for condemning a man. (Confusion—A voice: "Facts, not opinions.") I am quoting from the very words here. ("You have not read them.") You have all had these papers. Really these constant interruptions are not fair. Here is a case brought to Mr. Brown which created a great deal of odium, and I wish to argue upon it. It is said Mr. Brown went and operated upon a lady—it is stated here on the authority of Dr. West—against her consent. Now, that is a grave charge. What does Mr. Brown say? Mr. Brown said, "Yes; I did. I now see I committed an error." But I will ask you this. I do not talk to those gentlemen who have the experience of the world upon them, but I ask the young men of the Profession—those who are rising up—I ask those young men, if a woman came to you and told you, "I am doing such and such things—I do not want my husband to know it," I think there are very few young men (loud cries of "No, no,") who would not do as Mr. Brown has done. As we grow older we know better, and we should take a different view of the matter. I will take another case. I will go even further, and I will say that, according to the ethical laws that are generally observed in our Profession—according to those ethical laws, it is sometimes justifiable. If I am wrong you will tell me so. It is sometimes justifiable to keep a husband in ignorance of what you know about his wife. ("No, no. That is not the question.") I want to press my point, and I think those constant interruptions are very unfair. If you will not hear me, I will sit down. Now I will give you an instance. Such cases have occurred. I dare say there are certain members present who will say the same. Supposing a lady came to you and told you she was in the family-way; but, unfortunately, this lady being a married lady—I take a case that may occur, and has occurred—she will tell you, she will probably let out the fact, that her child is not her husband's. ("Oh, oh," and laughter.) Now I will ask you, is it any part of your duty, having got this information, to go to the husband and say, "That wife of yours is not virtuous"? Certainly not. I would ask you—I put it to you—which is the most—(interruption and hisses.)

The President: Keep to the question.

Dr. Routh: This is precisely upon the question. Which is the worst deed of the two? To palm upon another man a child which is not his own—(great laughter, uproar, hisses, and confusion.) I have told you that there are some circumstances in which it is probably justifiable to keep information from the husband. Now, sir, I will go to another point. It is said Mr. Brown has been in the habit of cutting off the clitoris of persons without informing them of it. Now, if that be so, I will merely ask you, if you had to operate upon a patient—I do not care what the operation may be—is it customary to enter into the minutiæ and to describe every particular phase of the operation to the patient? ("Yes, yes.") Then if it is the custom, there are very few Surgeons who keep to it. ("Oh, oh," and "Question, question.") That is the question. It is because this goes so home in the matter that you call out question. But I know this to be the fact, and you and every one of you know it also to be a fact that very often persons are operated upon, the Surgeon giving them a general idea of what the operation may be, but not going into all the minutiæ of the operation; therefore, it is perfectly possible in some of those cases that the information was not given in special terms; therefore, it was done without any information at all. The strongest point against Mr. Brown is, I think, that of the Lunacy Commissioners. It has been said—and the most unmeasured terms have been used—that Mr. Brown has been guilty of falsehood. Now, sir, let us look at the case exactly as it is. Let us understand what took place before the Commissioners of Lunacy. An article appears in the *Times* calling the attention of the Commissioners to Mr. Brown's practice. As the result of that, we find a few days afterwards that a letter is addressed to Mr. Brown, and he is asked to give his opinion with reference to certain people who have been taken into his Home and operated upon for being of unsound mind. And, what is more, the House-Surgeon is brought forward, and he admits positively that sometimes people of unsound mind were taken into the Home. What does Mr. Brown say? Does Mr. Brown say that he has not taken in any cases? That is the main point, and the wisdom of the lawyer proved it so. He merely says this—"That during the past year—those are the words—"during the past year——"

Dr. Wynn Williams: "Ever——." (Cries of "Read, read.")

Dr. Routh: "I have no hesitation in stating, as Senior Surgeon and founder of the London Surgical Home, that the institution is not a Home for the reception of females of unsound mind; and in no papers or advertisements issued or

published by authority has it ever been stated so." Now, sir, what is an institution that is open for the reception of insane persons? I really think you must look to the meaning of words. After all, we can only speak according to English. What is an institution open for the reception of insane persons? As I read it, it is a lunatic asylum, according to the plain English construction of phraseology. Put it before any person you like who is accustomed to write according to orthographical rules. I maintain, as far as that is concerned, Mr. Brown is perfectly right. The authorities have never stated that that Home was open as a lunatic asylum. On the other hand, is it not the fact that there are in other Hospitals occasionally patients taken in of unsound mind? Is it, or is it not? Is it not a fact that one very common case of unsound mind is commonly taken into our hospitals, which is just as contrary to the Act in every respect—I mean the case of ordinary *delirium tremens?*

Dr. Turner: Not if they can help it.

Dr. Routh: But whether they can help it or not it is done. Such cases occur. ("Time, time," and derisive cries of "Leave him alone.") If the Society does not wish to hear, I will stop. ("Go on.") I have seen many cases in the University College Hospital of insanity according to the Act—unsound mind. The Act says so. Then Mr. Brown states that during the past year he did not admit such a case. There was only one that came in. Mr. Brown could not state that he had never had such cases, for if he had stated such a thing he must have been a very foolish man indeed, when his book was there in black and white to tell that he had taken some of these cases in. How could he say he had not taken in these cases? Mr. Brown did not say so. He said, during the past year there had been but one case. Now I do not see any lie about that. When it happens that a man gets into an error and makes a mistake, it is but natural that he should go and ask his lawyer. Every one of us would do the same thing. I do not say that altogether the thing admits of a perfectly clear interpretation, but every man, I think, would have done pretty nearly the same thing if he had fallen into the same difficulty. I say I admit that; but I do not think it is justifiable to turn round upon Mr. Brown in this way. I think the Council are in error. They ought to have rather passed a vote of censure, after full, free, and entire investigation of the question, against Mr. Brown. If they had done so, Mr. Brown no doubt would have resigned, and we should have got rid of all this annoyance which has taken place, and which has been exceedingly injurious to the Society. I do not mean to say to-night that Mr. Brown has not been injudicious, that he has not been enthusiastic, that he has not laid himself open to several of the charges that have been brought; yet, inasmuch as I believe honestly—and certainly you will admit I have as much right to my belief as any other man—that he has acted more from ignorance as to what he really meant to do or to say than from wilful malice, I feel, as a man who would wish to follow the attribute of mercy and consideration towards a fellow-man, that I should not be justified in voting against Mr. Brown, and in supporting the action of the Council. Consider—and now I appeal to you all, gentlemen—the extremely unhappy position in which you are going to place Mr. Brown. Consider the injury which you do personally to the man. Is the punishment not greater than the offence? If you will not consider Mr. Brown at present, consider what he has done for science; and there is nobody here present, not even his enemies, who will deny that he has done good in the Profession. (Hear, hear.) Consider, lastly—and here I appeal to you as men of feeling—the injury you do by such a step to those who have not erred with himself, and who are the members of his own family. Sir, I confess for my part, believing that I have the heart of a man, that I cannot bring myself to vote in favour of this motion. I cannot bring myself on this occasion to put my hand into that box against Mr. Brown. And bear this point in mind, that if we could be clean dissected every one, there is no doubt whatever that many of us have been guilty—if not wilfully, at least by accident—of many an unprofessional act. ("Thank you; thank you.") I say, if not wilfully, nevertheless we have done it; and, under those circumstances, I should say, having in consideration the injury that you do to the man whom you wish now to ruin—("Oh, oh!" "No, no.")—let the man that is perfectly pure and immaculate among you throw in the first ball.

Dr. Tyler Smith: I do not think any one could repeat without grave consideration the words just uttered by Dr. Routh. (Hear.) No doubt we are all of us prone to err; but, sir, he has taken upon himself the *rôle* of the good Samaritan. But he seems to have no pity for those who are left wounded by the way. (Applause.) He wastes his sympathy upon those who have reduced the wounded to that condition. It appears to me the great vocation of the meeting to-night is to defend women who have been and are liable to be injured by the practices in question. There are a great number of females in London, and scattered throughout the country, who are in this case, and I may say that for the last two or three years I have never gone into the country to see a patient without having complaints of cases made to me upon this matter of clitoridectomy. There are numbers of families where the husband is annoyed, and the wife made wretched for life, by this operation having been performed with or without the consent of the patient and her husband. Then there are a number of young women upon whom this operation has been performed without the, at all events perfect, knowledge of themselves and their relatives; and these young women are in as deplorable a condition as can be imagined. If they are honourable, should any proposal of marriage come to them, the parents are obliged to tell the parties proposing that they have been mutilated, and thus they are obliged to expose themselves to the possibility of being treated as imperfect persons. Now, I think our sympathy should be with women in this position and their friends, and not with those who are instrumental in producing such unhappy results. It appears to me that the two main matters which we have to consider are the performance of the operation upon married women without the consent of their husbands, and upon unmarried women without the knowledge of their friends and of the patients themselves. Mr. Brown substantially has admitted this in the documents printed by us, the Council, and in his own reply he says, speaking once for all, the operation is of no consequence, it is merely circumcision, and he allows that he has done it, and justifies the doing it because a great number of other eminent Surgeons in this metropolis do the same. Now this I venture to disbelieve.

The President: Allow me to interrupt you a moment. I must put it to the meeting whether this discussion shall be continued for another half-hour.

Dr. Oldham: I beg to propose that it be so continued.

Dr. Priestley: I beg to second that motion.

The motion having been adopted unanimously by the Society,

Dr. Tyler Smith continued: Now it is substantially admitted by Mr. Brown in the documents we have before us that this is his notion of right practice, and that he does not shrink from this responsibility. I say that we, the Council, have not entered into the question of clitoridectomy in itself; we have avoided this matter; we have confined ourselves to the consideration of the questions in ethics arising out of the mode in which it has been performed. (Hear, hear.) I have not heard from any speaker in favour of Mr. Brown, or from Mr. Brown himself, anything which could in the slightest degree justify the performance of this operation upon young women without their knowledge, or upon married women without the knowledge of their husbands. I pass by Dr. Routh's observations as idle as the wind. You cannot compare the case of a pregnant woman, or a case of syphilis, or the use of the speculum, with the operation of clitoridectomy. Clitoridectomy leaves her a different woman after the operation from anything she has been before. Dr. Routh had nothing to do with the pregnancy of the woman who confided her secrets to him; it was no crime of his. (Laughter.) He does not participate in the crime by not revealing it to the husband; but if he is an operator in the case of clitoridectomy I maintain he is the faulty person. On the last occasion I spoke with great hesitation, and I may say that, although I have long been aware of these matters, I have not publicly spoken or written of them, although I have been entreated to do so. I have avoided it as a disagreeable subject. But on the last occasion I mentioned in this room that I had known cases where clitoridectomy had been performed under terrorism, where patients had been threatened that if they did not submit to this operation they would become insane. Now, I want to hand you a letter from a distinguished Practitioner in the country, confirming what I then said. It refers to an unmarried lady of rank. The writer says, "Permit me to say that the result of the operation was found unsuccessful; more than this, it has produced a great aggravation of the previous evil. At the time this operation was performed but little information could be obtained from reliable sources of its alleged value. We had to trust solely to the strong assertions of a person who we

had every reason to believe would not advise a proceeding of this kind, unless certain of the good results that would follow. Moreover, the patient was told in my presence that unless she submitted to this mutilation she would soon be in a madhouse." It seems to me that this is as bad a form of terrorism as can be exercised upon a defenceless woman. (Hear, hear.) Now it appears to me that a main point in Mr. Baker Brown's speech or defence is, "If I have erred I will never do it again. Point out my fault, and it shall never be committed afresh." If we could believe Mr. Brown, I would not stand up upon this occasion. If we could believe Mr. Brown, I think it would be our duty to condone this offence, however great it may be. But what do I find? On January 31 Mr. Brown wrote his letter to the Council, withdrawing his offer of a Committee of Investigation. He withdrew it (note the date) on January 31. On February 4, Mr. Woollaston Pym, the Secretary of the London Surgical Home, wrote this letter to the Medical journals:—"I am directed by the two senior Surgeons, Mr. Baker Brown and Mr. Philip Harper, to state that, solely in deference to the opinion of the Medical press on clitoridectomy, they have determined not to perform the operation in this institution pending the Professional inquiry into its validity as a scientific and justifiable operation. An early insertion of this note in your journal will oblige." This appeared in the *Medical Times and Gazette*, the *Lancet*, and the *British Medical Journal*. Now, on February 21, Mr. Brown performed essentially clitoridectomy in the London Surgical Home, and I maintain that in doing so he was guilty of a breach of faith with every individual member of the Profession who had read that letter of Mr. Pym's. (Hear, hear.) I have in my hand an account of the operation, written by Dr. Locking, who was present, and who resigned his appointment at the Home in consequence of what he considered a breach of faith towards the Profession committed by Mr. Baker Brown. He says:—"I gave you the history of the case of the person operated upon by Mr. Baker Brown on February 21 last for removal of the clitoris, as copied from the Case Book kept by the House-Surgeon. This extract from the Case Book was published. The particulars of the operation were not fully given in the Case Book. I therefore furnish you with the following if it is likely to be of any use:—In the case as entered in the Case Book, it is stated that the *caput clitoridis* was removed. I asked the House-Surgeon why he did not say the clitoris, as the whole of the organ was removed, and its very crura destroyed. He said he was directed by Mr. Brown, to write instead of 'clitoris,' 'caput clitoridis.' Now the whole of the organ was removed, and in the following manner:—Two instruments were used, the pair of hooked forceps which Mr. B. always uses in clitoridectomy, and a cautery iron, such as he uses in dividing the pedicle in ovariotomy. This iron is made by Pratt; it is somewhat hatchet-shaped. The clitoris was seized by the forceps in the usual manner. The thin edge of the red-hot iron was then passed round and round its base until the organ was severed from its attachment, being partly burnt, partly cut or sawn, and partly torn away. After the clitoris was removed, the nymphæ on each side were severed in a similar way by a sawing motion of the hot iron. After the clitoris and nymphæ were got rid of, the operation was brought to a close by taking the back of the iron and searing the surfaces of the labia and the other parts of the vulva—(cries of "Enough, enough")—which had escaped the cautery; and the instrument was rubbed down backwards and forwards till the parts were more effectually destroyed than is the case when Mr. Brown uses the scissors to effect the same result. On interrogating the patient subsequently, she told me she did not know what had been done to her; that the nature of the operation had never been explained to her, nor had she been asked if she would consent to the operation." (Sensation.) Now, it seems to me that we cannot give credence to any promises that may fall from Mr. Brown. It appears to me that we must eliminate from practice clitoridectomy as performed under the ethical conditions of Mr. Brown, or we really must fall down and become worshippers of Priapus. (Applause.) It appears to me the present occasion is one of the most solemn which have ever occurred in the history of the Profession. I know of no other occasion on which Medical men have been thinking continuously for months, upon such a question of right or wrong—(hear)—of ethical behaviour as the present. And it appears to me that we must either sink lower than the Profession has ever sunk, now the matter has been widely and thoroughly discussed, or we must really clear ourselves of this subject. If Mr. Brown could perform this operation alone—if he could go his own way—if he could separate himself from us—if we had nothing to do with it—we need not interrupt him. But we have to do with it. He stands not in his own strength; he stands as one of ourselves—(applause)—and we are bound, as it seems to me, to protest against the doctrines which he has urged as to this form of operation. ("Hear, hear," and cheers.) I will end as I began by saying that, while we may have some sympathy with Mr. Brown, and desire to act with perfect fairness towards him, we must have greater sympathy with the women whose lives and persons are intrusted to our care. (Loud applause.)

Mr. Baker Brown: I am sure you will allow me one word in reply to what has fallen from the last speakers, in all common fairness. With regard to the case Dr. Smith has related, and the letter he has read, a gentleman of Scarborough called me in to that case. I gave him my opinion honestly. I believed, and still believe, the patient was verging on insanity, produced by perpetual masturbation. He took time to consider, and she also. Two or three days elapsed; a nurse was sent for, and came down from London; and then and there, with his assistance and sanction, the operation was performed. I gave my opinion as an honest man, that she would become insane unless the operation was performed. I believe that masturbation does produce insanity. Am I to be told that I exercised terrorism? I did not see that patient alone. I saw this gentleman who called me in to see her. I gave my opinion, and performed the operation which I thought to be right. But there was no terrorism; and no large fee taken, for I think I only had ten guineas — certainly not more than twenty (a laugh) — for the operation, Then as to the other case—the last of all—I deny that I did perform clitoridectomy. ("Oh, oh!" and interruption.) I have not the least objection to state what it was. I had it in my paper to mention it, and I had many other things which I wished to mention, had I not been so unfairly interrupted. ("No, no.") I state it again. (A voice, "You were not.") I say again, I would not perform operations on women for masturbation; but I have done so simply because I find conditions and illness produced by masturbation. I am accused of having impure and unchaste ideas respecting women. I would have the Society know that I have been associated with women of the chastest order. I have, in my own family life, had the happiness to be associated with women as chaste as those connected with any man in this room. ("Oh, oh!") I have no unchaste thoughts with regard to women, such as have been imputed to me. I treat them to the best of my ability. With regard to that letter, as it has been mentioned by Dr. Tyler Smith, I will say a few words upon the case. You are asked to believe there is no personality and no feeling in this matter. I have Dr. Locking's statement that he showed that letter of resignation to Dr. Tyler Smith; and he says in his own language, Dr. Smith seized it as a tiger would a piece of flesh.

Dr. Tyler Smith: Have you that in his own handwriting? I disbelieve it. Will you produce it here?

Mr. Baker Brown: If I had known you were going to mention it, I should have brought it with me. I have it that he did not give the letter to Dr. Tyler Smith for publication; but that Dr. Tyler Smith said as soon as he saw it "This is too good, I must keep it." I have the written statement to my lawyer that he did not give it to you for publication, but for the use of the Society, and he was surprised to find it printed and published. That is the fact. I say I do not perform clitoridectomy. Several gentlemen have examined that patient, and can state that the clitoris is not removed. I took off the *caput* clitoridis, but the clitoris is on the woman still. (Laughter.) Gentlemen may laugh, but if they doubt my words let them go and examine that patient and see for themselves. (Roars of laughter.) That case was waiting in the Home for two or three months while I was ill. If it did no good, all I can say is I did what I thought was right. It is an operation which Dr. Tyler Smith himself has done—the use of hot iron for the removal of the clitoris.

Dr. Tyler Smith: Never, never.

Mr. Baker Brown: You are stated to have done so. I knew a person who stated you did so. At all events it is an operation that has been sanctioned by many. I have been asked, "Why not use a hot iron?" "Why not use a blister?" "Why not something else?" But I repeat this was not a case of clitoridectomy. The clitoris was not

removed, nor the crura: there it is now. If you doubt me, go and examine it. (Ironical cheers.)

Dr. Tyler Smith: If you will forgive me for a few moments I wish to say that Dr. Locking came to me saying, that in the interests of truth, he felt it necessary to put that letter before the Council. I said, "The Council deal only with published matters which can have nothing to do with this. If anything can be done with it, it must be published in the journals." He said he was perfectly willing that it should be published. It was not published in the *Lancet*, but so far from his being surprised at seeing it in print, he wrote a letter to Dr. Wakley saying he was perfectly willing it should be published. I must say unless Mr. Brown can produce what he says, I do not believe it.

Mr. Baker Brown: I undertake to produce it to every member of the Society within twenty-four hours. The *Lancet* telegraphed to him to ask if it was for publication. His answer was "No; I gave it to Dr. Tyler Smith." I will undertake to give every member of the Society a copy of this, and to prove it to every one by the attestation of my solicitor.

Dr. Tyler Smith: Do you deny that he wrote to Dr. Wakley that he was willing it should be published? Do you deny it?

Mr. Baker Brown: I say Dr. Wakley telegraphed to him—"Is this for publication?" The answer was—"No! I gave it to Dr. Tyler Smith." That was the answer. He showed the telegram to a gentleman, whose testimony has been given.

Dr. Tyler Smith: Mr. Brown, I am sorry to say, cannot describe anything accurately. The letter was given by me to the editor of the *British Medical Journal*. I said I cannot give to you the above. It is not private matter; it must be sent to the other medical journals, and it was sent by the editor to the *Medical Times* and *Lancet*. Dr. Wakley telegraphed to ask him if it was sent by him for publication. He, Dr. Locking, replied, "No." It was not sent by him, it is quite true; but he said, "I gave it to Dr. Tyler Smith *to do as he pleased with it*." Now, Mr. Brown has carefully left out that part of the sentence. After that, Dr. Locking showed me a telegram, and informed me of the words, and as far as I know I have found him a truthful person. He then wrote a letter to Dr. Wakley, saying, I am quite willing the letter should be published.

Mr. Baker Brown: I can show a letter from this gentleman stating that he did not send it for publication, and did not know of its publication till he saw it in print himself.

Mr. Chambers: I think I can explain this. The letter referred to by Mr. Brown was a reply from Dr. Locking to a threatening letter which he had received from Mr. Brown's solicitor, for allowing the paper to be published in the *British Medical Journal*.

Dr. Tanner (of Brighton): It appears to me we do not meet here for the purpose of discussing the mode of performing operations, neither do we meet as philanthropists, for the purpose of discussing Mr. Brown's moral character, or what were the intentions he had in performing those operations. (A voice: "We do.") On the contrary, I assume we meet here as the gentlemen constituting a public body who have emerged from the difficulties and clouds under which we lay during previous centuries, having achieved a position and satisfied the public that their health in our hands, as men of honour and gentlemen, is safe, and that we shall never presume to go beyond the bounds of what is right, nor at once, haphazard, to say, "Because I think so-and-so is right, therefore I will go and do what I think," until we have got something better than one's own poor judgment to go upon. I take that which has been written and been proved; and if I have a question of doubt in my mind, I put it before a number of men belonging to such a Society as our own, to have their opinion upon it—before I implicate the whole Profession by such conduct as Mr. Brown's. I am a perfect stranger to the gentleman in question. I came from Brighton to record my opinion, and there are others who have come from distant places, as to whether you and the whole Profession can feel as a body that you will endorse Mr. Brown's treatment of his patients in private or in public, or whether you will ignore it, and say you will have nothing to do with it. (Applause.)

The President: I have received a letter this morning from Dr. West, which I will request to be read.

The Secretary read the following letter:—

"61, Wimpole-street. April 3, 1867.

"Dear Dr. Davis,—I trust that I may not be suspected of any wish to interfere in the question before the Obstetrical Society to night; if, in self-defence, and in justification of the perfect accuracy of those statements which I see are impugned by Mr. Baker Brown, I trouble you with these few lines. First, I never spoke to Mr. Brown, nor have ever been in the same room with him in my life. I have, therefore, no personal difference with him, nor any animus against him. Second, the appeal to the public which I attributed to him I distinctly stated, and state to be the Address to a non-Medical audience at the 7th annual meeting of the Surgical Home, afterwards printed and circulated in the report of the Institution. Third, I had not *two* patients whom I was treating at the same time in the same way; one, as Mr. Brown suggests, for fits produced by masturbation; the other, for chronic eczema. I had one patient of chronic eczema. Part of my prescription has been published, part suppressed by Mr. Brown. Fourth, Dr. Greenhalgh's letter merely says, "that the patient had been under the care of Dr. Simpson, Dr. Farr, and, I believe, Dr. West," and does not even state that any of us had advised clitoridectomy. To the best of my knowledge and belief, I never saw that patient at all. Fifth, my statement that the case referred to by me of the removal of the clitoris by Mr. Brown, without the knowledge or consent of the patient, is by no means a solitary one; and so far from being vague, as Mr. Brown asserts, is positive, distinct, deliberate, and one which he cannot deny.—Believe me, yours truly,

"Charles West."

Dr. Barnes rose to reply, but was greeted with loud cries of "Vote, vote," and "Divide, divide."

The President: I will call upon Dr. Barnes to reply, if the meeting wishes it.

"No, no." "Divide, divide."

Dr. Barnes: I will merely call to mind the fact that no one of the main charges has been touched upon by Mr. Brown or his friends. He expressly evaded the question I put to him. (Cries of "Enough, enough;" "divide, divide;" and applause.)

The ballot was then taken, and at its close the scrutineers sent in the following report.—"We, the undersigned scrutineers of the ballot for the removal of Mr. I. Baker Brown from the Obstetrical Society of London, do hereby state that the following is the result:—For the removal of Mr. Brown, 194 votes; against the removal, 38 votes; non-voters, 5; total, 237. Thus it appears that the motion of the council for the removal of Mr. Brown from the Obstetrical Society is carried by 36 votes above the required majority of two-thirds." The names of the scrutineers were appended—Dr. T. H. Tanner and Dr. Edward Parson.

The President: In accordance with the Rules, sec. 2, cap. 4—"That if on a ballot taking place, two-thirds of the Fellows present shall vote for the removal, the President shall declare the Fellow in question removed accordingly"—I therefore declare that Mr. Isaac Baker Brown is removed from the Fellowship of this Society.

Mr. Nunn: There is one duty, I think, that this Society has to perform, and perhaps I may not be quite the wrong person to propose that the Society should perform that duty, seeing that I am not connected in practice with the special department which this Society presides over. The duty of the Society is to propose a vote of thanks to the Council, because the Council has undertaken a duty which has been of the most onerous and painful description. They have done that, I feel perfectly certain, and I think we must all feel perfectly certain, but with one single motive—namely, that of vindicating the honour of the profession. (Hear, hear.) Therefore, whatever personal feelings any of the members of the Council might bear, I am quite certain that those feelings were in no way commensurate with their feelings as citizens. Therefore I propose that a vote of thanks be given to the Council of the Society for their manly, and straightforward, and patriotic conduct of this painful affair.

Mr. Chance: I beg to second that. I think the thanks of the entire profession are due to the Council.

Mr. Nunn: Before it is put to the meeting, I would include the President in the vote of thanks.

The President left the chair, which was taken by Dr. Tanner.

The Chairman: I need hardly put this motion, but I beg to do so as a matter of form. It has been proposed by Mr. Nunn and seconded by Mr. Chance, "That the best thanks of this meeting be given to the President of this Society, and to the Council, for the admirable way in which they have

performed their very painful duty." Those who are of opinion that this motion should be carried, will signify the same in the usual way.

The motion was carried *nem. con.*, and the meeting separated.

---

237 Fellows were present, of whom the following were from the provinces:—John Armstrong, M.D., Gravesend; James H. Aveling, M.D., Sheffield; E. R. Blackett, M.D., Southwold, Suffolk; Charles Burnett, M.B., Biggleswade, Bedfordshire; John Carless, M.D., Woolwich; James Fenn Clarke, Leamington; John Clarke, Lynton; William Collingwood, Maidstone; James Coombs, M.D., Bedford; Charles Drage, M.D., Hatfield, Herts; James Fowler, Wakefield; W. John Harris, Worthing; H. Roche Hayes, Basingstoke; C. H. Hayman, M.D., Eastbourne; Geo. F. Hodgson, Brighton; Constantine Holman, M.D., Reigate; H. Martin Holman, M.D., Hurstpierpoint; George Edward Horton, Dudley; Thomas Steers Hutchinson, L.R.C.P. Edin., Sittingbourne; Henry James, F.R.C.S., Weybridge; Edward Leech, Chichester; Charles Lovegrove, M.D., Sevenoaks; John Macrae, Lewes; Richard Marley, Bromyard, Herefordshire; John Moorhead, M.D., Weymouth; Albert Napper, Cranley, Guildford; A. P. Owen, Margate; William John Pilcher, Boston, Lincolnshire; David Richards, Brighton; Alfred G. Roper, Croydon; William Alexander Russell, L.R.C.P. Edin., St. Albans; William. Johnson Smith, M.D., Weymouth; A. Browne Steele, Liverpool; William Sutherland, M.D., Croydon; Frederick Symonds, F.R.C.S., Oxford; Richard Turner, Lewes; Thomas James Walker, M.D., Peterborough; Joseph Ward, Epsom; George Henry Watts, Thatcham, near Newbury; Henry Speakman Webb, Welwyn, Herts; Robert Uvedale West, M.D., Alford; Thomas Wilson, L.R.C.P. Ed., Alton; J. Lucas Worship, Sevenoaks.

Number of Fellows present at meeting		237
Left before ballot		2
Present at ballot		235
Fellows who voted	232	
„ „ abstained from voting	3	
		235
Voted for the resolution of the Council		194
„ against ditto	38	
Non-voters counted as against ditto	3	
		41
		235
The two-thirds of meeting required by the by-laws		156
Number of votes in excess of ditto for the resolution		38
		194

It was understood that in the hurry of the ballot three Fellows voted by mistake in Mr. Brown's favour. The voting was carried on by means of papers stamped, "For the removal of Mr. Brown," and "Against the removal of Mr. Brown." The word "against" led to the mistake.

NEW ARMY MEDICAL WARRANT.

The following Royal Warrant, dated April 1, 1867, revising the pay and half-pay of Medical Officers of the Army, was promulgated on Tuesday:—

"Victoria R.—Whereas we deem it expedient to revise and amend the regulations for the pay and half-pay of the Medical Officers of our Army, our will and pleasure is that Articles 283 to 298 of our Royal Warrant of February 3, 1866, and so much of our Royal Warrant of October 1, 1858, as affects the half-pay and retired pay of the said officers, be cancelled, and that, instead thereof, this our present warrant be established and obeyed as the sole authority on the matters herein treated of:—1. The daily rates of pay of the officers of the Medical branch of the Hospital department of our Army shall be as follows:—Medical Staff—Director-General, special; Inspector-General, £2; after twenty-five years' service, £2 5s.; after thirty years' service, £2 7s.; after thirty-five years' service, £2 10s. Deputy-Inspector-General, £110s.; after twenty-five years' service, £1 12s.; after thirty years' service, £1 15s.; after thirty-five years' service, £1 17s. Surgeon-Major, £1 4s.; after twenty-five years' service, £1 7s. Surgeon, 17s. 6d.; after fifteen years' service, 20s. 6d. Assistant-Surgeon on appointment, 10s.; after five years' service, 12s. 6d.; after ten years' service, 15s.; after fifteen years' service, 17s. 6d. Charge pay.—The officer in Medical charge of an army in the field, of 10,000 men and upwards, £1 daily; of 5000 men and upwards, 15s. daily; of less than 5000, 10s. daily. Or, in Medical charge of a colony where the number of non-commissioned officers and enlisted men is 1500 and upwards, 5s. daily. General Hospital Staff.—Governor and Commandant, Staff-Captain and Assistant-Commandant, and Acting-Governor, special; Captain of Orderlies, 6s. 6d. per day; after five years' service, 8s.; after ten years' service, 10s. Apothecaries.—Apothecaries, 9s. per day; after five years' service, 10s. 6d.; after ten years' service, 12s.; after fifteen years' service, 13s. 6d.; after twenty years' service, 15s.; after twenty-five years' service, 16s. 6d.; and after thirty years' service, 18s. 2. Every candidate to be admitted to the competitive examination for a commission as Assistant-Surgeon in our Army shall be unmarried, and shall possess such a certificate or certificates as would qualify a civilian to practise Medicine and Surgery in Great Britain and Ireland; and before receiving a commission shall pass an examination in military Medicine, Surgery, hygiene, and pathology, after attending the authorised course in a general military Hospital. 3. Any Assistant-Surgeon shall pass such examination as our Secretary of State for War may require, and shall have served on full-pay with the commission of Assistant-Surgeon for five years, of which two shall have been passed in or with a regiment, or depôt battalion, before he can be promoted to the rank of Surgeon. 4. Assistant-Surgeons shall, as a general rule, be promoted to the rank of Surgeon in the order of their seniority in the service, unless unfit for the discharge of their duties from physical or Professional incompetence or misconduct. In cases of distinguished service, however, an Assistant-Surgeon may be promoted without reference to seniority; and in such cases the recommendation describing the services for which the officer is proposed for promotion shall be published in the general orders of the army and in the *Gazette* in which such promotion shall appear. A Surgeon after twenty years' service in any rank shall be styled Surgeon-Major; but a Surgeon of less than twenty years' full-pay service may be promoted to the rank of Surgeon-Major for distinguished service. The recommendation detailing the services for which the officer is proposed for promotion for distinguished service shall be published in the general orders of the army and in the *Gazette*, in which such promotion shall appear. 6. A Surgeon must have served ten years in our army with a commission on full pay, of which period two years must have been passed with the rank of Surgeon in or with a regiment or depôt battalion, before he can be promoted to the rank of Deputy Inspector-General of Hospitals. 7. All promotion from the rank of Surgeon or Surgeon-Major to that of Deputy-Inspector and from the rank of Deputy-Inspector to that of Inspector shall be gained by selection for ability and merit, the selection being made from the whole rank of Surgeons, whether styled Surgeons or Surgeons-Major, and the grounds of such selection shall be stated to us in writing, and recorded in the office of our Commander-in-Chief. 8. A Deputy Inspector-General of Hospitals must have served five years at home or three abroad in that rank before he can be promoted to the rank of Inspector-General. 9. Our Secretary of State for War, in cases of emergency, may shorten the several periods of service above mentioned, as he shall deem expedient for the good of our service. 10. Good service pensions shall be awarded to the most meritorious Medical officers of our Army, under such regulations as shall be from time to time determined by us, with the advice of our Secretary of State for War. Six of the most meritorious Medical officers of our Army shall be named our honorary Physicians, and six our honorary Surgeons. 11. Medical Officers shall have the right to retire on half pay, after twenty years' service; Medical officers of the rank of Surgeon-Major, Surgeon, or Assistant-Surgeon shall be placed on the retired list at the age of 55, and all Inspectors-General and Deputy Inspectors-General at the age of 65 years. 12. Our Secretary of State for War may, when he shall deem it fit, employ officers of the Medical branch of our Hospital Department in sundry situations, at such daily rates of pay, in addition to half-pay, as he shall from time to time determine. 13. A Medical officer who having voluntarily resigned his commission has subsequently been permitted to re-enter the Army shall not, except under very special circumstances, to be approved by our Secretary of State for War, be allowed to reckon his former service. 14. An Apothecary shall have the right to retire on half-pay after thirty years' good service. Service on the West Coast of Africa.—15. A Medical officer volunteering for service on the West Coast of Africa shall, in order to come under the provisions of the two following articles, serve on the coast for a period of at least twelve months, and shall be governed by the following regulations:—16. Each year of such service shall be allowed to reckon towards promotion and retirement as two years of ordinary service, but it shall not so reckon towards increased pay or qualification for the rank of Surgeon-Major. If an officer shall be permitted at his own wish to prolong his stay on the Coast, his further service shall be allowed to reckon in proportion. 17. For each service on the Coast a Medical officer shall be entitled to a year's leave at home, and for every additional period beyond a year he shall have an equivalent extension of leave. Non-effective pay.—18. A Medical officer placed on half-pay by reduction of establishment, or, on the report of a Medical Board, in consequence of wounds or ill-health caused in and by the discharge of his duties, or on account of age (under Article 11), shall be entitled to half-pay at the following daily rates:—Inspector-General, after thirty years' service, £1 17s. 6d.; after twenty-five years' service, £1 13s. 6d.; after twenty years' service, £1 10s. Deputy Inspector-General, after thirty years' service, £1 5s. 6d.; after twenty-five years' service, £1 2s. 6d.; after twenty years' service, £1 1s. Surgeon-Major.—After twenty-five years' service, £1; after twenty years' service, 16s. 6d. Surgeon.—After fifteen years' service, 13s. 6d.; after ten years' service, 11s. Assistant-Surgeon.—After ten years' service, 10s.; after five years' service, 8s.; under five years' service, 6s. 19. The rate of half-pay awarded to officers retiring for their own convenience, after twenty years' service on full pay, shall not exceed one-half of their full pay at the time of retirement. Every Medical officer who shall retire after service upon full pay for twenty-five years shall be granted a rate of half-pay equal to seven-tenths of the daily pay he may last have been in receipt of when thus retiring or proceeding on half-pay, provided he shall have served three years in his rank, or shall have served abroad for ten years in all ranks, or for five years with an army in the field. An officer of twenty-five years' full-pay service whose service falls within neither of these conditions shall be entitled to only seven-tenths of the daily pay he was in receipt of prior to his last promotion. 21. A Medical officer placed on half-pay from any other cause shall be allowed only a temporary rate of half-pay (not exceeding the rates specified in Article 18) for such period and at such rate as our Secretary of State for War shall decide with reference to the services rendered to the public by such officer. 22. Medical officers of twenty years' full-pay service placed temporarily on half-pay, under Article 21, on account of ill-health, may, however, be allowed to retire on permanent half-pay at the rate fixed by Article 18, if, after one year on half-pay, they shall be reported by a Medical board to be permanently unfit for further service. 23. An Apothecary shall be granted pay at the following daily rate, if placed on half-pay by reduction of establishment, or on account of age

(under Article 14), or through ill-health, certified to the satisfaction of our Secretary of State for War to have been contracted in and by the service:—Apothecary to the Forces, after thirty years' service, 9s. per day; after twenty-five years' service, 8s. per day; after twenty years' service, 7s. per day; after fifteen years' service, 6s. per day; after ten years' service, 5s. per day.

"Given at our Court at St. James's, this 1st day of April, 1867, in the 30th year of our reign.

"By her Majesty's commands,

"J. S. PAKINGTON."

NEW BOOKS, WITH SHORT CRITIQUES.

Brighton as a Watering-place. By R. Tuthill Massy, M.D., etc. London: Jarrold and Sons. Pamphlet.

Brighton Royal German Spa. By the same Author. London: Turner. Pamphlet.

*** Dr. Massy has managed to write a pamphlet on Brighton. We do not know who is to read it. Certainly, were all the quotations removed, Dr. Massy would not have much of his handiwork to boast of. In the second pamphlet, Dr. Massy has displayed still greater ingenuity. He has succeeded in writing on a subject without saying anything about it: in the whole production only twenty lines refer to the spa mentioned.

Memoria sobre las Causas que orignan el Cólera Morbo y Medios de evitarlo. Por Don Andrés Hernandez y Guasco. Mahon: Fábriques y Pascal.

Memoir on the Originating Causes of Cholera and the Means of avoiding it; with Supplement. By Don A. Hernandez y Guasco. Pamphlet.

*** Always glad to receive foreign literature, we can on this occasion safely congratulate Don Hernandez on his reasonable views (he maintains origin by bad water), regretting, at the same time, that he has been put to the trouble of maintaining them so often, as the appendix shows he has.

Contributions to Operative Surgery—Operations about the Face. By Maurice Henry Collis, M.B., F.R.C.S.I., Surgeon to the Meath Hospital, etc., etc. Dublin: Falconer. Pp. 46. Reprint.

*** No praise of ours is needed to enhance the high position Mr. Collis has taken as a Surgeon, nor is it necessary to state that the present production is quite worthy of its predecessors. The number of plastic operations described, and their results, often figured, render this contribution of the utmost value to operating Surgeons. One of its most valuable chapters treats of that important operation, removal of the tongue.

Practical Observations on Asiatic Cholera, with Cases. By W. Beamish, Physician to the Cork Fever Hospital, etc. Dublin: Fannin. Pp. 32.

*** The views brought forward by Dr. Beamish in his little work are eminently practical, evidently the result of careful observation. Like most others, Dr. Beamish stands up for astringents and stimulants, with especial emphasis on prophylaxis. Without pretending to any eminently scientific value, this little work is one of the best which could be placed in the hands of a plain, intelligent man who wanted something to do, not to say, when he has to deal with cholera.

Notes for a History of Sanitary Legislation. By Edwin Lankester, M.D., F.R.S. London: Chapman and Hall. Pp. 35.

*** The former portion of this little work originally appeared in the "Encyclopædia Metropolitana," but the latter is entirely new, and to it we would especially direct attention, as narrating in a short space what has been done in the way of improving sanitary matters in England. We cannot refer to all the points touched upon, but we would especially notice what is said of burial-grounds when surcharged; all that is wanted, says Dr. Lankester, is a simple letter to the Secretary of State, calling his attention to the case, no matter whether the burial-ground be situated in town or country. But probably the most valuable part of all, is that wherein Dr. Lankester proceeds to define and point out the various duties of Medical Officers of Health—hints that will prove of the utmost value to men who have been recently appointed to these onerous posts, and who will feel grateful to Dr. Lankester for what he has done in this way. Apart from this, the book is well worth attention from both Medical and lay readers.

Leçons Cliniques sur les Maladies des Vieillards. Par M. le Dr. Charcot, Agrégé à la Faculté de Médecine de Paris, Médecin de la Salpétrière. Recuellies par M. le Dr. Ball. Paris: Adrien Delahaye. Pp. 84.

Clinical Lectures on the Maladies of Old Age. By Dr. Charcot, Assistant-Professor at the Faculty of Medicine, Paris, and Physician to the Hospital Salpétrière. Collected by Dr. Ball.

*** The value of these lectures will be more readily appreciated by a reference to one on gout and rheumatism in the *Med. Times and Gaz.* for March 16.

First Annual Report of the Manchester Nurse Training Institution, 58, Grosvenor-street, Manchester.

*** The advantage of knowing where to obtain well trained and careful nurses is perfectly palpable both to the Profession and the public at large. Certainly the benefits to be derived from their services are great, and we invite attention to the above report, which shows how much good has already been done by the above institution, and still may be so were the funds in a more prosperous condition.

Photographs of Eminent Medical Men of all Countries. Edited by Wm. Tindal Robertson, M.D., of Nottingham. Photographs by Ernest Edwards, B.A. London: John Churchill and Sons. Pp. 13.

*** We are glad to observe that this elegant and useful publication has been resumed, a stop having for some time been put to its issue by the untimely death of its distinguished editor, Dr. Herbert Barker. Dr. Tindal Robertson is, however, a worthy successor, and we have no doubt that the work so successfully commenced by his predecessor will be carried on to a prosperous issue by the present editor. The present number, which is the first of the second volume, contains capital likenesses of Bence Jones, Huxley, and Cowan (of Reading), with short sketches of their lives and works.

A Memoir of William Brinton, M.D., F.R.S. Pamphlet. Reprint. Lancet Office.

*** A short account of the regretted Dr. Brinton, reprinted from the pages of a contemporary.

The London University Calendar for 1867. London: Taylor and Francis. Pp. 424+170.

*** We are glad to see that the questions in the preliminary scientific examination for M.B. are somewhat more reasonable than they have sometimes been.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 28, 1867:—

John Sutherland Howell Probyn, Newbury, Berks; Edwin Cuthbert Montgomery, Maidenhead; William Slingsby Mann, Brook-street, Birmingham; Joseph Rymer Dowman, Birmingham; Edwin Homfray Addenbrooke, Birmingham; Benjamin Walker, Handley, near Chesterfield; Thomas John Burroughs, New Cross-road, S.E.; James Rawlings, Liskeard, Cornwall.

The following gentlemen also, on the same day, passed their First Examination:—

Eustace Arthur Brickwell, St. Bartholomew's Hospital; Frederic John Glencross, St. Bartholomew's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

ASH, R. VASEY, M.R.C.S.E., L.S.A., etc., has been appointed Assistant Medical Officer to the Royal South Lincolnshire Militia, *vice* T. Mogor, Esq., resigned.

BARON, T., M.R.C.S.E., has been appointed Junior House-Surgeon to the Royal Infirmary, Liverpool.

DAVIDSON, J. H., M.D., has been appointed Assistant Medical Officer to the Cheshire Lunatic Asylum.

ESCELL, E., M.R.C.S.E., has been appointed Resident Medical Officer to the Eastern Dispensary, Bath.

PUZEY, C., L.R.C.P. Lond., recently Junior House-Surgeon to the Liverpool Royal Infirmary, has been appointed House-Surgeon, *vice* G. B. V. Nash, M.R.C.S.E., resigned.

ROBINSON, J., L.R.C.P.Edin., has been appointed House-Surgeon to the Cumberland Infirmary, Carlisle.

STOCKS, FREDERICK, M.R.C.S. and L.M., late Resident Accoucheur at St. Thomas's Hospital, London, has been appointed Senior Assistant Resident Medical Officer to the County Lunatic Asylum, Rainhill, near Prescot, *vice* G. R. Irvine, M.D. St. And., resigned.

BIRTHS.

MARRIOTT.—On March 24, at Dynevor House, Leamington, the wife of C. Marriott, M.R.C.S.E., of a daughter.

MENZIES.—On March 28, at 7, Upper Stamford-street, S., the wife of Dr. J. I. Menzies, of a son.

RICHMOND.—On March 26, at Northallerton, Yorkshire the wife of S. Richmond, M.D., of a son.

SAUNDERS.—On March 25, at Cuckfield, Sussex, the wife of C. E. Saunders M.D., of a daugher.

MARRIAGES.

CALDCLEUGH—HILL.—On March 13, at Huddersfield, Dr. Caldcleugh, of 1, Queen's-crescent, Haverstock-hill, London, to Rachel, youngest daughter of Richard Hill, Esq., of Clare-hill, Huddersfield. No cards.

CAMIDGE—PENTLAND.—On March 5, at St. John's Church, Port Whitby, J. Camidge, M.D. Cantab., to Georgina Emily Montgomery, third daughter of the Rev. John Pentland, A.B.

CATTELL—GOODRICKE.—On January 24, at St. Paul's, Durban, W. Cattell, Surgeon 20th Regiment, to Caroline Pickering, second daughter of J. R. Goodricke, Esq., Advocate Supreme Court of Natal.

JACKSON—HELFRICH.—On March 26, at St. Mary's Church, West Brompton, Dr. J. Jackson, to Agnes Hildegarde, third daughter of Francis Helfrich, Esq., West Brompton. No cards.

PASLEY—LILLICRAP.—On March 21, at the Catholic Cathedral, Plymouth, R. C. Pasley, Assistant-Surgeon, H.M.'s Flagship *Royal Alfred*, to Martha, daughter of the late W. B. Lillicrap, Esq., Plymouth. No cards.

DEATHS.

ASHTON, J., M.D., of Greek-street, Stockport, on March 18, aged 56.

EMMERSON, R., M.R.C.S.E., of Sandwich, Kent, on March 17, aged 83.

FORMAN, G. E., Surgeon R.N., on March 30, aged 67.

FRENCH, J., M.D., C.B., Inspector-General of Hospitals at Lampits, Lanarkshire, on March 29.

GOODWIN, F. C., M.D., at Birkdale, Southport, on March 20, aged 72.

ROBERTSON, T., M.D., R.N., at Blackheath, on March 30, aged 74.

ROSS, J. BROWN, L.R.C.P. Edin., of 12, Albert-square, Commercial-road, on March 29, aged 33.

WARD, J., M.R.C.S.E., at Granville House, Hall-road, Handsworth, Birmingham, on March 21, aged 55.

WATSON, H. W., M.D., at Willington, near Derby, on March 30, aged 46.

VACANCIES.

QUEEN'S HOSPITAL, BIRMINGHAM.—Resident Physician.

WEST KENT GENERAL HOSPITAL, MAIDSTONE.—Physician.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Ashbourne Union.—Mr. William Toogood has resigned the Mayfield District; area 8603; population 3013; salary £25 per annum.

Belper Union.—The Ripley District is vacant; area 5446; population 11,302; salary £27 10s. per annum.

Burton-upon-Trent Union.—Dr. William Anderson has resigned the Lullington District; area 2907; population 625; salary £10 per annum.

Torrington Union.—Mr. William Risdon has resigned the First Dolton District; area 11,927; population 2244; salary £42 3s. 4d. per annum.

APPOINTMENTS.

Bedminster Union.—John Hurd, L.R.C.P. Edin., M.R.C.S.E., L.S.A., to the Sixth District.

Chailey Union.—Benjamin G. Everett, M.R.C.S.E., L.S.A., to the Third District.

Chapel-en-le-Frith Union.—John Bennett, M.R.C.S.E., L.S.A., re-appointed to the Chapel-en-le-Frith District, and the Workhouse.

Cosford Union.—William M. White, L.R.C.S. Edin., L.S.A., M.D. Univ. Aber., to the Lavenham District.

Haslingden Union.—Thomas W. Green, M.D. Univ. Glas., M.R.C.S.E., L.S.A., to the Rossendale District.

Ipswich Union.—Webster Adams, jun., M.R.C.S.E., L.S.A., to the St. Clement's District.

Linton Union.—Edward Ireland, M.R.C.S.E., L.S.A., to the Linton District, and the Workhouse.

Newhaven Union.—Francis W. S. Wickstead, M.R.C.S.E., L.S.A., to the Third District.

St. George-in-the-East Parish.—Mark B. Garrett, M.R.C.S.E., L.S.A., to the Eastern District.

Ulverstone Union.—Richard Cranke, L.R.C.P. and S. Edin., to the Ulverstone District, and the Workhouse. John B. Oliver, M.R.C.S.E., L.S.A., to the Broughton West District.

We understand that, in consequence of the short time given for Dr. Sanderson's lecture at the College of Physicians on Friday last, Dr. Sanderson proposes on Thursday next, April 11, at 5 o'clock p.m., with the permission of the President, to give a more full demonstration of the sphygmographic tracings referred to in the lecture, in order that he may give explanations and answer questions with respect to them.

The new building for the University of London is to be Italian Gothic. Mr. Pennethorne is the architect. Messrs. Banks and Barry have charge of the building intended for the learned societies.

At the Quarterly Court of Addenbrooke Hospital, Cambridge, held on Monday last, E. J. Mortlock, Esq., and Dr. Fawcett were appointed a deputation to represent the Governors in London for praying for an exemption of Hospitals from parochial rates. At the same Court a letter was read from E. B. Michaelson, Esq. (Trinity College), stating that he presented the Hospital with a few books, that he should be an annual subscriber of £50, and that he had just paid in £100 at Messrs. Mortlock's to the Hospital. A vote of thanks to Mr. Michaelson was entered upon the minutes.

Ireland.—It is said, although we can scarcely believe it, that Dr. Keogh, Medical officer of the Carrigaholt district, has been arrested on the charge of having given Surgical aid to a Fenian fugitive.

Royal Institution of Great Britain.—At the general monthly meeting on Monday, April 1 (William Spottiswoode, Esq., F.R.S., in the chair), Charles John Leaf, Esq., John Neal, Esq., and Evan Wynne Roberts, Esq., were elected members. The presents received since the last meeting were laid on the table, and the thanks of the members returned for the same.

Odontological Society.—At the ordinary monthly meeting of this Society, April 1 (the President, G. A. Ibbetson, Esq., in the chair), Dr. Richardson exhibited and described various modifications of the ether spray apparatus introduced by him; and C. Spence Bate, Esq., F.R.S., read a paper upon "The Dentition of the Mole, *Talpa europæa*."

Evans *v.* Forshaw.—This was a case tried by Mr. Justice Shee at Liverpool on March 30. The plaintiff was a Surgeon, who had received his education and held certain appointments in Ireland, who entered into an engagement with Messrs. Horsfall and Son (by which he engaged to render assistance to and follow the orders of their agent) to become the Medical attendant at their trading settlement at the Bight of Benin, on the South Coast of Africa, and who brought his action for alleged illegal detention and ill-treatment there, and also to recover some trifling articles of property. The evidence given was very contradictory, but the jury came to the conclusion that the plaintiff had been harshly treated by being confined to his room in an African climate and prevented returning to England, and they accordingly found for him, with £50 damages.

At the Court held by her Majesty at Buckingham Palace on Thursday, March 28, Mr. Trevor Lawrence was presented by his father, Mr. Lawrence, Sergeant-Surgeon to the Queen. The Court was attended by Dr. Arthur Farre.

St. Bartholomew's Hospital.—Between one and two o'clock yesterday afternoon, the Prince of Wales and their Majesties the King and Queen of Denmark, attended by some members of their suite, visited St. Bartholomew's Hospital. They were received by Mr. Paget, the senior Surgeon of the Hospital, and by Mr. Foster White, the treasurer, and spent an hour and a half in the different wards. The royal party, before leaving, expressed themselves highly gratified at the means which had been adopted to secure the comfort of so large a number of the sick poor.

Alleged Revival of a Questionable Practice.—The *New York Times* of the 7th ult. makes the following statement:—"A terrible case of hydrophobia is chronicled in the Detroit papers. A little daughter of Mr. Alfred Woodruff, of the town of Greenfield, Michigan, was bitten some time ago by a dog, but no symptoms of hydrophobia were at first shown. At length the poison, which, acting as a subcutaneous injection, permeated every tissue of the system, broke out in a severe form, causing the most intense suffering. A consultation was had by Physicians, who decided that, as the sufferer could not possibly survive, every consideration of humanity demanded that her sufferings be ended by some means, in accordance with which, during a severe paroxysm, the child was smothered to death."

Medical Charities.—The friends of the undermentioned metropolitan and provincial Medical institutions will be glad to learn how munificently the late Mr. Alexis J. Doxat, of Putney, Surrey, has augmented the funds of their respective charities. To the Hospital for Consumption, Brompton, this gentleman has bequeathed £1000; and sums of £500 each to the Brighton Hospital, the Royal Ophthalmic Hospital, the Royal London Ophthalmic Hospital, the Truss Society, the Westminster Hospital, the London Dispensary, Spitalfields; the St. Leonard's Infirmary, Hastings; and the London Hospital. To the Hospital for Diseases of the Chest, Victoria-park, £300; the Royal Maternity Charity, Chatham-place, £200; and the Lying-in Hospital, York-road, Lambeth, £200; making a total of £5700 to Medical charities alone. To other institutions, both at home and abroad, and not strictly Medical, Mr. Doxat has been equally liberal; and further he directs that the distribution is to be made in every case free of legacy duty to these recipients of his great wealth.

Briton Medical and General Life Association.—The annual meeting of this Association was held on the 20th instant. The report stated that 3649 proposals had been received for £1,911,835 1?s.; that 2947 policies had been issued, assuring the sum of £804,979 18s. 2d., and yielding in new annual premiums the sum of £26,252 12s. 4d.; the income had increased to £226,151 0s. 1d.; the claims for the year were £141,364 3s. 11d.; the balance of income over expenditure was £65,434 14s. 10d. Mr. Francis Webb occupied the chair, and moved the adoption of the report. Dr. Tyler Smith seconded the motion, which was carried *nem. con.* The retiring directors and other officers were re-elected; a dividend of 8 per cent. was declared; and after the usual vote of thanks had been passed to the Consulting Physicians, Surgeons, Consulting Actuary, District Managers, and agents, to John Messent, Esq., the Actuary and Secretary, and to the Chairman, the meeting separated.

Medical Society of the King and Queen's College of Physicians in Ireland.—An important and very fully attended meeting of the above Society was held in the College Hall, Kildare-street, Dublin, on the evening of Wednesday, the 27th ult., Dr. Stokes, D.C.L., F.R.S., President, in the chair, to receive reports on the recent epidemic of cholera from the several Hospitals in Dublin which had opened their doors to patients labouring under that disease during its prevalence. The order in which the reports should be brought forward having been previously determined by ballot, that from the Meath Hospital was read, in the absence of Dr. Hudson, by the Secretary of the Society, Dr. Guinness; that from the Hardwicke Hospital was read by Dr. Lyons; that from Sir Patrick Dun's was read by Dr. Moore, Vice-President of the College, and was followed by a report, read by Dr. Robert McDonnell, F.R.S., of the singular outbreak which occurred in the Mountjoy Prison in the month of December last. The last report submitted to the meeting was from the Mater

Misericordiæ Hospital, and was read by Dr. Hayden. It was intended that a discussion should have followed the reading of the reports, but in consequence of the lateness of the hour at which this was concluded, it was found necessary to postpone the discussion until Thursday, April 4. A great advantage has, however, resulted from the delay, as a printed abstract of each report will be placed, some days before the adjourned meeting, in the hands of each member of the Society, an arrangement which will evidently greatly facilitate the discussion of the important facts recorded. At the adjourned meeting the time of each speaker will be limited to ten minutes.

EDINBURGH UNIVERSITY. — TESTIMONIAL TO MR. TURNER.—On Friday, March 29, at the close of the winter session of the University, 360 Medical students, who have attended or are attending Mr. Turner's anatomical demonstrations, and the lectures on anatomy delivered by him as the substitute for the late Professor Goodsir, presented him with the following address:—"To William Turner, Esq., M.B., F.R.C.S.E., F.R.S.E., Demonstrator of Anatomy, University of Edinburgh, etc., etc. Dear Sir,—We, the undersigned students of Medicine of the University of Edinburgh, deeply sympathise with you in the heavy loss that we all have sustained in the lamented death of Professor Goodsir. At the same time we take this opportunity of expressing to you our heartfelt thanks for the very able and efficient manner in which you have performed not only your own onerous and important duties, but those also that have for a long time devolved upon you in consequence of the illness of our late lamented Professor, and which you have discharged with much credit to yourself and advantage to your pupils. We desire most particularly to convey to you our grateful appreciation of your lectures and demonstrations, which are always specially characterised by their clearness and exhaustiveness, exhibiting as they do concisely yet fully the subjects under consideration. We cannot refrain from congratulating you on the eminent success which has ever attended your course of anatomical demonstrations, although the large and regular attendance given to it by the students speaks more forcibly than anything we can say, more especially when it is considered that attendance on this class is entirely voluntary. In the dissecting-rooms, where we are of necessity brought more immediately in contact with you, your unvarying kindness, courtesy, and patience have won for you the warm respect and esteem of us all. It is superfluous for us to refer to those painstaking and original researches in anatomy and physiology which have gained for you so very high and distinguished a position in the scientific world. Trusting that we and our successors may long continue to enjoy the inestimable advantages of your teaching, we beg you to accept this spontaneous and heartfelt expression of our feelings towards you. We are, dear Sir, very sincerely yours." (Here follow 360 signatures.)

THE INTERNATIONAL EXHIBITION.—It is gratifying to observe how well our Profession is represented at the Exhibition of the Industry of all Nations about to take place in the capital of France, as from the *Gazette* of Friday last it appears that the Commissioners (among whom are some distinguished Physicians and Surgeons) appointed by her Majesty the Queen to advise on the best mode by which the products of British industry and agriculture might be exhibited, and to appoint jurors, have, in accordance with the authority given to them, nominated and appointed, among others, the following gentlemen:—In Class V. Engraving and Lithography: Mr. F. Seymour Haden, F.R.C.S. (in conjunction with Mr. Lane, A.E.R.A., and Mr. J. Marshall). Class IX. Photographic Proofs and Apparatus: Dr. Hugh William Diamond (with Lieut.-Colonel Gordon, C.B.). Class XI. Medical and Surgical Instruments and Apparatus: Sir J. F. Olliffe, M.D. Class XII. Mathematical Instruments and Apparatus for Teaching Science: Mr. Charles Brooke, M.A., F.R.S., F.R.C.S., Surgeon to the Westminster Hospital (with Lieut.-Colonel Strange). Class XXV. Group 3. Perfumery: Dr. W. Odling. Class XLIII. Agricultural Products, not used as Food and easily Preserved: Dr. T. Thomson, F.R.S., with Mr. D. Hanbury. Class XLIV. Chemical and Pharmaceutical Products: Dr. Frankland, F.R.S., and Dr. David Price. Class XLV. Specimens of the Chemical Processes for Bleaching, Dyeing, Printing, and Dressing: Sir Robert Kane, F.R.S., and Dr. David Price. Class XLVI. Leather and Skins: Dr. Forbes Watson. Class LI. Apparatus used in Chemistry, Pharmacy, and in Tan Yards: Dr. Lyon Playfair. Class LXXXIII. Hothouses and Horticultural Apparatus: Professor Balfour, M.D., and Dr. T. Thomson, F.R.S. Class LXXXVII. Seeds and Saplings of Forest Trees: Dr. J. D. Hooker, F.R.S., and Dr. Moore. With such names, the duties respectively entrusted to these gentlemen will, the public may be assured, be carried out with strict justice and impartiality.

SUDDEN DEATH OF A PHYSICIAN.—Dr. Watson, late Physician to the Derby General Infirmary, was found dead in his house at Willington, near Derby, on Saturday last. It appeared that deceased had quarrelled with his servant, whom he had dismissed on the previous night. The next day, as no one appeared stirring in the house, it was forcibly opened. Dr. Watson was found lying dead on the top of the cellar steps. It appeared that he had gone into the cellar for the purpose of drawing some ale, for he held a glass half full in his right hand. On returning, he seems to have fallen down insensible, and, lying for some hours in the cold, to have died. The deceased was a bachelor, and possessed of great wealth, and had no near relatives living. Until recently, he had a good practice in Derby, and was for a short time one of the Physicians to the Derby Infirmary, but his health failed him, and he resigned that appointment some years ago. Two months ago he left Derby and took up his residence in a mansion, which was his property, at Willington. His habits for some time past had been rather eccentric. The jury returned a verdict in accordance with the above facts.

THE DIFFERENCES BETWEEN MAN AND THE APE.—On the occasion of a paper on this subject by M. Schaafhausen, of Bonn, read before the Paris Anthropological Society, M. Gratiolet thus expressed the result of his researches. He thought that there existed no reason for establishing an anatomical similitude between man and the gorilla. "As regards the brain, the gorilla's is the lowest of the anthropoid apes, since the brain does not cover the cerebellum, by which he approaches the cynocephali. It is not in his size and strength that we must look for human characters, but in the conformation of the hands, and just in this he differs considerably from man. The thumb is very short in the gorilla, and its muscles much reduced. The long flexor is replaced by a tendinous tract, the origin of which is lost in the tendinous sheaths of the flexors of the other fingers. It follows that the thumb has no independent movement of opposition. In the orang, though the thumb is shortened, it still is capable of an independent flexion; but this depends on a peculiar disposition which he had lately verified with M. Alix. In point of fact, the proper flexor of the thumb is entirely absent in the orang; there is not even found that tendinous tract existing in the gorilla; but, by a singular contrivance, the marginal fibres of the adductor muscle of the thumb terminate in a tendon which is placed in the axis of the first terminal axis." "The fact which establishes a great relation between man and apes is, that in them the optic nerves open directly in the cerebral hemispheres, whilst in the other vertebrates these nerves reach the brain only by the intermediation of the tubercula quadrigemina. This peculiarity may explain the existence of a certain conformity in the manner in which man and ape perceive their sensations. But it does not follow that there is an identity in the nature of their intelligence; for, though the senses are subservient to the operations of the intellect, it cannot be said that they produce it. Man must be placed by the side of the ape, but only as an animal. Man is a being apart, just as all other vertebrata must be separated, as they cannot be considered as having originated from each other." M. Gratiolet added, that, as a pupil of Blainville, with whom originated the idea of a series in natural history, he felt bound to state how much the ideas of his master had become modified. Where Blainville formerly recognised transitions from group to group, he, in the latter period of his life, only saw maxima and minima of realisation for each group. He acknowledged an ideal series between types, but not a lineal series between all beings. It is thus impossible to invoke the opinions of Blainville for the support of theories tending to reduce to a single stock the numerous species composing the animal kingdom.

PRE-HISTORIC SMOKING.—The following letter appeared in Tuesday's *Times*, addressed to the editor:—"Sir,—In your extract on Thursday from the *Manchester Guardian*, I was surprised (as an old F.G.S.) to see it stated that pre-historic 'smoking-pipes are solely confined to the North American Continent.' In 1829 I obtained at Torquay, with bones, etc., from Kent's Cavern, a bowl and stump of an unmistakable smoking-pipe. Mr. Plant will be doubtless interested in this, and I shall be glad if you will allow him and your other readers to hear of the fact.—Your obedient servant, T. ENGLAND, F.G.S. North Lew Rectory, March 30."

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Will Dr. Atkinson send his address to Dr. Hughlings Jackson?

Alexander.—We cannot prescribe for correspondents.

A copy of Dr. Struthers' testimonials for the Professorship of Anatomy in the University of Edinburgh has been received.

To Correspondents.—The great length of our report of the meeting of the Obstetrical Society obliges us to postpone a letter from our Paris correspondent, containing an account of matters of Professional interest in connexion with the Exhibition, until next week.

Female Physicians.—We have had in our possession for some weeks a certified copy of a document sent us from America, purporting to have been issued from the Surgeon-General's Department of the American Army, and commenting, in disparaging terms, on the qualifications of a lady who has been received in this country as a female Physician. We declined to publish it, and are sorry to find that it is now circulated anonymously. One swallow does not make a summer, and no one man or woman, wise or foolish, can be assumed as a type of a whole class.

St. Bartholomew's Hospital.—As is now generally well known, Mr. Thomas Wormald, who had been Assistant-Surgeon for more than a quarter of a century before becoming full Surgeon, which he has only held a year or two, has now retired from the above institution, whereupon some wag sends us the following:—

"How hard is poor Tom Wormald's lot
Among Chirurgic sages;
He all the work and honour got,
While they got all the wages."

COMMUNICATIONS have been received from—

Dr. Foster; Mr. Hearne; Mr. Phillips; Mr. Buckingham; Dr. Stewart; Mr. Sankey; Dr. Kitchener; Dr. Downie; Mr. C. J. Fox; Mr. Stocks; Mr. Constable; Alexander; Dr. Lumley Earle; Dr. Cholmeley; Mr. J. Chatto; Dr. Hughlings Jackson.

NEWSPAPERS RECEIVED—

Gazette Hebdomadaire—Sunday Gazette—Medical Press and Circular.

BOOKS RECEIVED—

Report of the Sanitary Condition of Birkenhead—Lawson on the Eye—Aldis on Preventive Medicine—Report of the Brighton Sanitary Association—Edinburgh Medical Journal, No. 142—Medico-Chirurgical Review, No. 78—Medical Mirror, No. 40—Westminster Review, No. 62—The Official Catalogue of the Paris Exhibition—Journal of Cutaneous Medicine, No. 1—Davis's Conservative Surgery—Ophthalmic Hospital Reports, Vol. V. parts 3 and 4—Johns on Blind People.

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 30, 1867.

BIRTHS.

Births of Boys, 1254; Girls, 1235; Total, 2489.
Average of 10 corresponding weeks, 1857-66, 2005·1.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	824	777	1601
Average of the ten years 1857-66	739·0	712·1	1451·1
Average corrected to increased population..	..	..	1596
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,388	5	2	3	1	13	6	2	..
North ..	618,210	7	6	2	3	17	6	3	..
Central	378,058	1	1	5	1	10	5	..	..
East ..	571,158	12	2	2	1	12	14	..	..
South ..	773,175	13	10	6	2	15	11	7	..
Total ..	2,803,989	38	21	18	8	67	42	12	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·390 in.
Mean temperature	46·6
Highest point of thermometer	59·1
Lowest point of thermometer	34·4
Mean dew-point temperature	39·6
General direction of wind	S.W.
Whole amount of rain in the week	0·29

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, March 30, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending Mar. 30.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending Mar. 30.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	2489	1421	1601	59·1	34·4	46·6	0·29	29
Bristol (City) .	165572	35·3	157	74	‡79	56·5	35·4	45·3	0·91	92
Birmingham (Boro')	343948	43·9	378	167	203	54·0	35·0	44·9	1·29	130
Liverpool (Borough)	492439	96·4	430	285	270	58·7	35·0	45·2	0·42	42
Manchester (City) .	362823	80·9	318	205	‡233	58·5	31·0	44·9	0·72	73
Salford (Borough) .	115013	22·2	124	58	66	59·5	31·6	44·9	0·64	65
Sheffield (Borough).	225199	9·9	218	119	104	56·5	32·5	43·5	0·50	51
Leeds (Borough) .	232428	10·8	353	118	134	60·0	30·0	45·8	0·57	58
Hull (Borough) .	106740	30·0	79	49	42	..	..	..	..	..
Nwcstl-on-Tyne, do.	124960	23·4	137	66	65	53·0	33·0	42·6	0·08	8
Edinburgh (City) .	176081	39·8	145	85	110	54·7	33·0	43·3	0·10	10
Glasgow (City) .	440979	87·1	366	257	289	54·8	33·4	42·2	0·66	67
Dublin (City and some suburbs) .	319210	32·8	211	†157	255	59·5	33·6	45·2	0·61	62
Total of 13 large Towns . . .	6187764	34·8	5405	3061	3451 Week ending Mar. 23.	60·0 Week ending Mar. 23.	30·0	44·5	0·57	58
Vienna (City) . .	(1863) 560000	..	..	..	338	..	..	§ 34·5	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·390 in. The barometrical reading increased from 29·17 in. on Wednesday, March 27, to 29·64 in. on Saturday, March 30. The general direction of the wind was S.W.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 35·5°.

APPOINTMENTS FOR THE WEEK.

April 6. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.
Royal Institution, 3 p.m. Mr. Pengelly, "Antiquity of Man."

8. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

9. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.
Ethnological Society of London, 8 p.m. Dr. Hyde Clarke, "On Ancient European Mines." J. Crawfurd, Esq., President, "On the Classification of the Races of Man according to the Form of the Skull." Dr. Collingwood, "Visit to the Kibalan Village of Sano Bay, on the North-East Coast of Formosa."
Royal Medical and Chirurgical Society (Ballot, 8 p.m.), 8½ p.m. Dr. Robert Lee's "Case of Difficult Parturition from Distortion of the Pelvis." Dr. Dawson, "On the Formation of Tubercle." Dr. John Harley, "On Cysticercus of the Brain, and an Ovarian Tumour."
Royal Institution, 3 p.m. Rev. G. Henslow, "On Botany."

10. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 2 p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.
Hunterian Society (Council, 7½ p.m.), 8 p.m. Dr. Ward, "A Case of Aneurismal Tumour connected with the Arch of the Aorta."

11. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.
Royal Institution, 3 p.m. Mr. Pengelly, "Antiquity of Man."

12. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.
Royal Institution, 8 p.m. Mr. Balfour Stewart, "The Sun as a Variable Star."

ORIGINAL LECTURES.

LECTURES ON EXPERIMENTAL AND PRACTICAL MEDICINE.

By BENJAMIN W. RICHARDSON, M.A., M.D., F.R.C.P.,
Senior Physician to the Royal Infirmary for Diseases of the Chest.

ON A NEW STYPTIC AND ADHESIVE FLUID—STYPTIC COLLOID—AND ON HEALING BY THE FIRST INTENTION.(a)

Gentlemen,—It is my intention on the first Tuesday of every month, except in the holiday months of July, August, and September, to invite your attention to a lecture on some subject of Medical science and art, which subject, resting on experimental and original research, shall have a direct and immediate bearing on practice, on the treatment, and, I hope I may venture to say, on the cure of disease. You will, I think, agree with me that the time has come when experiment, if it be worth anything as a means of Medical research, should be blended with experience, or, I had better said, should be a true foundation of experience. Indeed, we now have before us no other mode of progress. The classical history of Medicine is written: the classification of diseases is well advanced: the symptoms of special diseases have been so fully, so excellently described, that simple industry can enable the student to learn diagnosis with the precision, I had almost said, with which he may learn anatomy. The geographical limits of disease have been most faithfully mapped out; the ordinary or descriptive anatomy of the human body is mastered: the minute anatomy is advanced as far as the skill of the optician will let it: morbid anatomy has been demonstrated until it has become a nearly wasteful repetition of labour: and Surgical art, itself purely experimental and therefore positive, is so brilliantly discovered as to be in its operative part all but perfect.

But there remain yet to the true Medical inquirer many grand fields of research. Physiology is an open wide plain: pathology lies even beyond physiology, only to be explored through it: and the field of therapeutics, concerning which empirical observation has done far more than is generally recognised, is still so uncertain that he who advances upon it ever so little is a true benefactor to science and humanity.

"STYPTIC COLLOID."

In this lecture I propose to take up a very simple subject, and yet a subject of first importance in one department of our common work. I am about to call your attention to a compound fluid for instant and ready use in the dressing of wounded surfaces: a compound which is at one and the same time a styptic, an antiseptic, and a complete means of excluding wounded, abraded, or ulcerated parts of the body from the influence of the external air.

My mind was led to this matter as long back as the year 1852. In that year Signor Pagliari, of Rome, announced the discovery of a new styptic, possessing, as he asserted, remarkable properties for arresting hæmorrhage. Having made some of this solution, I subjected it to careful experiment, and reported the results to the Medical Society of London. The report based on the facts elicited was not favourable to the new remedy, and as other experience of it confirmed my own it soon lost the popularity that at first surrounded it. The styptic of Pagliari's was composed as follows:—

Gum Benzoin, eight ounces;
Alum, one pound;
Water, eight pints.

The alum and the benzoin were boiled for eight hours in water, fresh water being added to make up the loss by boiling. The solution as a styptic was found inferior to lunar caustic, but it was superior to a simple solution of alum. It was antiseptic, but was not adhesive.

In succeeding years I made several attempts to produce a better fluid; but it was not until last year, when I was specially studying the applications of ether to practice, that I saw the true principles on which to proceed.

The use of collodion, or guncotton dissolved in ether, had for some years been recognised as of great service in covering wounds, and as I found that collodion was very easily diffusible in the form of spray, it seemed to me that it might be applied in that form with advantage, and might even be made to coat a bleeding open surface. But on experiment it came out that, in whatever way applied, collodion fulfils but a small part of the required duty as a styptic and a wound-healer. In the first place, it mixes indifferently with blood; in the second place, it forms but an imperfect adhesion; and lastly, it allows the transudation of air through its structure when laid upon a moist surface, and particularly upon the body, which is at all times throwing off watery vapour. At the same time the principle of the collodion process was excellent: to lay down from a fluid a deposit of solid matter by the evaporation of a volatile solvent was sound and beautiful action.

The next point in advance, therefore, was to combine, if possible, with the ether and guncotton some other substance which, being also soluble in ether and capable of deposit by the evaporation of the ether, would combine chemically with the blood, with the albuminous exudative matter of a wound, or with purulent matter.

The idea only was wanted to secure the object in view. There was one substance which answered all these indications—I mean tannin. A mixture, therefore, of xyloidine, a substance resembling guncotton, and of tannin was formed into solution with ether, and from that came what I designated "*xylo-styptic ether.*"

Brought into practice, the advantages of this solution as a means for stopping hæmorrhage at once became obvious. Indeed, as a means for the arrest of hæmorrhage, less than the application of a ligature to an open vessel, the spray leaves little to be desired. The extreme cold produced by the evaporation of the ether acts directly on the water of the blood, the tannin solidifies the blood by combining with it, and the cotton acts as a plug: thus every indication for arrest of hæmorrhage is secured.

But in observing the action of the styptic spray, I soon became impressed with another fact—viz., that after the application to decomposing and fœtid wounds and sores the fœtor entirely disappeared, the wounds commenced to heal with great rapidity, and a kind of natural covering appeared to form out of the secretion by its combination with the dressing above it.

This observation has led me to simplify the application still further until it has come into this convenient form, a mere solution capable of being kept on the table as gum is kept, and of being applied with a soft brush in the same simple way.

The process of manufacture of the fluid is tedious, but sufficiently easy. The object to be aimed at is to saturate ether entirely with tannin and a colloidal substance, xyloidine or guncotton. In the first step of the process, the tannin, rendered as pure as it can be, is treated with absolute alcohol, and is made to digest in the alcohol for several days. Then the ether, also absolute, is added until the whole of the thick alcoholic mixture is rendered quite fluid. Next the colloidal substance is put in until it ceases readily to dissolve. For the sake of its very agreeable odour, a little tincture of benzoin is finally admixed.

The solution is now ready for use. It can be applied directly with a brush, or, mixed with equal quantities of ether, it can be applied in the form of spray. In order to give to the fluid a short name by which it may be known, I have called it "*styptic colloid.*"

Properties.

When the solution is brought into contact with an open surface of the body, the resultant phenomena are these: the heat of the body gradually volatilises the ether and the alcohol, and the tannin and cotton, as the ether leaves them, are thus left stranded on the surface in intimate combination. In proportion as the ether passes off, the blood or the secretion of the surface permeates the tannin and cotton; but tannin acts directly upon albumen, coagulating it, and transforming it into a kind of membrane, almost like leather. The cotton meanwhile unites the whole, gives substance to the mass, and adhesive quality. When all is solidified, the dressing becomes, in fact, a concrete, having a true organic hold or basis on the tissues; and as the tannin, if the solution be freely applied, is in excess, any new exudative matter or blood is for several hours taken up by it, and the annealing is made the more complete.

Thus, by this dressing, the air is excluded from every possible point in every possible direction, not by a mere septum, but by the combination of the animal fluids with the remedy; and because the air is excluded and fluid is absorbed there is

(a) Delivered on Tuesday, April 2, 1867.

no decomposition—*i.e.*, no oxidation; and because there is no oxidation there is no irritation.

The styptic and adhesive qualities of this fluid are easily demonstrated by observing its direct action on blood, on serum, on pus, on albumen. You will see that it solidifies all these by mere contact with them.

To these properties I must also add that of complete deodorisation. Here is putrid blood, here putrid ovarian serum, here putrid purulent substance. They are unapproachable when laid on an open surface, but we bring them into contact with the solution, and they are deodorised. Further, the decomposed substance is fixed by the tannin and rendered inert.

Modes of Application.

Having thus laid down the principles at work in this method of treatment, let me next pass to the modes of application. I have here an artificial limb; a portion of it is covered with thin skin to represent the ordinary skin. At one part, for the space of six inches by four, there is placed under the skin a spongy substance charged with blood and albuminous fluid. I will now make an incision through the skin, and expose the bleeding surface. Suppose this to be an open wound, the two flaps of an amputation. I close it with silk ligatures in five places. This done, I take a little cotton wool, tease it out finely in a wineglass, and saturate it with the styptic solution. Next, with a soft camel-hair brush, I apply the solution freely over the closed wound, letting it lie between the edges. If blood exude, it simply combines with the solution, making a mass much like red wax. I lay on the solution also for a little distance beyond the wound, and wait a few moments to allow for the evaporation of ether. Next I take from the wineglass the saturated cotton wool with forceps, and lay a seam of it half an inch wide and the eighth of an inch in thickness over the line of incision. Finally, I coat the whole over with another layer of the solution, wait until the layer is nearly dry, cover with a little dry cotton, and, if pressure be necessary, carry over the whole a bandage.

If time is a matter of importance, the evaporation of the fluid can be hastened by gently blowing with the warm breath over the solution as each layer of it is applied with the brush.

Presuming that a cavity has to be treated, the fluid is often more neatly and handily used as spray. Thus, in treating the roof of the mouth for carious bone, or in plugging a bleeding alveolar cavity after extraction of a tooth, the spray is excellent. We begin in such a case by applying the spray direct to the bleeding surface, and when a layer of deposit is formed we use that as a foundation for a thin layer of cotton wool ready saturated in the solution. Then we reapply the spray, and again cotton, until the whole operation is complete.

For bleeding or fœtid discharge from the uterus or vagina the spray is not advisable, because of the introduction of air. Here injection by the syringe is the best process, followed, if need be, by a plug of cotton wool saturated with the solution.

In cases of compound fracture, after the parts have been brought into apposition as far as is possible and fixed in the necessary position, the fluid should be poured slowly into the open cavity so as to fill it. Then the parts externally should be covered with a layer of cotton wool saturated with the solution.

On open cancer, and on suppurating or decomposing surfaces, the solution may be freely applied with the brush, and afterwards the parts may be covered with cotton wool saturated with the fluid.

In no case need there be any fear that irritation will follow the application of the solution. On the contrary, the action of it is so purely negative that it might be considered a sedative. It is not such in the technical sense of the term, but it so effectually covers the wounded and susceptible surfaces as to maintain what is virtually a sedative influence.

After a fresh wound has been once dressed with this solution, it requires but little further treatment. In the case of small wounds they may be safely left with one dressing. In process of cure the dressing will slowly be thrown off in the form of thick scale, and ligatures will also spontaneously come away. Even when the wound is very large, as after amputation, it is not desirable to try to open the wound unless there be systemic symptoms. In such case, in order to remove the dressing without pain, the bandage, if it be adherent, must be sponged at the adherent parts with a mixture of alcohol and ether, or with alcohol and water; this will set everything at liberty with ease and cleanliness. Water alone must on no account be used, neither hot nor cold.

THE FLUID IN PRACTICE.

From these directions I may now move to the recital of a few typical cases in which this solution has been employed.

Hæmorrhage after Tooth Extraction.

At the request of my friend, Mr. Thomas A. Rogers, of Hanover-square, I was summoned, on May 9, 1866, at 10 a.m., to see a young gentleman who was suffering from a dangerous hæmorrhage from an alveolar cavity from which a large molar tooth had been extracted. Mr. Rogers had extracted the tooth at 5 o'clock on the previous evening, and from then until my arrival the bleeding had never ceased. I learned from the parents that all their children suffered from the hæmorrhagic tendency in an extreme degree. The young man was now in a state of very great exhaustion, and the flow of fluid blood was still continuous. Laying him upon the floor, with his head raised, I applied the styptic, in the form of spray, directly into the bleeding cavity, and with such force at first as to dislodge the little pool of blood there. Continuing the spray, I was soon gratified at seeing complete arrest of the hæmorrhage. I now placed in the cavity a small pledget of cotton-wool saturated with the fluid, pressed it firmly home, and covered it with spray; thus, layer upon layer, I not only filled the cavity with cotton wool and firmly set styptic, but builded up the space between the two adjoining teeth with the same substances until the gap in the middle looked as if filled with what the dentists call a bone block. The bleeding was entirely arrested from that moment, and recovery was perfect. There was no sign of irritation in the wound, and when, four days afterwards, the plug came away, all the structures beneath were healed.

Severe Hæmorrhage from Necrosis of the Upper Maxilla.

A gentleman suffering from syphilis, extremely aggravated by excess of mercury, was last year brought under the care of my friends Messrs. Musgrave and Milson, of St. John's-wood. I saw the patient with them in consultation many times, and we were all in much anxiety in regard to the roof of the mouth. The mucous membrane of the roof was thickened, red, percolated, and offensive; the fœtor was almost unbearable, and every evidence of necrosed bone was present. The soft covering of the palate at length gave way, the soft parts ulcerated, and about midnight on October 16, the necrosed bone loosened, and was partly displaced. In this way, the two descending palatine arteries were severed, and the most sudden and profuse hæmorrhage followed. I was summoned, and soon after my arrival, Mr. Milson also came. Unfortunately, we had to send some distance for the styptic fluid, but meanwhile we tried, quite ineffectually, to plug with the perchloride of iron, and were compelled to trust to pressure with the fingers. When the styptic arrived, we played it freely in the form of spray over the bleeding points, and with instant effect in stopping the loss of blood. Then we plugged carefully with cotton, saturating each layer with the spray, and soon the mass set firmly, and no more blood was lost. By the time we had controlled the bleeding, we were gratified by the arrival of Mr. Paget, whom we had summoned; and as he, from having already tried the styptic, was content to trust to it, we did no more. It is the fact that this patient lost five pints of blood before the fluid was used, but the hæmorrhage did not return, the fœtor no longer was present; and a few days later, assisted by Mr. Milson, I removed the dead bone. The removal laid bare a wide ulcerated surface or cavity, which we continued to plug with the styptic on cotton wool; and so perfect has been the healing process that the cavity would now bear an artificial plate.

In Open Ulcer.

The styptic solution is equally good in cases of ulceration in other parts of the body, and from other causes. The son of a Medical man was brought to me with a large deep ulcer on the face. The boy had a strumous taint, and for three months various remedies had been applied without any avail. I simply painted over the surface of the ulcer freely with the solution, and ordered that it should be steadily applied whenever there was fresh oozing of purulent matter. The result towards cure was favourable beyond expectation, and in nineteen days the ulcer healed.

In Cancer.

My friend, the late Mr. Hitchman, of Leamington, consulted me in reference to a case of large open malignant ulcer of the breast in a woman of middle age. The discharge was

most abundant, and the fœtor intolerable. Here, again, I suggested the free use of the styptic solution, and with the most useful effect. Pain was soothed by it, the discharge was arrested, and the fœtor was completely removed. The death of Mr. Hitchman has prevented me from knowing the result of the case, but in his last letter to me he reported that no previous treatment had given so much relief, and that the broken surface was contracting, and was, he thought, inclined to heal.

For Recent Wounds.

Leaving these cases of hæmorrhage and of ulceration, I pass to the effect of the fluid in promoting the healing of recent wounds.

A lady, between 70 and 80 years of age, in coming from her bedroom caught her foot in the carpet and fell foremost on her head, receiving, by striking against a box, a large and severe wound on her forehead. The wound, triangular in shape, raised a portion of skin three inches long on two sides of the triangle. I treated the wound by putting in one suture at the apex of the triangle, and then painting the edges with the solution and covering them with cotton wool saturated in the solution. Not another dressing was required; the wound healed at once without the slightest discharge, and leaving scarcely a scar.

In Amputation.

But the best case of recent wounds which I have to report is that of an amputation treated by the fluid as the dressing. The patient, a young gentleman, was under the care of Mr. W. Adams for extreme deformity of the foot, requiring amputation by Chopart's operation. The operation was performed on Wednesday, February 13 of this year, and as the cuboid bone and os calcis were anchylosed, the saw had to be freely used. Several vessels had to be tied, and the ligatures were left in the usual way, suspended from the wound. When the lips of the wound had been brought together by wire suture, I coated the wound freely with the fluid, and the bandage was applied. Three days later there was no fœtor, no discharge, and no general symptoms, but as Mr. Adams was anxious to see the condition of the wound, I undressed it. To our delight, we found it healed throughout, but, unfortunately, from the bandage adhering to one of the long ligatures, I, in removing it there, tore open the newly healed wound for the space of a quarter inch. At this broken spot about a teaspoonful of purulent matter formed two days later; but this little break was very quickly reunited, and on the sixteenth day after the operation the patient was able to return to the country with complete healing by the first intention, and without having suffered from one symptom of a constitutional kind.

I was never more indebted than to Mr. Adams for allowing me to put the fluid to this crucial test, nor can I thank him for this without also thanking him for permitting me to practise, and that also successfully, local anæsthesia by the ether spray in the first great cutting operations—viz., for the removal of a portion of the femur, and for partial amputation of the hand.

Points of Practice in Dressing.

The case of amputation to which I have referred leads me to notice two points of practice in respect to the dressing of wounds. In another similar case, I should suggest that, so long as there is no fœtor from the stump, no discharge, and no general symptom indicating the formation of pus, the part should not be touched nor interfered with in any way whatever for fourteen days. And, again, I would point out that should the Surgeon feel it necessary to remove the dressing, he should scrupulously avoid the use of common water, either hot or cold. Water itself does not dissolve the styptic, and would only make trouble. The fluid to be used is a mixture of alcohol and ether, or equal parts of absolute alcohol and distilled water, warmed a little above the heat of the body.

Another point of practice worthy of note is simple but important. It is, that it is not good to leave the styptic in large quantities within a wound that is about to be closed for healing by the first intention. Thus left it combines with the blood in the wound, and forms a hard substance, which sometimes produces friction, and so causes evolution of heat and pain.

Combinations with the Styptic Colloid.

I have treated so far on the styptic fluid in its simple form. I should add, however, that as a base it combines well with the following medicinal substances, as you will see by the specimens now sent round:—

Creasote.—With the old creasote of the shops the fluid forms an excellent compound. The creasote acts well as an additional antiseptic, and also as a solidifier of albumen. It produces, however, some degree of irritation. The proportion is one minim of creasote to two drachms of solution.

Carbolic Acid.—With pure carbolic acid the fluid also combines. The compound so produced possesses the same properties as the mixture of creasote and the styptic. Five grains of the acid may be added to two drachms of the fluid. The combination is very powerful, but it produces some irritation.

Quina.—The pure alkaloid quina dissolves in the styptic fluid, and forms a good solution in the proportion of one grain to the drachm. The quina adds to the antiseptic power, but, I think, takes away from the adhesive property. Proportion, half a grain to a drachm.

Iodine.—Iodine unites readily with the fluid, and five, or even seven, grains of it may be got into the quarter-ounce. The combination is most useful in cases where there is purulent or fœtid discharge from a surface surrounded with indurated tissue. The iodine produces no irritation.

Iodide of Cadmium.—Iodide of potassium and iodide of ammonium do not readily combine with the styptic; but iodide of cadmium, which possesses a similar physiological action, goes up in it readily. Half a drachm of the salt will go up in an ounce of the solution.

Bichloride of Mercury.—The bichloride of mercury is soluble in the solution, and the compound, in the proportion of the one-twentieth of a grain to one drachm of the styptic, is a most useful application in indolent syphilitic ulcers. I think this application would also be useful in lupus.

Morphia.—Morphia goes up well in the solution, and in irritable painful ulcer a compound of morphia and the styptic, in proportion of half a grain of the alkaloid to a drachm of the fluid, is of service. Pain is at once relieved, and healing is promoted. This compound on cotton would be good for a stopping of a hollow tooth to relieve toothache.

All the other narcotic alkaloids in their pure form go up in the solution—atropia, aconitina, and the rest. I have, however, no experience as to the value of such combinations in practice. This experience has yet to be learned.

Cantharidine.—This substance, on the addition of a little chloroform, can be taken up in the solution. The compound produces what may almost be called a dry blister, the fluid secreted being taken up as it is exuded by the styptic. There are cases in which this blistering fluid would be a considerable advantage; indeed, it would probably be an advantage in all cases in which a blister is required. Two to four grains may be used to the ounce.

Chloride of Zinc.—Chloride of zinc, which, in solution, has recently been used for the dressing even of recent wounds, makes a good compound with the styptic. Half a drachm of the salt dissolves readily in an ounce of the solution.

From these purely descriptive facts I pass to the subject of healing by the first intention.

(To be continued.)

The Fate of Dr. Livingstone.—The Secretary to the Admiralty has published the following:—"Commodore Hillyar, in a letter dated at Bombay, March 13 last, reports that Her Majesty's ship *Wasp* had returned to Zanzibar, from Quiloa, with Mr. Seward, Her Majesty's Acting Political Resident at Zanzibar, and states that the information which that officer had been able to obtain respecting the reported death of Dr. Livingstone was chiefly of a confirmatory nature." At a meeting of the Royal Geographical Society on Monday evening last, the President, Sir Roderick Murchison, announced that the Council of the Society had that day passed a resolution with respect to the search for Dr. Livingstone to the following effect:—The Council are of opinion that it is highly desirable that a tentative expedition or expeditions should proceed either from the east coast of Africa to the head of Lake Nyassa, or by the Zambesi and Shire to the same point, with a view to ascertaining the fate of Dr. Livingstone. It was also resolved that the President be requested to communicate this resolution to Lord Stanley, with the expression of a hope that her Majesty's Government will see fit to adopt such measures as may appear to them most conducive to the end in view, in which not only geographers, but the public at large, take so deep an interest.

ORIGINAL COMMUNICATIONS.

ON THE CHEMICAL CHANGES IN LIVING BEINGS, FROM AN EXPERIMENTAL POINT OF VIEW.

By JAMES BLAKE, M.D., F.R.C.S.,
Professor of Obstetrics in Toland Medical College, St. Francisco, California.

I HAVE read with much interest the discussion that has recently been going on in this journal of the laws which are supposed to govern the formation of organic compounds. Perfectly agreeing with Dr. Beale as to the advantage of free discussion in settling scientific questions, I need offer no apology for the remarks I may have to make on his theories, or even for calling his attention to a method by which I believe truth on these points can be arrived at with more certainty than even by discussion. I certainly cannot agree with the observations he makes on the difference in kind between the transforming power of organic and inorganic matter. Surely because we are unable to make organic matter it is no proof that its formation is not governed by the same laws as those that preside over the formation of inorganic compounds. There are many minerals known to chemists, with the composition of which they are perfectly acquainted, but which they are unable to make because they cannot place the elements of which they are composed in those conditions which shall enable them to enter into the combinations under which we find them. Yet the chemist believes that these compounds have been formed under the influence of ordinary chemical laws, and does not require the admission of a mineralogical force to explain their formation. The inability we now labour under in the production of organic matter is, I think, analogous to that which prevented chemists a few years ago from forming urea and some of the alcohols – viz., that they could not place the elements of which these substances are composed in conditions favourable for their union in the required form; and now that in the dawn of chemical science we are unable to place the elements of organic compounds in the conditions in which these compounds are formed, it is no reason that our ignorance of these conditions should seek to hide itself under the admission of a vital force. Even supposing that these conditions should not be discovered for some centuries, such an admission would not in the least shake my belief that these organic compounds are formed under analogous laws to those which preside over the formation of inorganic substances. But my object in making these remarks is not to enter into a theoretical discussion with those who have devoted much more attention to chemical and vital theories than myself, but more particularly to point out, both to the chemical and the vital physiologist, how much more promising a field is open to them by experimenting on living animals, and bringing their different reagents in contact with the fluids and tissues of living beings, and carefully noting the reactions that take place. Some years ago I performed an extensive series of experiments with this object in view, the accounts of which were published in a paper read before the Royal Society in January, 1841, and in several reports which were printed in the *Transactions* of the British Association for the Advancement of Science from 1843 to 1847. These experiments were undertaken simply to observe the reactions that would take place when different chemical substances were introduced directly into the veins and arteries of living animals. About thirty-eight different substances were experimented with, including the salts of the alkalies, earths, and metals, and also compounds of the chlorine group, at least three hundred experiments being performed, mostly on dogs. The principal result arrived at from this extensive series of experiments was one which I believe neither the chemico-physiologist nor the physiologico-chemist can bring forward in support of their peculiar theories; for whilst showing that these inorganic substances, when introduced directly into the blood, did not act according to their common chemical properties, they yet proved that the phenomena they produced were dependent on a property closely connected with these chemical properties, as it was clearly shown that with every substance experimented with the reactions produced were intimately connected with its isomorphous relations. This law was verified by experiments on compounds of all the more important isomorphous groups, including the salts of eight substances in the magnesium group, four in the platinum group, three in the baryta group, two in the silver group, three in the phosphorus group, two in the sulphur group, three in the chlorine group, and two in the alumina group. The results at which I arrived undoubtedly lent more support to the chemico-physiologist than to the vitalist, but, as their verification would involve a great deal of unchemical manipulation, the fact of their discovery appears to have been quietly ignored by all parties; and yet I believe there is no law in physiology established on a broader experimental basis, or one which opens up a more interesting field of investigation. Perhaps, after being allowed to sleep for another twenty-five years, some Continental physiologist, with a sufficient number of consonants in his name to make the discovery acceptable, will introduce it to the notice of the world as the great physiological discovery of the age. It is not my intention to dwell more fully on this subject at present. I trust enough has been said to point out at least one direction in which experimental physiology is capable of throwing light on the chemical reactions taking place in living beings, and also to call attention to a series of experiments which have cost me a great deal of time and labour, but the results of which appear to be in danger of being lost. Those who are interested in the subject will find details of these experiments in the *Edinburgh Medical and Surgical Journal*, No. 148, and in the *Transactions* of the British Association for the Advancement of Science, from 1843 to 1847. I also published a short *résumé* of them in the *American Journal of Medical Science*, January, 1848.

ON A CASE OF SUBLINGUAL TUMOUR PARTIALLY REMOVED BY OPERATION.(a)

By GEO. STEWARDSON BRADY, M.R.C.S., etc.

THE case which I have briefly to bring under your notice this evening is that of a boy, aged 14, the subject of a large sublingual tumour. The history of the case before my acquaintance with it is, so far as I can gather from the boy's relatives, as follows:—Immediately, or very shortly, after birth a small bluish swelling was observed beneath the tongue, and was punctured by the Medical attendant. The puncture gave rise to hæmorrhage, so profuse as almost to destroy the child, and from that time the tumour began steadily to increase in size; but no further steps were taken for its removal, although from time to time the patient came under the notice of many Medical men.

My first acquaintance with the case was in November, 1860, the tumour having then suddenly become inflamed and painful. At that time it was about the size of a pigeon's egg, lying rather to the left side of the mouth, and considerably elevating the tongue. Poultices and soothing fomentations were used, and the swelling gradually subsided to its former dimensions; not, however, without the formation of a small abscess, which was opened externally. From that date the case has been frequently under my notice, though seldom requiring treatment, except for occasional attacks of inflammation similar to that just described. None of these, however, resulted in suppuration. The growth of the tumour continued slowly and steadily; but as it did not seriously interfere either with speech or mastication, and as the boy's general health did not suffer, it seemed undesirable to take any steps for its removal. I may add that Mr. Welford saw the case more than once, and concurred with me as to the policy of non-interference. Latterly the patient, being somewhat refractory, and more than a match for his sister, under whose care he lived while in Sunderland, was sent as a pupil-teacher to a school in the country, where he continued until the time of his last coming under my care.

On March 8 of the present year (1866), I was again called in, and found the patient suffering from another attack of inflammation in the tumour—much more severe and formidable than previously, owing to the greatly increased size of the tumour itself. At the time of my first visit the boy was utterly prostrate, unable to speak intelligibly, and could swallow only very little, and that with the greatest difficulty. The tumour was very tense, red, and painful. Leeches were applied externally, and followed by poultices smeared with belladonna; but it was several days before any improvement took place. The tumour at this time occupied almost the entire cavity of

(a) Read to the Sunderland Medico-Chirurgical Society, May 29, 1866.

the mouth, mingling with the muscular tissue of the tongue, which was pushed up against the roof of the mouth towards the right side. The mouth could not be closed, the teeth being held widely apart by the pressure of the tumour; the tongue was, for the same reason, protruded and considerably swollen. Of the size of the tumour itself it is difficult to speak accurately; its backward termination could not be seen or reached with the finger, but in front it pressed against the incisor teeth, upwards it forced the tongue against the roof of the mouth, and below it filled up the space between the rami of the lower jaw, forming a conspicuous external swelling. It was most largely developed on the left, thus pressing the tongue towards the right side of the mouth. The surface was lobulated, firm and resisting to the touch, and had no appearance of excessive vascularity.

A few days after the first application of leeches and poultices there was some mitigation of the symptoms. The protrusion of the tongue became less, swallowing rather easier, and the pain in the tumour considerably abated. Towards the left side, just beneath the tongue, a small ulceration occurred and discharged a few shreds of disintegrated tissue, but little or no pus, and parts of the surface of the tumour were covered with a tenacious exudation very similar to that of diphtheria. The improvement had lasted only two days when the unfavourable symptoms returned with increased intensity; swallowing and articulation became quite impossible; the boy was ravenously hungry, and would even rub crusts of bread against his teeth in the hope of some alleviation of his sufferings. Opiates were given by the rectum to relieve the pain and induce sleep, and beef-tea to keep up the vital powers; but it soon became evident that the only termination to be looked for was death from starvation, unless the tumour itself could be removed.

Being confirmed in this opinion by Mr. Dixon, Mr. Welford, and several other surgeons, I proceeded, with their assistance, to operate. An incision was made, in the first instance, from near the upper border of the thyroid cartilage to the symphysis of the jaw, but, as sufficient room for manipulation could not be thus obtained, the incision was continued upwards, completely dividing the lower lip. The left central incisor was extracted, and the lower jaw was then sawn through a little to the left of the median line. The two rami being drawn apart, the attachments of the tumour to the surrounding tissues were broken down by the finger and handle of the scalpel, the edge of the knife being used very sparingly. The diseased mass lying on the left side of the frænum being thus detached as far as practicable, the wire of the écraseur was passed through it in three directions, so as to include the greater portion of the tumour, which was thus easily removed. The tongue itself was found to be greatly implicated in the disease, and it was therefore impossible, without removing that organ, to accomplish the complete extirpation of the tumour. Under these circumstances, it was thought best not to attempt the removal of the smaller growth lying to the right side of the frænum, especially as by so doing the attachments of the tongue to the floor of the mouth would have been destroyed. It was evident that the portion already taken away had been the source of danger, and that not much immediate benefit was to be expected from continuing the operation. The external wounds were therefore brought together by means of harelip pins, and a bandage applied to keep the severed sides of the jaw in apposition. An opiate enema was given immediately after the operation. The after-treatment of the case presented no particular difficulty, except in the adjustment of the two sides of the jaw; the incision healed throughout nearly its whole length by the first intention, and the harelip pins were removed on the sixth day. But, owing to the resistance of the portion of tumour remaining on the right side, the *left* side of the maxilla was drawn considerably above its proper level. This I attempted to remedy by the insertion of a piece of cork between the teeth; but the plan did not answer, as the cork on one side, and the still protruding tongue on the other, interfered too much with the entrance of food. I therefore had a small silver splint constructed, consisting of two grooved sockets adapted to the teeth, and held apart by a slender stem, which could be lengthened or shortened by means of a screw. This answered its purpose well, but in the course of a day or two after its application the swelling of the right side much subsided, so as to allow of the tongue being drawn within the mouth, and of the jaws being completely closed. The difficulty was thus remedied in the best possible way, and the bone united well and evenly. Some slight suppuration and sloughing of the tumour took place, still further reducing its bulk; but in a fortnight from the operation this had altogether ceased, and has not since returned, if we except the formation of a very small abscess (apparently periosteal), which formed and burst at a subsequent period, but is now completely healed up.

At the present time the patient's position is better than it has been for several months, or perhaps years. The tongue has returned to a position much more nearly approaching the natural one; the jaws are well closed; articulation and deglutition are performed without difficulty; and the general health is good. There is some hardness about the cicatrix, but this seems to be gradually diminishing.

A microscopic examination of the tumour showed it to be composed of granular or amorphous material scarcely distinguishable from tubercle, but mapped out into angular areolæ, and traversed by red streaks, perhaps indicating the course of embryo blood-vessels. There were no typical cancer-cells, nor any of the caudate or irregularly formed bodies which have sometimes been thought characteristic of malignant growths. Yet the characters were such as I have previously seen to occur in tumours of a recurrent type, and I cannot but think it probable that the morbid growth in this case might have taken on, or may even yet assume, a malignant character.

On a reconsideration of the whole case, the main question that arises is whether we acted rightly in declining to attempt the removal of the smaller portion of the tumour. The reasons which weighed with me have been already stated, and I think that the result of the case has quite justified the course which was adopted. The boy has made a good recovery—perhaps he might not have done so well had the operation been more severe—and, considering that the tumour could not have been entirely removed, I do not see that the removal of a very minor portion which gives rise to but little inconvenience could have been of any great advantage. The great use of the écraseur was conspicuously shown in this operation. All the hæmorrhage that occurred was that produced by the scalpel, and was inconsiderable; the removal of the tumour itself was effected with no loss of blood whatever. Indeed, without this instrument I confess that I should scarcely have had courage to undertake the operation. Altogether I think we may fairly congratulate ourselves on the progress of the case hitherto. Whether the good result may be merely temporary, time alone can show; but it can scarcely be doubted that months, if not years, have been added to the patient's life.

P.S.—March 26, 1867.—The patient is now living in the country, and actively employed as a mason. I have not seen him for many months; but his sister informs me that his health is good, his speech better than it has ever been, and that the remnant of the tumour shows no increase of size.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

THE GERMAN HOSPITAL, DALSTON.

PREVALENCE OF SMALL-POX—CASE OF TYPHOID FEVER, FATAL FROM HÆMORRHAGE—CASES OF TYPHUS—THE TEMPERATURE IN TUBERCULAR MENINGITIS, WITH SOME CASES.

The great prevalence of small-pox throughout the metropolis has also been felt at this Hospital, and during the last few weeks a good many patients applied for admission either already presenting the eruption or unmistakable prodromal symptoms of that disease. Several others who had been admitted with doubtful symptoms, merely indicating some general febrile disorder, turned out, after one or two days, to be cases of small-pox. Nine cases had thus found their way into the wards since the end of January, but only a few of them were of a more severe type, all the others being of a very mild character; and whilst the former were sent to the Small-pox Hospital, the latter were kept, though separated from the other patients. Although some of these patients had been for one or two days in the wards before the

true nature of their complaint became manifest, it did not spread to any one in the Hospital. With reference to one case which might be considered as such, it is much more probable that the infection had already taken place outside the Hospital, as no case of small-pox was in the ward when the patient was admitted with chorea, and the first febrile symptoms appeared eight days after his admission.

Of other acute specific diseases there have been two cases of typhoid fever, under the care of Dr. Sutro, one terminating fatally about the beginning of the fourth week, ten days after admission into the Hospital, in consequence of profuse hæmorrhage from the bowels commencing five days before death. On post-mortem examination the alterations in the glandular apparatus of the bowels were not found to be extensive, the ulcers, to which the sloughs were still partly adherent, being rather small and few; but there were also a few small ulcers in the colon, and some streaks of blood adherent to them rendered it probable that they had been the source of the hæmorrhage.

One case of typhus, which, although severe, took a very regular course, might be worth mentioning, as no stimulants were taken by the patient just at the most critical time. He had been ordered a few ounces of wine in the beginning, but he soon refused to take it, saying it made his head ache. The patient, 18 years of age, a labourer, was admitted under the care of Dr. Sutro, on the sixth day of the fever, with a well-marked typhus rash. The prostration was very great, and there was diarrhœa during the whole of the febrile period. An incomplete crisis took place in the febrile symptoms during the night of the eleventh to the twelfth day, which was followed by a further considerable fall of the temperature—even below the normal rate—on the two following mornings, the whole febrile period thus being completed in fourteen days. We subjoin the observations of pulse and temperature made by Dr. Hirsch, to whom we are also indebted for the particulars of the case:—

Day of illness.	Pulse.	Temp. F.
6th—Evening	140	103·8°
7th Morning	132	104·2
7th Evening	144	104·8
8th Morning	128	103·4
8th Evening	144	105·1
9th Morning	124	103·0
9th Evening	136	104·0
10th Morning	128	103·0
10th Evening	124	102·6
11th Morning	128	104·4
11th Evening	124	104·6
12th Morning	128	99·6
12th Evening	128	103·4
13th Morning	108	100·8
13th Evening	112	102·4
14th Morning	88	97·8
14th Evening	103	100·4
15th—Morning	88	96·2
16th—Morning	88	97·8

Of medicines this patient first took a sulphuric acid mixture, and afterwards, as the diarrhœa still increased, a solution of tannic acid.

Another case of typhus presenting some interesting features was brought under our notice by Dr. Weber. The patient is a married woman, 26 years of age; she was admitted on the ninth day of her illness, which had commenced with repeated rigors; the rash had appeared three days before admission. She had diarrhœa, first beginning after some purgative, from the fifth to the fifteenth day. The pyrexia was very high on the first two days after her admission, but a gradual irregular fall of the temperature began on the thirteenth day. In the following night abortion took place, and a fœtus about two months old was expelled, a bloody discharge from the vagina having already been present three days before, but having stopped again for a day. She did not suffer any ill effects from the abortion, and on the seventeenth day the fever had entirely disappeared, but since then she is suffering from a painful rheumatic affection of the left shoulder without any febrile symptoms. This complication, Dr. Weber remarked, although possibly quite independent of the previous disease, still reminds one of the rheumatic affections that are observed after other exanthematous diseases, especially after scarlatina, as well as of those that sometimes occur in the puerperal state, some equivalent of which might here be considered to be present after the abortion. Dr. Burger has kindly placed at our disposal his observations of pulse and temperature in this case:—

Day of illness.	Pulse.	Temp. F.
9th—Evening	124	104·90°
10th Morning	128	104·00
10th Evening	128	104·36(a)
11th Morning	120	104·36
11th Evening	132	105·18
12th Morning	120	103·28
12th Evening	120	103·82
13th Morning	120	103·82
13th Evening	124	102·56
14th Morning	124	102·02
14th Evening	124	103·28
15th Morning	104	102·20
15th Evening	112	101·48
16th Morning	104	102·02
16th Evening	112	101·48
17th Morning	92	100·58
17th Evening	92	99·32
18th Morning	100	98·96
18th Evening	104	98·24
19th Morning	96	98·06
19th Evening	88	96·80
20th Morning	88	96·80
20th Evening	92	97·16

The return of the febrile temperature to the normal in this case, as in the previous, was not so rapid as is sometimes observed, and this may possibly be due to the severe bronchitis which was present in both cases, especially in the latter, which, as stated, was also further complicated just about the time of the crisis by the abortion.

The following case of tubercular meningitis, which was under the care of Dr. Sutro, is instructive for the study of the temperature in this disease:—S. M., a girl, 13 years old, had, according to the statement of her father, who is a strong, healthy-looking man, never been seriously ill in her life. Her mother is also healthy, but her grandfather is said to have very rapidly died from a disease of the chest, and her father's brother had hæmoptysis a year ago, but appears now to be perfectly well. For some weeks past the parents noticed a sort of sleepiness and drowsiness in the child, who on February 25 began to complain of severe headache and took to her bed. Vomiting occurred on that and the following days, and she was exceedingly irritable, and especially very sensitive to noises. At times she appeared better, and was even up, but towards the middle of the second week she became gradually worse. On admission into the Hospital on March 6 she complained of severe headache, and appeared rather drowsy, now and then uttering a sigh or a sharp cry as from pain. The dilated and unequal state of the pupils (the left one being wider), the slowness of the pulse, the temperature being not inconsiderably raised, the flaccid state of the abdomen did not leave any doubt as to the diagnosis of tubercular meningitis. On the next day the sopor increased, and in the evening she was nearly insensible. Consciousness, however, partly returned on the following day (March 9). She answered questions again, and asked for drink. But a rather sudden collapse took place on the evening of the 10th, which was soon followed by death. There had never been any convulsions, and the symptoms of paralysis were entirely confined to the eyes. The medical treatment had consisted in the application of ice to the head, the administration of 5 gr. of iodide of potassium three times a day, of a dose of castor oil on the 7th, and on the 8th of calomel gr. ij., jalap gr. iv. The following table gives pulse and temperature, as observed by Dr. Hirsch:—

Date.	Pulse.	Temp. F.
March 6.—Evening	64	101·2°
,, 7.—Morning	84	102·2
Evening	64	102·2
,, 8.—Morning	—	102·0
Evening	64	100·8
,, 9.—Morning	84	100·0
Evening	80	100·8
,, 10.—Morning	104	101·4
Evening, 6.30 p.m.	124	102·4
7.18 p.m.	—	102·4
Died at 9.30 p.m.	—	—
9.50 p.m.	—	103·2

(a) The observations were made with a thermometer divided in centigrades, and the numbers were afterwards translated into Fahrenheit degrees.

The temperature, as well as the pulse, thus increased towards the end of life, and the approach of the fatal termination might already have been surmised by the higher numbers on the morning of the 10th, although in other respects the state of the patient was the same as on the previous day. Whether in this case a post-mortem increase of the temperature took place, as in some cases observed by Wunderlich and by Erb, had not been ascertained; for, although the temperature was, even twenty minutes after death, 0·8° F. higher than two hours and a half before, it may have been still higher between the time of the last observation during life and the moment of death. The post-mortem examination showed a moderate enlargement of the ventricles of the brain, with softening of their roof; the pia mater on the basis rather opaque, but containing only few and very small grey granulations. The lungs, much inflated in their front parts, contained a small number of grey tubercles on their pleural surface, as well as in the tissue. The places where the granulations were most abundant and most developed were the abdominal surface of the diaphragm, the peritoneal covering of the spleen and liver, and the broad ligaments of the uterus. The mesenteric glands were somewhat enlarged, but, as well as the bowels, otherwise of normal appearance. One of the bronchial glands had undergone cheesy transformation.

The same general course of the febrile symptoms was observed in a case that had been in the Hospital some time ago. This patient was a little girl only eleven months old. She was admitted in the second week of her illness, already half comatose and with paralytic symptoms in the muscles of the right eye. Four days before death she had frequently slight convulsions, and from that time pulse and temperature gradually rose, with slight morning remissions. The temperatures in this case were taken by Dr. Bäumler in the rectum, which he, with Ziemssen(b) and Liebermeister, considers as the only fit place for the application of the thermometer in small children, from which reliable results can be obtained. Besides, it saves a great deal of inconvenience to the little patient and much time to the observer. The temperature of the rectum in children is, according to Baerensprung and Ziemssen, on an average 0·9°—1° F. higher than in their axilla.

Date (1865).	Pulse.	Respiration.	Temp. F.
Sept. 6.—Evening	136—140	28	100·0°
10.30 p.m.	76— 80, irreg.	—	—
„ 7.—Morning	80—100	40	99·0
Evening	76— 84	52	100·8
„ 8.—Morning	60— 80	36—40	99·0
Evening	80— 86	36, very irreg.	100·6
„ 9.—Morning	80— 96	28 „	97·0
Evening	100—108	28 „	99 6
„ 10.—Morning	132—160	36 „	98·4
Evening	128—156	32 „	101·2
„ 11.—Morning	120—140	30 „	99·4
Evening	160—172	40 „	102·4
„ 12.—Morning	152	38 „	99·9
Evening	148—160	48 „	103·3
„ 13.—Morning	192—212	56 „	103·3

Pulse and respiration were very irregular in this case, the latter ceasing sometimes altogether for five to seven seconds, and then the pulse became slower and slower; the respiration was carried on very much after the type which was first noticed by Dr. Stokes in cases of fatty degeneration of the heart—gradually increasing in depth and frequency, and then decreasing again and coming to a standstill altogether. The same kind of respiration has also been observed lately by Erb(c) in a case of acute cerebro-spinal meningitis.

It was very curious in this case to notice the influence of the respiration on the pulse. It was much slower during the pauses of the former, but after the third or fourth respiration it became very much accelerated, and then its frequency decreased again after the respiration had ceased. This irregularity and the same coincidence in the two functions were observed during the five days preceding death, only that the pauses became shorter towards the end, whilst the numbers of respiration and pulse increased. The post-mortem examination showed a small cheesy tubercle in one of the convolutions of the cerebrum, besides the usual appearances of tubercular meningitis, miliary tubercle in all internal organs, ulceration in Peyer's glands, and cheesy transformation of bronchial and mesenteric glands.

(b) H. Ziemssen, "Pleuritis u. Pneumonie im Kindesalter." Berlin. 1862. P. 8, sq.
(c) Deutsches Archiv für klinische Medicin, i. p. 185.

The temperature in tubercular meningitis seems to be rather variable in the beginning, not very high (102°—103° F. in the evening), and of a remittent type. According to the two cases mentioned and the experience of other observers, a more or less rapid rise of temperature appears to take place towards the fatal termination. This symptom, if more generally confirmed, would, together with the increasing frequency of the pulse, become very valuable for the prognosis in such cases. It further deserves notice that in the period immediately preceding this final rise, the morning temperature on one or more days was normal, or even abnormally low, which might, perhaps, be due to collapse from inanition. Complications—as, for instance, old-standing disease of the lungs or fresh pneumonia—will, of course, influence the febrile symptoms very much.

The variable character and the remittent type of the pyrexia in this disease are also the experience of Dr. Weber, and he has kindly communicated to us two cases, one of which he had under his care at this Hospital some months back, and another which he had observed in 1860 in private practice, together with the late Mr. Stuckey, in which the fluctuations of the temperature were more irregular and the final increase much less striking than in the two cases related above, but in both cases the remittent character of the fever was well marked. In both these cases, as in the above, the serous membranes of the different cavities were likewise affected. Dr. Weber thinks that the observation of the temperature might facilitate the diagnosis in the beginning of cases doubtful whether tubercular meningitis or typhoid fever, or even typhus in children—the temperature in tubercular meningitis, although raised, still never, or but rarely, attaining so high a degree as in continued fevers with equally developed general, and especially nervous, symptoms. Wunderlich has already drawn attention to this difference in the height of temperature as a means of diagnosis between typhoid fever and acute tuberculosis.

ST. THOMAS'S HOSPITAL.

CASE OF SYPHILITIC DISEASE OF THE BRAIN, WITH PARALYSIS OF THE RIGHT SIDE OF THE FACE, AND THE REMAINS OF SYPHILITIC DEPOSITS IN THE VESSELS OF THE BRAIN AND IN THE LIVER.

(Under the care of Dr. PEACOCK.)

Syphilitic diseases of internal organs have always a very great interest to us as members of a utilitarian profession. The time has gone by when syphilis was considered to be so capricious as to attack only parts which are in sight. It is now more obvious than ever that it is a disease which the Physician must carefully study. The possibility that a patient may be suffering from the Tissue changes which syphilis permits should always be kept in mind when we are trying to find out what sort of damage is interfering with the Functions of particular Organs.

S. B., aged 27, was admitted into Edward's Ward on November 24, 1866. He stated that about four years before, while serving as a soldier at Lucknow, he had sores on the penis, for which he was treated with mercury in the military Hospital. After this he had sore throat, which continued for about four months. He was sent home, and soon after his arrival in this country, and about two years after the commencement of his symptoms, he had a discharge from the right ear, and his face became drawn to the left side. Some small pieces of bone had also been removed from behind the ear, and he had suffered from fits, in which he became insensible and fell down.

When admitted into the Hospital, he still had some discharge from the ear, and the right side of his face was paralysed; he could not completely close the right eyelids, and the face was drawn to the left. The sensation in the face was not at all impaired, and he had no difficulty in speaking or swallowing, and there was no loss of power over the extremities. He, however, complained of pains in the head, particularly on the right side, and occasionally felt dizzy. There were cicatrices of ulcers on the tonsils, especially the right. He was directed to have the ear syringed with tepid water each day, and to take the iodide of iron. Subsequently this was changed for the iodide of potassium. Under this treatment his general condition improved, and the discharge from the ear ceased, but the paralysis remained as before, and he continually complained of the headache and dizziness.

On November 19 erysipelas made its appearance on the right eyelid, and he had considerable fever, and became much prostrated. The specific treatment was discontinued, and replaced by febrifuge medicines. Subsequently an abscess formed in the lower eyelid, and was opened, and he rallied, but the part never healed, and the lids continued red and swollen, and his strength was never satisfactorily restored. Latterly he became very torpid, being unwilling to leave his bed, and never speaking except when addressed, and there was difficulty in getting him to take his food.

On February 12 he became somewhat excited, and talked involuntarily, and this was followed by convulsions and coma, in which he died. The post-mortem examination was made by Dr. Lees on the following morning.

The membranes and substance of the brain were natural, but on the right side of the pons Varolii and cerebellum, and along the course of the fifth nerve to the Gasserian ganglion, and the seventh nerve as far as the internal auditory foramen, there was a considerable amount of old fibrinous deposit. This, on careful examination by Mr. Stewart, the Curator of the Museum, was found not at all to involve the branches of the fifth nerve beyond the Gasserian ganglion, and not to extend into the internal ear—the course of the facial nerve in the aqueduct of Fallopius, and the semicircular canals and cochlea, and the tympanic cavity and membrana tympani, being quite healthy. The external auditory passage also presented no appearances of disease. On the right branch of the vertebral artery there were several small swellings, consisting of yellow-coloured fibrinous deposits in the walls of the vessel. The pericardium was firmly attached to the heart by old cellular adhesions. The heart, when deprived of pericardium, weighed ten ounces and a quarter avoird., but was otherwise free from disease. The capsule of the liver on the convex surface of the left lobe displayed a patch of thickening about the size of a florin. This corresponded to a depressed cicatrix, and beneath it the substance of the liver contained a hard yellowish-white mass of the size of a pea. This consisted of well-developed fibrous tissue, fibre-cells, and oval and rounded cells and granules; and there were several light-coloured patches in other parts, which extended about a quarter of an inch into the tissue, and these also consisted of fibrinous deposit. The liver weighed three pounds three ounces. The kidneys were congested and large, weighing together twelve ounces and a half. The other organs were healthy.

KING'S COLLEGE HOSPITAL.

CASES OF ACUTE ORCHITIS (SWELLED TESTICLE), TREATED BY PUNCTURE OF THE TUNICA ALBUGINEA TESTIS, AND BY COMPRESSION BY MEANS OF STRAPPING IMMEDIATELY AFTER THE PUNCTURE—CLINICAL REMARKS.

(Under the care of Mr. SPENCER WATSON.)

By the term acute orchitis, Mr. Watson remarks, is not meant simply inflammation of the body of the testicle, but swelling of the testicle with the epididymis as a whole, such as is commonly seen in gonorrhœa. Dr. Humphry, of Cambridge, wishes to restrict the term orchitis to inflammation of the body of the testicle, such as occurs in mumps, and epididymitis to the swelled testicle of gonorrhœa and similar irritations of the urethra; and he considers that the inflammation rarely proceeds to any great extent in the body of the testicle in the latter affection. In reference to this point John Hunter remarks—"It has been asserted, but without proof, that in cases of swelled testicle in consequence of gonorrhœa it is not the testicle that swells, but the epididymis. The truth is, it is both the one and the other." (See vol. ii. p. 181 *et seq.* of Palmer's Edition of the "Works of John Hunter.")

The following cases have been treated on a plan which is a combination of the method of Vidal de Cassis (who was the first to use incision of the tunica albuginea for swelled testicle) with that of Ricord, who was very successful in the treatment by strapping.

The advantages and disadvantages of this plan may be judged of to some extent by these cases taken in connexion with those already published in the *Medical Times and Gazette* of May 19, 1866.

Case 9.—*Report by Mr. C. B. Allen, Dresser.*

A. W., aged 22 years, admitted as out-patient on Jan. 22, 1866, with swelling of the testicle of a week's duration in the course of gonorrhœa. The testicle was very painful and tender, the whole of the superficial structures red and swollen, the gland itself being hard, and having a hard mass on the outer side resembling a second testicle. Puncture in the usual way allowed a small quantity of serum to escape, and about half an ounce of blood. The patient, who was in a very feeble condition, fainted after the operation, but on recovering expressed himself as relieved so far as the pain in the testicle was concerned. Strapping applied; pil. saponis c. opio gr. v. ordered to be taken every night.

February 6.—The strapping is still tight; complains of much pain and sleeplessness. A purgative draught ordered.

9th.—In no pain; the strapping has become loose.

13th.—The puncture in the scrotum has healed, and the cicatrix appears to be adherent to the body of the testicle and tunica vaginalis. There is great hardness of the epididymis, but no pain. The gonorrhœal discharge is still going on.

18th.—Complains of pain in the loins and along the groin; the swelling somewhat diminished.

Observations.—The general result, though not so satisfactory as in some of the cases, will yet bear a favourable comparison with cases of equal severity treated by internal remedies only.

Case 10.—*Report by Mr. C. B. Allen, Dresser.*

H. L., aged 20. Admitted with acute orchitis on Jan. 6, 1866. The swelling had existed for a week, and the testicle had been strapped by a Surgeon, but without relief; the swelling is uniform—*i.e.*, without any distinctly marked prominence of the epididymis; no distinct fluctuation; severe pain in the testicle, and in the loins. Puncture; no clear serum, but about half an ounce of blood escaped. Strapping applied, and pil. saponis c. opio gr. v. om. noct. sumend.

January 7.—Reached home (a distance of two miles) very comfortably after the operation yesterday, and had been much relieved ever since. Slept tolerably well last night.

13th.—The swelling is less; the testicle is still, however, about twice the natural size, and there is hardness of the epididymis. Strapping reapplied.

Observations.—In this case strapping had proved ineffectual before the puncture was resorted to, and immediate relief attained by the latter is therefore more remarkable.

Case 11.—*Report by Mr. Cooper, Dresser.*

W. H., aged 21 years, applied first on April 17, 1866, with gonorrhœa, for which he was treated by injections at King's College Hospital. The discharge ceased after a fortnight. A few days after this he again contracted a gonorrhœa, and took some medicine supplied to him by a chemist. On May 9 the left testicle was much swollen, very tender, and accompanied by severe pain in the left loin. The swelling was uniform.

May 17.—Puncture. About a drachm of clear serum and a few drops of blood escaped. Strapping, and pil saponis c. opio gr. v. om. noct.

19th.—The pain was relieved within a few hours after he left the Hospital, and he has been free from pain ever since. He has slept well each night. The strapping is loose and moistened by the continuous oozing of serum from the puncture. Strapping again applied.

22nd.—Swelling much less; no pain; slight gonorrhœal discharge; there is much hardness in the epididymis.

24th.—Testicle very little larger than natural.

29th.—No discharge from the penis; testicle still a little larger than the other; the puncture has healed.

June 5.—Slight hardness in the globus minor of the epididymis; trifling gonorrhœal discharge, probably brought on by drinking.

12th.—Testicle normal, with the exception of the slight hardness of the epididymis.

Observations.—This case is almost an exact counterpart of Case 7 (*Medical Times and Gazette*, May 19, 1866). In both there was effusion of serum into the tunica vaginalis, as evidenced by the escape of serum, as well as of blood, when the puncture was made; in both there was immediate relief of pain following the puncture; and in both the symptoms were steadily ameliorated afterwards. Such an agreement in the particulars of the two cases must be something more than a coincidence, and, taken in connexion with other facts, points to the conclusion that the relief of pain is partly due to the evacuation of fluid from the tunica vaginalis when it exists there, and so to the diminution of tension of the fascia propria of the testicle and spermatic cord. No doubt the escape of blood would partly account for the diminution of tension, and especially of tension in the tunica albuginea; but it is worth notice that in both these cases only a few drops of blood

escaped. The same rapid relief is seldom seen in cases in which there is an escape of blood only, and is most marked in those in which clear serum spirts out with some amount of force when the puncture is made. This was particularly observed in a third case, the notes of which were incomplete. The continued oozing of serum from the puncture for some days after the operation was a favourable circumstance, and the next case (Case 12) affords an instance of the state of the parts when the superficial wound happens to close up too soon.

Case 12.—*Report by Mr. W. G. Irving, Dresser.*

W. W., aged 23 years, applied on November 17, 1866, with acute orchitis, in the course of a gonorrhœa of six weeks' duration treated by copaiba, and without injections.

November 17.—Puncture, strapping, and pil. sap. cum opio. A small quantity of serum, with blood, followed the puncture.

20th.—After leaving the Hospital, walked a distance of two miles with little difficulty. The testicle has been less painful ever since the puncture, but is still tender, and is much swollen. He has kept his bed ever since the puncture. As there was indistinct fluctuation in front of the testicle, as well as general swelling, Mr. Watson again punctured in the site of the original wound, when some bloody serum escaped, as if from the cavity of the tunica vaginalis. Strapping again applied, and the opiate to be continued.

24th.—The pain decreased gradually after the second puncture at 2.30 p.m., and was very nearly all gone by 8 the same evening. When the strapping came off the swelling was much decreased. He has now no pain and very little swelling, but the testicle generally is quite hard.

28th.—The swelling is chiefly at the lower and hinder part of the testicle, the body of which is getting smaller and softer, and is not tender when touched.

December 11.—The hardness has nearly disappeared, and the swelling entirely gone down. As there is some gonorrhœal discharge, an injection of solution of carbolate of potash was ordered. There is a nodulated hardness in front of the testicle, distinct from the epididymis, and probably due to the cicatrix remaining after the puncture.

Observations.—Here the almost immediate relief of pain was evidently due in some measure to the evacuation of the serum in the tunica vaginalis, as is clear from its recurrence when the superficial wound closed up, and serum, mixed with blood, collected again in the cavity. The relief and subsidence of all the symptoms after the second puncture are still further confirmation of the same fact. The patient in this instance kept his bed for three days, but whether he was compelled to do so by the severity of the symptoms is by no means certain, though, if such were the case, it is still probable that under active treatment by leeching and antimonials internally he would have been confined to his bed for a much longer period.

Case 13.—*Report by Mr. Hayes, B.A., Dresser.*

Wm. W., aged 21, admitted November 22, 1866. He had had gonorrhœa for two months, for which he had used a sulphate of zinc injection, and had taken some internal medicine during the last week. The left testicle had become swollen the day before admission, and was very painful, but did not altogether prevent him sleeping. There was uniform swelling of the testicle and epididymis. Puncture gave exit to about two ounces of blood, but no serum. Strapping applied, and opiate at bedtime ordered.

November 24.—Great improvement; pain entirely gone. Strapping reapplied.

December 4.—No recurrence of pain; swelling diminished. There is slight hardness throughout the body of the testicle, but the epididymis is not materially altered. He complains of pain in the loin, which sometimes prevents sleep, and says that the pain continued in his loins after the second strapping, but was relieved when the strapping became loose. The pain was increased by active exercise.

11th.—Much improved; hardness gone; no pain; still slight enlargement.

Observations.—The improvement in the symptoms was decided in this case, but it does not appear that the pain was so severe as in the majority of the cases, nor does the puncture seem to have given any immediate relief.

Case 14.—*Report by Mr. B. Duke, Dresser.*

G. W., aged 23 years, was treated at this Hospital in November for gonorrhœa by an injection containing a fluid drachm of strong carbolic acid to a pint of water. On November 21, 1866, he came to the Hospital with the left testicle slightly enlarged and very painful, for which he was ordered a mixture containing henbane and camphor, and to use warm fomentations.

December 6.—Testicle still enlarged and painful, the epididymis being principally affected; puncture gave exit to a little blood (about one drachm). Strapping applied, and opiate at bedtime.

10th.—No pain; the testicle much reduced in size.

17th.—The testicle free from pain, and of natural size.

Observations.—The injection here used may possibly have had some influence in bringing on the orchitis. In a few other cases in which a similar solution has been used the patients have complained of severe pain and irritation of the urethra. Mr. Watson has, therefore, modified this injection by adding sufficient bicarbonate of potash to neutralise the carbolic acid, and the results hitherto have been more satisfactory, though the injection has not been used in a sufficient number of cases to be able to form any estimate of its value.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0
Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.
Terms of Subscription for India, £1 15s. per annum.
The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.
Post-office Orders and Drafts on Army or Navy Agents, should be made in favour of Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d. | A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d. | A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, APRIL 13, 1867.

CLITORIDECTOMY AND MEDICAL ETHICS.

The operation of clitoridectomy, as performed under the conditions described in Mr. Baker Brown's writings and denounced in Dr. West's lectures, is an offence against Medical science and Medical ethics.

1. It is an offence against Medical science, in the first place, that it should be described as a mere circumcision.(a) Instead of taking away a loose fold of skin, it removes a rudimentary organ of exquisite sensitiveness, well supplied with blood-vessels and nerves, and the operation is described by the author as occasionally attended with serious bleeding; in these respects it differs widely from circumcision.

It is a second error to assume that if a woman desired to continue filthy habits this operation would stop her. The organ removed is but one amongst many susceptible of intense excitement.(b)

In the third place, it is against all Medical science to remove such a part because "subject" (or subjected?—see note) "to unbearable irritation." Intense itching is a common malady, but this itching does not depend on local causes, and it may generally be relieved by proper measures. To cut off part of the body because it itches is monstrous.

If, indeed, the clitoris be diseased, that is another thing; but as clitoridectomy is practised, the part is cut off without any signs of disease in it.

(a) "Let it be known, once for all, that clitoridectomy is neither more nor less than circumcision of the female; and as certainly as that no man who has been circumcised has been injured in his natural functions, so it is equally certain that no woman who has undergone the operation of excision of the clitoris has lost one particle of the natural functions of her organs. I would here also protest against the cruel insinuation made against me by my accusers, that my reasons for performing the operation are because women are subjected to immoral habits; when, as I have distinctly again and again asserted, I operate because there is undue and unbearable irritation of the clitoris, and in such cases alone is the operation likely to be successful."—(Mr. Baker Brown's "Replies to the Remarks of the Council," Nos. 12 and 13.)

(b) For evidence, see Baker Brown on Curability, etc., pp. 12, 18, etc.

It is nothing to the purpose to affirm that clitoridectomy may have been successful in postponing epileptic fits or lengthening their interval. Any *positive* line of treatment will do that for a time. Many young men believe *for three months* that they have found a specific for epilepsy. An intimate friend lately thought he had found one in colchicum. Give enough of any potent drug to make the patient ill, break a leg, or cut off the clitoris, and the fits will probably be interrupted *for a time.*

Neither is it to the purpose to accuse Mr. Brown of having performed an operation rashly, groundlessly, and unsuccessfully. Many such operations have been performed in the best faith. Marshall Hall used to propose tracheotomy for epilepsy; a living Surgeon once performed castration for the same malady; each operation thoroughly unsuccessful, and not to be defended, save on the ground of the good faith of the proposers, and of an enthusiasm which had carried them beyond the bounds of sound discretion.

Although, then, clitoridectomy must be condemned as an offence against Medical science, if that were all, it might be let pass into oblivion without further notice. It is the offence against Medical ethics which it involves, which has secured for it the reprobation of the Profession.

2. It is an ethical offence, in the first place, if the Practitioner who is consulted for any common complaint, say hysteria, or fissure of the rectum, set himself to consider whether or not the patient is guilty of immoral practices, which have nothing to do with the case before him. Thus, as we said in our last number, and as we implied in the *Med. Times and Gaz.* June 4, 1864, if the clitoridectomical theory and practice were established, no parent who sent a daughter to any Medical man for any complaint whatever, could be sure that she might not return tainted with filthy inquiries, or branded by filthy suspicions—a thing incompatible with the honour of the Profession, and the possibility of that unrestrained frank intercourse between Practitioner and patient that happily exists now.

As an illustration of this kind of breach of Professional honour and its consequences, we will mention a case which was shortly touched on in our first article in the number for June 4, 1864.

A young lady was brought by her friends, ten or twelve years ago, to a Surgeon practising specially on the rectum, for a fistula. He did not content himself with exploring the fistula, but ascertained that she had lost her virginity, and told her father so. The consequences were frightful, including a painful trial, and loss of honour, character, and position to the parties concerned. All this, because the Surgeon had gone out of the path of his duty, and, instead of confining himself to the malady for which he was consulted, had gratuitously imported into it certain moral considerations with which he had nothing to do. If this were a habit with Medical men, there would be an end to the present free and honourable intercourse with their patients. We should be accused, and justly, of making prurient, or indecent, or degrading inquiries, and of bringing a knowledge of evil to minds from which it had been absent.

Affirming, then, in the first place, that the very entry of thoughts of pollution into the Practitioner's mind respecting his patients is an offence of the deepest dye, this offence is aggravated by the kind of evidence which the clitoridectomist is taught to accept as a proof of his patient's guilt. That evidence consists, partly, in certain physical signs detailed in Mr. Baker Brown's book—a "peculiar straight and coarse hirsute growth," a peculiar follicular secretion, and other phenomena detected by inspection, which are as frivolous as they are disgusting. It is said by credible witnesses, that at a clitoridectomical operation nose as well as eyes were called into requisition, and that a respectable Practitioner was invited to apply his nose to the parts implicated, in order to satisfy his mind, by this test, that these parts had been subjected to abnormal irritation. The thing is almost too beastly to tell of, but we want to deal with this subject once for all, and to let our readers know why clitoridectomy does not stand in the same category as any other mere unsuccessful operation.

But, says Mr. Brown, "before commencing treatment, I have always made a point of having my diagnosis confirmed by the patient or her friends." And this brings us to what we may call the moral evidence on which the patient's guilt is assumed, the process of obtaining which is one of the most heinous offences against good sense and Professional ethics that can be conceived.

We have heard of questions put (not by Mr. Brown) to female out-patients after the following fashion:—"Do you feel any irritation in certain organs?" "Is it very bad?" "Does it induce you to rub them?" "Does the rubbing ever make you feel faint?" And if the patient answers these questions affirmatively it is said that the evidence of unnatural excitation is regarded as complete.

Nervous young women, as is well known, may be profoundly ignorant of the nature and drift of such questions. They delight to magnify their own sensations, they enjoy the Physician's sympathy, and are sure to answer "yes" to any leading question whatever. But we say that if young women are subjected to such inquiries as these in out-patient rooms at Hospitals and Dispensaries, or by private Practitioners, the sooner the Profession speaks out the better. A Medical consultation may involve the worst contamination to the patient. We think we are justified in saying that the kind of evidence on which the guilt of the woman is assumed is itself an ethical offence.

That the performance of clitoridectomy on a woman, absolutely without her knowledge and consent, as detailed by Dr. West, is an offence against Medical ethics, needs not be said. We suspect it is amenable to the criminal law of the land.

It is an offence against Medical ethics, also, to obtain the woman's consent, nominally, while she is left in ignorance of the real scope and nature of the mutilation, and of the moral imputations which it involves. Consent to a thing whose nature is not known, is like the consent of an infant or lunatic—null and void. Equally do we repudiate, as an offence against Medical ethics, the performance of such an operation, even with the consent, nominal or real, of the patient, but without the full knowledge and consent of the persons on whom she is dependent, as wife or daughter. As the woman's character affects theirs, they have a right to decide whether a female relative shall undergo this operation, with the disgrace it involves, or whether relief shall be sought from other means.

We may be pardoned for adding that not one of the supposititious cases alleged by Dr. Routh at the late meeting of the Obstetrical Society has the least bearing on or analogy with the performance of clitoridectomy without the knowledge of the patient and her friends. Dr. Routh argued that all the details of every operation cannot be described to patients. But it is not the details—it is the moral questions involved in clitoridectomy, which ought not to be kept secret. Dr. Routh argued, also, that there are cases in which a Practitioner is bound to keep a patient's secrets from her husband; but, in the cases before us, it is not secrets imparted by the patient, but dishonourable surmises and filthy imputations generated in the mind of the Practitioner—the nature of the mutilation and its disgrace—that are kept secret.

Thus, then, we have shown, as shortly as possible, the real position of clitoridectomy as an offence against science and morality, and the reasons why the Medical Profession, as an honourable, moral Profession, whose members have free and familiar access to families, must repudiate and utterly reject it.

Last week three suicides and two murders were reported to have been committed by insane persons at large.

PROFESSOR PARKES'S RECENT OBSERVATIONS ON THE ELIMINATION OF NITROGEN.

In late numbers of the *Medical Times and Gazette* (a) we have laid before our readers an account of the latest experiments and remarks of Donders, Pettenkofer, Wislicenus, Fick, and Dr. Frankland on the functions in the animal economy of various kinds of food. We now propose to notice the experiments of Professor Parkes "On the Elimination of Nitrogen by the Kidneys and Intestines during Rest and Exercise on a Diet without Nitrogen," conducted at the Netley Hospital, and to place the results before the Profession without the technical language and detail which necessarily belong to the inquiry.

The experiments were originally undertaken "to test the results arrived at by Professors Fick and Wislicenus (b) with respect to the elimination of nitrogen during exercise on a non-nitrogenous diet, as recorded in the *Philosophical Magazine* for June, 1866 (supplement)." Their conclusions were in brief as follows.

The question at issue was, whether muscular power is the result of the oxidation of actual muscular substance, or of the elements of the food after absorption, but before conversion into organised tissue; and the object of the experiment was to determine the ratio existing between the waste of the tissues produced by a given amount of mechanical work, and the calculated amount of force to be obtained from the oxidation of so much matter. For it is evident, that should these two quantities prove to be not related to one another, the waste of the tissues must not be taken as the equivalent of the amount of work done.

To determine this point, the Professors, having abstained for a given period from meat, bread, cheese, milk, and, in short, from all food containing nitrogenous principles, carefully estimated the amount of nitrogen excreted during their ascent of a mountain, which happened to present unusual facilities for the purpose; and they found that, after making ample allowance for errors of observation, "scarcely one-fifth of the actual energy required for the work performed could have been obtained from the amount of muscle consumed," the remaining four-fifths having been supplied by the elements of the non-nitrogenous diet taken during the period.

These conclusions, although supported in the main by the results obtained by other observers, have been objected to on the ground of the very short period over which the observations extended, and on account of the intestinal excreta not having been considered. It was with the view of testing the value of these objections that Dr. Parkes undertook the present series of investigations.

The experiments were made upon two perfectly healthy soldiers, of steady and regular habits; one of them, S., was a young, strong, active adult; the other, T., the senior by several years, was a small spare man, but well proportioned and active. Every care seems to have been taken to insure the most accurate results. The whole period of eighteen days, over which the observations extended, was divided into five periods, as follows:—

First, a period of six days, during which the men ate a regulated diet, consisting of—

	S.		T.
Cooked meat	7·625	oz. avd.	7·625
Bread	16·66	,,	16·26
Vegetables (¾ potatoes, ¼ cabbage)	13·87	,,	13·
Butter	1·	,,	1·
Tea (milk 3 oz., sugar 1½ ozs.)	20·	,,	20·
Coffee do.	20·	,,	20·
Beer	15·	,,	15·
Water	5·8	,,	2·33
Salt	5·	,,	·33

and performed their ordinary work. During this period all the variations in their weight, and in the amount and character of their egesta were carefully noted, in order to form a standard of comparison.

Secondly, a period of two days of abstinence from meat, bread, milk, and all nitrogenous food, but with the most complete rest from muscular activity.

Thirdly, a period of four days, during which they returned to their former diet and occupation, in order that they might regain their normal standard.

Fourthly, a period of two days of abstinence from nitrogenous food, but during which they took a very considerable amount of exercise.

Fifthly, a period of four days of their regulated diet and occupation, in order that the effect of the last period might be fully noted.

During the first period it was found that nutrition proceeded with the most perfect regularity, and the excreta (both urinary and intestinal) proved to be perfectly normal. The amount of food was almost the same in each case, as may be seen from the table, with the exception that the bigger man took nearly twice as much water as the other; the smaller man, therefore, took more solid food in proportion to his body-weight than the bigger man did. The proportion existing between the amount of nitrogen excreted and the weight of the body was identical in the two cases, showing, as Dr. Parkes says, "that a real connexion must exist between body-weight and urinary excretion." As might have been expected, the smaller man, T., passed more nitrogen in his intestinal excreta than the other did, since he ate the same amount of food and lost less in his urine.

Second Period.—The men were now placed upon a diet consisting of

Arrowroot (cakes and jelly);
Butter (containing no casein);
Sugar; and
Tea without milk.

The quantity was left to choice and appetite. Both took more water than formerly. They were confined to their room, and remained sitting still or lying in bed the whole time. Both lost weight—S. rather more than 2½ lbs., and T. about 1¾ lb.

The results of the urinary analysis, when summed up, amount to this—that, on the mean of the two days, the urea excreted during the first twenty-four hours was only about one-half of what it had been before, whilst during the last twelve hours it was in each case only one-third of the normal quantity. The total amount of nitrogen excreted varied in much the same proportion. On comparing the relation borne by the excreted nitrogen to the body-weight, it was found that the tissues of the older and smaller man furnished a slightly greater amount than those of the younger man; and this statement holds good both as regards the nitrogen contained in the urea and the other excreta.

Third Period.—The men at the close of this period had regained what they had lost during the previous two days in body-weight, and had, in other respects, returned to their normal standard.

With regard to the excreta, it was found that a certain proportion of the nitrogen of the food was retained in the body to make up for the previous deficiency, and to enable the tissues to recover that reserve fund of nutriment which had been so largely drawn upon. In the case of S. the amount of nitrogen retained represented one-fourth, and in the case of T. nearly one-third, of the whole quantity taken.

Fourth Period.—The men were again reduced for two days to the same non-nitrogenous diet as before during the second period. They ate more this time; their hunger was satisfied, but they complained of the monotony of the diet. They now took active exercise, walking on level ground at intervals

(a) *Vide Medical Times and Gazette* for 1866, vol. ii. p. 449; and 1867, vol. i. p. 9.

(b) An admirable *résumé* of the conclusions arrived at by MM. Fick and Wislicenus is to be found in a lecture by Dr. Frankland, *Proceedings of the Royal Institution*, June 8, 1866. See *Medical Times and Gazette*, 1866, vol. ii. p. 449.

during the day, after which they went to bed. On the first day they walked 23·76 miles, which, when calculated as work done, may be represented on Dr. Haughton's plan as follows:—

S. lifted 453·6 tons one foot
T. „ 346·74 tons „

On the second day they walked 32·78 miles: *i.e.*,

S. lifted 625·8 tons one foot
T. „ 475· „ „

"The first day's walking was done pretty well by both men. On the second day both did the first twenty miles well, but felt very much fatigued during the last thirteen miles. During the last four miles each man felt a pain in the small of his back. Both, however, could have marched on the following day if necessary." S. stated that though he had previously marched long distances with a heavy kit, he had never before felt so exhausted. Both men felt hungry; the food, however, satisfied their craving sensations. There was no perceptible action of the skin. The weather was fine and warm.

During these two days S. lost nearly 4½ lbs. in weight, whilst T. lost rather more than 1¾ lbs.

The changes in the excretion of urea were as follows:—During the first twenty-four hours a decrease of 15·5 grs. was noted in each case; in the next twelve hours a further decrease of 7·7 grs. took place; whilst, during the last twelve hours, chiefly during rest at night, there was an increase of 30·86 grs. in S., and of 15·5 grs. in T.

The total excretion of urea during these two days of exercise, as compared with a similar period of rest, was an increase of about 7·7 grs. in S., and a decrease of about 11·5 grs. in T.

The total excretion of nitrogen stands thus:—S. excreted more throughout the entire period, the excess over that excreted during the same period of rest being about 23 grs.; whilst T. for the first thirty-six hours excreted less than before, but made up for it during the last twelve hours, the excess being ultimately a little over 3 grs.

With regard to the other constituents of the urine, it was found that no increase took place in the amount of phosphoric acid excreted during the period of exercise, as compared with that of rest, and only a very slight increase in the sulphuric acid; whilst it appeared that, on a diet free from salt, much more chloride of sodium passed with the urine during a state of rest than of exercise.

On balancing the totals of the ingesta and egesta during this period, it was found that in both men a considerable increase took place in the egesta of the skin, lungs, and intestines.

Fifth Period.—The men now returned to their regulated diet and exercise. At first both were fatigued after the exertion of the previous day, and rested a good deal; and, as might have been expected, they were more hungry than they had been after the rest period, and ate more largely. They almost entirely regained their lost weight in two days.

On estimating the excess of nitrogen excreted during this period, and taking into account at the same time the increased amount of nitrogen taken in the food, it appears that there is no ground for supposing that in the case of S. this excess was derived from the disintegration of muscle which had taken place during the last period. It is, however, probable that the very large excess of urea on the first day of this period, which occurred in the case of T., was really owing to an augmented elimination due to the work done. No such excess was observed in the case of S., who had had, however, a larger elimination than T. during the previous twelve hours.

A marked increase in the excretion of non-ureal nitrogen over the ureal nitrogen was noticed as a direct result of the exercise taken during the previous period. Dr. Parkes considers it probable that this nitrogen existed in the form of creatinine, and believes that the cause of the discrepancy between the results of Professors Fick and Wislicenus and his own on this point is to be found chiefly in the very short period of time over which their observations extended.

The chloride of sodium and the phosphoric acid speedily returned to their respective normal standards.

The following important conclusions may be drawn from these experiments, and those of Professors Fick and Wislicenus, with which they agree on the most important points:—

Firstly. That on a non-nitrogenous diet of fat, starch, and sugar, exercise produces a slight but unimportant increase in the amount of nitrogen excreted both by the kidneys and the intestines.

Secondly. That during the period of actual work the amount of urea is diminished, proving that changes take place which cause either a retention of the nitrogen or an elimination by another channel. It is evident, then, that the quantity of the urea excreted cannot be taken as an index of the amount of waste which the tissues have suffered.

Thirdly. That the amount of force expended during exertion is not merely the result of the oxidation of the muscular, nervous, and other nitrogenous tissues of the body, which can, in fact, only represent about one-fifth of the entire quantity, but that a most important share in its production is taken by the non-nitrogenous (fatty and starchy) elements of the food, previous to their transformation into tissue.

Fourthly.—That a well-fed body possesses a sufficient store of nitrogen to allow of muscular exertion being continued for some time without requiring any immediate supply, but that food will shortly be required to replace the tissues which have been destroyed, and that this food must contain some of the nitrogenous principles, either animal or vegetable—viz., albumen, fibrin, casein, gluten, &c. This last fact was very distinctly proved during the third and fifth periods of Dr. Parkes's experiment, in which not only was the exhaustion consequent upon the starvation of the nitrogenous tissues severely felt, but a very notable quantity of nitrogen was taken and retained in the body to replace the former loss.

These results, besides their purely scientific value, may teach certain useful practical lessons. Thus, in training for those exercises which require a great and sudden expenditure of force, it is a mistake to supply a too exclusively nitrogenous or meat diet, since four-fifths of the total amount of force has to be obtained from the oxidation of the non-nitrogenous elements of the food—fat, starch, sugar; whilst, on the other hand, the want of a sufficient supply of the nitrogenous elements—albumen, fibrin, and casein, etc.—leads to an inadequate renewal of the wasted muscular and nervous tissues, and the consequent formation of an imperfectly organised structure, which will be less able to bear any of the severer trials to which it may be subjected, and will ultimately lead to early degeneration and death.

THE METROPOLITAN POOR ACT.

Although the Poor-law Board have not yet actually issued any orders giving effect to the Metropolitan Poor Act, we understand that measures are in active preparation for carrying out its provisions. Rome was not "built in a day," and, while dilatoriness in this matter would be wicked, proper caution is not only desirable, but absolutely necessary. There is one point, though, on which we wish the Poor-law Board would alter, in the new arrangements, the present mode of proceeding. We wish that, instead of leaving the local authorities to fix the remuneration of the officers, at all events of the Medical officers, they would take the matter into their own hands. The law empowers them to do this. The salaries are to be such as the Board "direct or approve;" hitherto they have contented themselves with "approving," unless in very special cases, and the consequence is that in many instances the guardians hardly realise that the matter is not as entirely within their own control, legally, as it is practically.

We believe that after a very short experience of the working of this Act in the metropolis we shall see its provisions, or others

of a kindred nature, extended to the rest of the country. It is a significant fact that in some parts the guardians are themselves taking the initiative. We observe that on Monday night a petition was presented to the House by Lord Richard Grosvenor from the Poor-law Guardians of the Holywell Union, Flintshire, praying for the establishment of county financial and administrative Boards.

THE MERCANTILE NAVY.

We are happy to find that the letters on the mercantile navy from Dr. Domett Stone which recently appeared in the *Times*, and the papers on the same subject read at the Society of Arts by Captain Henry Toynbee and others, have produced a good effect—viz., that of calling together a number of influential gentlemen, who have formed themselves into a Society for improving the Condition of Merchant Seamen. The objects of the Society, as stated in their Report just published, were expressly limited to the collection of information as to the real grievances of merchant seamen, and to the consideration whether these grievances were susceptible of remedy. The members of the Committee were selected to represent the views of all the classes who might, it was supposed, take an intelligent interest in the objects of the Society. A deputation from the members of the Committee had an interview with the Duke of Richmond at the office of the Board of Trade, Whitehall, on the 30th ult., on the subject. The Report of the Committee, a copy of which was handed to his Grace, is directed principally towards improvements in the provision scale of seamen, and to the quality and the addition of anti-scorbutics. It is recommended that, as it is obligatory on owners of foreign-going ships to provide for their ships' companies sufficient, wholesome, and suitable provisions, an ample supply of vegetables be considered for the future to be obligatory also, the failure to do so being punishable. It is recommended that water should, to prevent deterioration, be more frequently carried in iron tanks, instead of wooden casks. The sale of *pure* lime-juice (which, as it takes the place of vegetables, is considered an article of provision, and not a medicine) should be insured either by the issue of licences to vendors, with a heavy penalty on adulteration, or by its being supplied *out of bond*, after being tested by a Government officer. A certain proportion of spirit (say 15 per cent.) should be mixed with the lime-juice in bond, previous to shipment. At sea it should be issued *daily*, as enjoined by the Act, mixed with sugar and water, the issue to commence ten days after the ship has left port. The scale of provisions submitted by the Committee suggests one ounce as the daily allowance, instead of the half-ounce now directed by the Act. Light wines might, perhaps, be issued *when good lime-juice is not procurable*. A wineglassful, daily, would be suffiicient (?), and would generally be not more expensive than the proposed allowance of lime-juice. It is most earnestly recommended that the application of the provisions of the Contagious Diseases Act be extended to the water-side parishes of the chief mercantile ports. It is recommended that every seaman, boy, or member of a crew of a foreign-going ship should be entitled to twelve superficial feet of deck room, and seventy-two cubic feet of air. The forecastles, or other places devoted to the accommodation of the crew, should be water-tight, ventilated, lighted and drained, and protected from the sea. The Report contains other alterations in, and additions to, the Merchant Shipping Act.

THE WEEK.

H.R.H. THE PRINCESS OF WALES.

The following bulletin was issued on Wednesday:—

"Marlborough House, April 10.

"The progress of the recovery of her Royal Highness the Princess of Wales was checked in the latter part of last week by the occurrence of a fresh attack of inflammation of the knee-joint. The inflammation has now greatly subsided, and the general health of her Royal Highness, which was only slightly affected by the local change, is very satisfactory.

(Signed) "William Jenner.
"James Paget."

We are assured that the alarming reports of her Royal Highness's state, which "society" delights in inventing and propagating, have no foundation in fact.

THE LONDON SURGICAL HOME.

A considerable portion of one of the advertising columns of the *Times* of Saturday last is occupied by an advertisement of "The London Surgical Home for Diseases of Women, Stanley terrace, Notting-hill." The charitable are informed that this institution, of which we have lately heard so much, is under the patronage of "His Royal Highness Albert Edward, Prince of Wales, K.G.; Her Royal Highness Alexandra, Princess of Wales; Her Royal Highness Victoria, Crown Princess of Prussia, Princess Royal of Great Britain and Ireland; and of Her Royal Highness Princess Louis of Hesse, Princess Alice of Great Britain and Ireland." It is scarcely conceivable that the notoriety to which this Institution has recently attained should not summarily cut short the necessity for a continuance of the Royal patronage; but, at any rate, few of our readers will think the patronage and the notoriety compatible, and we would only call the attention of the Medical attendants of their Royal Highnesses and of the dispensers of the royal patronage to their incongruity.

THE KNAPSACK.

We last week alluded to the report of the Committee which had been appointed to inquire into the proposed changes in the knapsacks of our forces, but want of space compelled us to defer any inquiry into the deficiencies of the old and the advantages of the new packs. We may state, in the first place, that inquiries have been going on for years as to the best system of carrying the weight each soldier must bear, conducted more especially by the Professors of the Army Medical School, and dating from its very foundation. According to our present system, the whole weight of the knapsack is thrown on the straps passing under the arms; on the Prussian the weight of the pack is conducted by two straps passing over the shoulders to the waist-belt in front; but, according to the proposed scheme, the valise or pack is made to rest on the top of the sacrum, from either extremity proceeds a strap, which is attached in front to a yoke or collar passing over the neck, and it is also fastened to the waist-belt, so that its weight is distributed over all of these. Its advantages are great. The weight of the whole apparatus is considerably lessened, the pack itself weighing only 4 lbs. 3 oz. instead of 10 lbs. 2 oz., the weight of the present knapsack and accoutrements. Some of the systems proposed, as Colonel Carter's, had to be rejected at once, on account of iron rods entering into their composition, which being not only liable to breakage, and thus becoming useless, would, should such an accident occur, in all probability wound either the bearer or his neighbours. In this matter the Government authorities have spared neither time nor pains, their great desire being to see the soldier efficient; yet there is one little matter which, if not attended to, would go far to neutralise all advantages obtained by lightening the soldier's load, and that is, the covering of his feet. Boots are now numbered and served out indiscriminately to men with long feet, short and broad feet, feet with high insteps and feet with little or no insteps, feet with bunions and feet with corns; consequently, save by the rarest chance, they never fit, and to expect celerity and endurance from men so shod is simply rank nonsense. What is to hinder each soldier from having his boots fitted to his feet, as his coat is to his back?

MUSEUMS OF NATURAL SCIENCE OF CAMBRIDGE.

The Syndicate have issued their first annual statement, which consists chiefly of reports from the various Professors as to the state of the museums under their charge. Professor Newton places the Museum of Comparative Anatomy in pleasing contrast with that of Zoology, owing to the energy and assiduity of the superintendent of the former, and the insufficient means at present provided for arranging and exhibiting the valuable collections of zoology. Professor Humphry reports that Pathology is fairly represented, and that the skill and diligence of the demonstrator (Mr. Carver) are gradually supplying the deficiencies in the Anatomical department. We are glad to find that he can speak of a commodious dissecting room and good opportunities for the study of practical anatomy, and that the Professor of Chemistry writes that the Students' Laboratory answers its purpose well, and is well attended. Opportunities for practical study were much needed, and it is satisfactory to learn that they are being sufficiently provided.

FALSE CHARGE AGAINST A MEDICAL MAN.

The newspapers last week contained an account of what may be called a typical example of one kind of danger to which Practitioners of Medicine are exposed. The risks we speak of are no less real than those arising from contagion or the present state of the law of lunacy. No little caution is necessary to avoid them, and it is certainly possible that the most cautious may not escape. The relations between the Medical adviser and his patient are necessarily of such a kind that even the most circumspect and watchful must in their daily routine constantly afford some opportunity for these accusations. It is only necessary that a designing, an hysterical, or an immoral woman should, on the plea of consultation, be admitted to a private interview with a Medical Practitioner, against whom she has a grudge, or from whom she may wish to extort money, and it is no hyperbole to say that he is from that time in her power. Except by proving her previous character to be so bad that no one would receive her testimony, we really do not see how he is to rebut any charge which she may bring against him. In the case to which we allude, fortunately this was possible. The character of the woman, the wife of a railway stationmaster, who brought a charge of rape against her Medical attendant was so damaged by her own admissions that her own counsel refused to go on with the case, and the complete innocence of the Surgeon was triumphantly established and emphatically pronounced by the bench of magistrates. But in what proportion of such cases can such a defence be established; and, in its absence, what other—except of course the appeal to the previous character borne by the accused, which, however good, will be held by some to be insufficient to rebut positive assertions—can be set up? Risks of this kind incurred by Medical Practitioners are so far from imaginary that they are recognised by our ablest lawyers, and have been insisted on frequently in charges from the bench. It is perhaps the public sense of the danger to which Medical men are exposed that affords them their best protection. But there have been several cases of late years that have proved that even an unblemished professional reputation of long standing may not be sufficient by itself to defend its possessor against an unscrupulous accuser.

ARCHAIC MAN.

An old proverb says that one man's meat is another's poison; so, also, it may be said that one man's play is another man's work; and of none can this be with greater truth affirmed than of the present distinguished Professor of Midwifery in Edinburgh, Sir J. Y. Simpson. A series of researches conducted in his leisure time led to the discovery of chloroform; another set of inquiries ended in the introduction of acupressure; whilst, in the capacity of which we now have more particularly to speak of him—that is, as an antiquarian—he has made discoveries enough to send his name down to posterity, altogether apart from his other achievements. Thus we question if we have had anything in antiquarian Medicine of greater interest than Sir James Simpson's "Notes on Syphilis in Scotland;" but, be that as it may, the work to which we now have to refer is, although bearing on a different branch of the subject, one of very great importance. The title of the work is "British Archaic Sculpturings," and treats more especially of those rude and primitive tracings, the meanings of which are as yet hidden from us. Such are the rudest of them all, the cup and ring ornaments, the spectacle ornament, and the Z sceptre. Others there are of still greater interest—certainly of easier interpretation; for on the walls of caves, and on the surfaces of the stones forming parts of circles, etc., are to be found tracings of mammoths and other long extinct animals, showing that these still existed at a period when man had become sufficiently civilised to possess and know the use of stone-cutting tools. The rude form of sculptures known as the cup and ring ornaments belonged to an earlier date, and are supposed by Sir James Simpson to have been executed by a race possessing polished flint weapons, following those of ruder knowledge, who only employed chipped flints, but it may be that the history of their origin extends downwards to the time when bronze was introduced into the country and the people had attained a certain degree of civilisation. The subject is of great interest, and certainly shows that these now extinct animals lived along with man much longer than was recently believed.

A STAR ON FIRE.

An article in the last number of that popular periodical, *Good Words*, bears the above somewhat sensational title, but as the facts have been obtained by a most ingenious application of science we refer to it here. On the night of May 12th, last year, a gentleman at Tuam, in Ireland, was observing the stars, when he suddenly detected a new one of unexpected brilliancy in the constellation known as the Corona Borealis. It so happened, as was afterwards found, that an eminent astronomer at Athens had been examining the very same group of stars only three hours before this time, yet he had observed nothing unusual, nor was the star one to be overlooked, for when first seen it was of the second magnitude—that is, something less than the dog star, Aldebaran, or others of a like importance,—yet of a brilliance such as to render it a prominent object in the heavens. On May 14th it was observed in America, on the 15th at Manchester, and on the following night, in consequence of tidings from Ireland, by Professor Allen Miller and Mr. Huggins, near London. By this time it had decreased from the second magnitude to nearer the fourth than the third, and by June 24th it had sunk to the tenth magnitude, and so become inappreciable, save by a good telescope. Its colour also varied: at first it presented a blue nebulous appearance, but after May 25th the blue tint disappeared, it passed through various shades of orange and yellow, and is now of a dull white colour. The decadence in brightness was not, however, uniform, for on August 20th a second outburst occurred, and its brilliance increased sixfold; since the latter date, however, its light has gradually and uniformly diminished in intensity. Having found the star, Professor Miller and Mr. Huggins proceeded to examine its chemical constitution by the spectrum, but were surprised to find it exhibited two spectra, the one superposed on the other, one portion of one of them exhibiting the peculiar bright lines indicative of burning hydrogen; other two bright lines were not found to correspond with the spectrum of any known body. The other spectrum was that ordinarily produced by fixed stars. But Professor Miller was not satisfied with ascertaining that the bright lines corresponded with those produced

by burning hydrogen; an apparatus was contrived so as to throw the rays of that substance in a state of incandescence on the spectrum of the star, when they were found to correspond in every particular with the bright lines originally noticed. This bright blazing star, then, contained hydrogen in a state of incandescence, how brought about we cannot say; but the circumstance is highly suggestive. When the conflagration began is also unknown, for, the distance of the star not being ascertained, we cannot estimate how long the light has been in travelling to our world; it may have been hundreds of years, but it cannot have been less than three.

A HINT TO THE COMPETITORS FOR THE VACCINATION PRIZE ESSAY.

We have been led to understand that the donor of this prize is one who would not be unwilling to obtain evidence against the practice of vaccination. Nevertheless, as we understand that the judges are to be selected from Medical men of undoubted standing and position, who will be perfectly unbiassed in their decision, we can safely bid all intending competitors say what they like, being assured that nothing will be permitted to have weight excepting the respective merits of the essays sent in. We would invite the attention of those at work on the subject to the following note from Dr. Paget's Harveian Oration (1866), which appears to be pregnant with something—what we dare not yet say:—

"How little exact knowledge have we of the conditions of the body which increase or lessen the liability to infection from the various fevers! Instances are familiar to every Medical Practitioner, in which a person apparently in good health catches a fever, to which, on a prior occasion, he had been exposed with impunity. A wife, who has nursed her husband through scarlet fever without suffering from the infection, takes it some years afterwards while nursing her daughter. A Medical Practitioner, who all his life had been attending cases of fever with impunity, catches it in his old age.

"Again, with respect to the protective power of vaccination, and why it is perfect in some persons, imperfect in others? Are all the latter cases to be explained by want of care in vaccinating, or lapse of time since the operation? May not the liability be due in some cases to a fresh modification of the constitution, *ex. gr.* by some disease subsequent to the vaccination?

"At Swavesey, a populous village in Cambridgeshire, typhoid fever was very prevalent and severe in the year 1850. In 1865, on the occurrence of a few cases of small-pox, the inhabitants in alarm, young and old alike, sought for vaccination. Accordingly, Mr. Daniell, the Resident Surgeon, vaccinated 616, many of whom had been vaccinated on a former occasion, or had had small-pox. Of course in a large proportion of these Mr. Daniell's vaccination was unsuccessful, but by no means in all such. Mr. Daniell noticed the remarkable fact, that the cases of successful vaccination, in those who had been already vaccinated or had had small-pox, were chiefly, or almost wholly, among persons who had had the typhoid fever in 1850.

"One was a woman aged 60, who had had small-pox twenty years before, and whose face was pitted with it. The vaccination proceeded with her quite normally. She had had typhoid fever severely in 1850. It seemed as if the typhoid fever had not only produced a permanent effect on the constitution, but removed that condition of inaptitude for vaccination which had been left by the first vaccination or by the small-pox."

FROM ABROAD.—PREVALENCE OF INFLUENZA AT PARIS—OPPOSITION TO VIVISECTIONS IN NEW YORK—DECAPITATION.

The influenza has been very prevalent for this last month or two in Paris—indeed, quite general, sparing neither Doctors nor patients. In many cases it has been found to assume an intermittent character, which has been advantageously treated by means of quinine. With respect to this last feature, it seems to be the opinion of many Practitioners that the complication is in some measure accidental, the phenomena of intermission being really due to the great disturbance of the soil which is now going on in Paris, exposing to the air animal and vegetable detritus in the state of decomposition, and giving rise to miasmata capable of producing intermittent fever. This state of things was formerly observed at Paris during the formation of the St. Martin canal, and later, when the Rue Rivoli was opened up. At the present time, large works of this description are being carried on at the Luxembourg, the Trocadero, near the Halles, and many other parts of Paris; and in these various quarters of the town cases of intermittent fever have been met with.

"The Society for the Prevention of Cruelty to Animals in New York," determined not to be behindhand of its European prototypes in its opposition to vivisections, has introduced, or is about to introduce, a bill for their suppression into the Houses of Legislature of the State of New York; and as it is quite impossible to predicate what absurdity American legislators will not commit, there is probably considerable danger that such a measure might be carried. Of course, such an Act could never be enforced, and it is highly desirable that its passing should be prevented. If sound arguments and abundant proofs are likely to prevail, these are furnished by a most able address delivered at the New York Academy of Medicine (since, we believe, published separately) by the chief delinquent, Professor John Dalton. In this all the arguments in favour of the practice are exhaustively and temperately stated, and its utility and necessity, if Medical science is to advance, ably maintained. That it has been abused is admitted, and Dr. Dalton joins with all its defenders in this country in protesting against the disgrace which has unjustly been brought upon it by the cruelties perpetrated in the Continental veterinary schools, with which it has, in fact, no manner of connexion. Another abuse, not more likely to occur in the United States than it is with ourselves, but frequent on the Continent, is the needless repetition of vivisections, not for the purpose of ascertaining facts not yet made out, but merely having for its object their exhibition to successive batches of students. We may extract a passage from Dr. Dalton's paper:—

"In conclusion, there is one point to which I would allude, which seems to me of decisive importance. It is sometimes asserted by those who oppose physiological experiments that there are other sources of information more legitimate and allowable, and that the chief of these is the observation of the phenomena of disease met with in the treatment of the sick. But do those who take this ground appreciate what they really inculcate when they recommend that we should rely on this source of knowledge and neglect experimentation? Do they overlook the fact that such a course is simply *waiting for accidental experiments* to help us in our inquiries? What was the case of Alexis St. Martin but an experiment, accidentally arranged by a gunshot wound? When we are called to see a case of disease, we do not wish to manipulate and experiment with it; we wish to cure it. In order to cure it we must know its pathology and understand it beforehand. And if we do not understand it, then our observations and manipulations in that case are experiments on the living man, and cannot be regarded as anything else. Take the case of the facial nerve and the fifth pair. Sir Charles Bell himself says that, previous to his time, as the result of operations on the face for tic douloureux, 'after fifty years of experience, we remained ignorant of the distinction in these nerves.' It is true that, in many instances, our observations in disease, and our attempts for its cure, must necessarily be of the nature of experiments upon man. But when experiments upon animals have led the way, and have cleared up, in advance, some of the important points in physiology or pathology, they can only be regarded as fortunate and precious aids in our study of disease. The assistance which this method of investigation may be to us in the future, can be judged of by what it has done in the past; for the science of Medicine is one which is constantly advancing, as each generation receives the benefits and feels the impulse communicated by its predecessor."

The New York State Medical Society has memorialised the Legislature against the projected measure.

As is usually the case after every execution in Paris, the decapitation of the brutal murderer, Lemaire, has been followed by statements in the newspapers as to the persistence

of sensibility for some time in the head after decollation. M. Bonnafont has therefore thought it worth while to give an account, in a recent number of the *Union Médicale*, of some experiments he made many years since in Algeria in order to dissipate the belief then so generally held in that colony. On the occasion of the decapitation of two Arabs, he had ready a vessel nearly filled with pulverised plaster, and placed on a low table, and a friend and himself were provided with a small speaking-trumpet and a very sharp-pointed probe. Immediately the first head was cut off it was placed in the vessel containing the plaster, in order to arrest as far as possible the hæmorrhage. The speaking-trumpet was applied to the ear of the defunct, and his name well shouted through it, but no movement of the eyes or of any part of the face manifested the slightest perception. The eyes remained dull and motionless, and the face colourless, and scarcely any contraction of the muscles was induced by provoking them with the pointed probe. The second head manifested in like manner signs of instant death; as, indeed, how could it be otherwise than that this must at once ensue upon the syncope induced by the section of the large arteries? The numerous relations to the contrary, as well as the blush on Charlotte Corday's cheek, M. Bonnafont regards as fabulous, and he points out that there is no analogy between this reputed retention of sensibility by the decapitated head, and the fact of ducks and turkeys being able to walk about for some time after decapitation, as shown in the experiments of Aldini and Eugene Sue.

PARLIAMENTARY.—QUARANTINE—THE CRIMINAL LUNATICS BILL—THE CASE OF TOOMER—THE NEW BUILDING FOR THE UNIVERSITY OF LONDON—PUBLIC HEALTH (SCOTLAND) BILL—THE METROPOLITAN GAS BILL.

On Thursday, April 4, in the House of Commons,

Sir J. C. Jervoise asked the Vice-President of the Committee of Council on Education whether on January 25 last the Lords of the Privy Council issued an order permitting Dr. Edward Seaton to go on board the vessels called the *La Plata*, *Æolus*, and the *Menelaus*, under quarantine at the Motherbank, off the Isle of Wight, "without being in any way subject to the restraint of quarantine;" and, if so, on what principle Dr. Seaton was privileged to forego the requirements supposed to be necessary for the security of the public health.

Lord R. Montagu said the occurrence alluded to took place during the very cold weather in January last. Quarantine was not founded on the theory that it was necessary to stop the spread of fever in cold weather, but rather to prevent injury to commerce. If a vessel arrived from the West Indies with yellow fever on board, Southampton would be declared infected, and every vessel proceeding thence would be put in quarantine. That would be injurious to commerce. Quarantine in this country was not Medical, but commercial. Dr. Seaton did go on board the vessels named; but by all foreign countries it was a recognised fact that Medical officers had a right to board vessels in quarantine.

On Friday, in the House of Lords, the Criminal Lunatics Bill was read a third time and passed.

Sir R. Collier called attention to the case of Toomer, convicted of rape at the Berkshire Assizes, and sentenced to fifteen years' penal servitude, and in answer to Mr. Walpole's objection the other night that he was taking a novel and unconstitutional course in asking for papers, he referred to the cases of Lord Cochrane, of Frost, Williams, and Jones, of Jessie Maclachlan and Townley, where a similar course had been taken. He then went at length through the well-known facts of the case, maintaining that on the evidence of the prosecutrix alone there ought to have been an acquittal, insisting upon the Medical evidence, which proved that no resistance had taken place, and asserting that the verdict was disapproved by the whole Bar, and that the severity of the sentence astonished everybody. The case was peculiarly one for the immediate interference of the Home-office; but the suggestion that Toomer should prosecute Miss Partridge for perjury was absurd, as such a prosecution must infallibly break down.

Mr. Walpole, though disputing the accuracy of many of Sir R. Collier's facts, declined to follow him through them, as he wished to keep to the position of complete neutrality which he had carefully maintained all through. He denied that the Home-office was a Court of Appeal in criminal cases. The duty of the Home Secretary was not to rehear cases for the purpose of oversetting the deliberate judgment of a competent tribunal, but to exercise the prerogative of mercy by way of mitigation of punishment. In a similar case, that of the Rev. Mr. Hatch, some years ago, the course which he had suggested now had been followed, and on the chief witnesses for the prosecution being convicted of perjury, he received a free pardon. The question of excessive punishment had never been brought before him—when it was he would consider it carefully—and he did not shrink from admitting that from the first he had thought the sentence extreme.

After some remarks from Mr. Clive, strongly condemning the verdict,

Sir F. Goldsmid said there were differences of opinion among his townsmen at Reading as to Toomer's guilt, but all agreed that the sentence was extreme, and that no further light would be thrown upon the facts by a prosecution for perjury.

Mr. Neate pronounced the verdict to be atrocious, and sharply attacked Mr. Justice Shee for conduct which, he said, deserved the interference of the House of Commons. Toomer's friends, he intimated, would be satisfied to leave his claim to a mitigation of punishment in the hands of the Home Secretary.

Mr. Denman defended Mr. Justice Shee, and mentioned various circumstances in the case which justified a severe sentence, though he admitted it was extreme. He also denied that the Home-office was a Criminal Court of Appeal.

The Solicitor-General maintained that the Home Secretary would have overstepped his duty if he had set aside the verdict of the jury, entirely satisfactory as it was to the judge, without a new inquiry; and to the proposal to institute a fresh inquiry Toomer's friends, he remarked, had returned no answer. Mitigation of punishment was a different question, and when it was brought before the Home Secretary he would consider it favourably.

Some further conversation followed on the case, in which Mr. Otway, Mr. Baggallay, Mr. T. Chambers, Mr. M. Chambers, Mr. Sullivan, Mr. Rearden, and the Attorney-General took part.

Among other subjects discussed on the motion for going into supply was that of the buildings now in course of erection for the London University on the site of Burlington-house, which Mr. Layard complained were utterly out of keeping in style with the other buildings, and were erected in the Italian-Gothic style, in direct violation of the pledge given to Parliament last year. On this last subject,

Lord J. Manners explained that he had exercised no influence on the styles selected. Two plans had been prepared, and the plan now being carried out had been chosen in concert between Mr. Pennethorne and the representative of the London University, and he denied emphatically that there had been any breach of faith.

Mr. Cardwell, as a member of the Senate, expressed their dissatisfaction with the design, and maintained that the House would not have voted sixpence for it if the plans had been exhibited beforehand.

Mr. Beresford Hope, Mr. Tite, Mr. Bentinck, Lord Elcho, and Mr. Cowper also expressed an opinion that a promise had been given last year that the building should not be commenced until the House had seen the plans, and urged that the works should be stopped until that pledge had been redeemed.

On Monday, April 8, the Public Health (Scotland) Bill was to have been read a second time, when it was proposed by Lord Elcho, and agreed to by Sir G. Montgomery, that the Bill should be postponed until Thursday, May 2.

On Tuesday, in the House of Lords, in answer to some remarks by Earl Granville in reference to the new building for the University of London,

The Duke of Buckingham said he could only confirm what had been already stated in another place by his noble friend the First Commissioner of Works—namely, that the works at the Burlington-house site would be suspended for a few weeks, so as to leave open the question of any modification or alteration of the plan and elevation which had been proposed for the buildings for the London University.

In the House of Commons, in reply to Mr. Harvey Lewis, Sir S. Northcote said he should not bring on the Metropolitan Gas Bill until after Easter.

The Criminal Law Bill was read a third time and passed.

RESULT OF ELECTION
TO THE
VACANT CHAIR OF ANATOMY IN THE UNIVERSITY OF EDINBURGH.

(*By Electric Telegraph.*)

The seven Curators met in the University at two o'clock today (Thursday) to elect an Anatomical Professor, when six voted for Mr. Turner.

THE CROONIAN LECTURES.
By Dr. ANDREW CLARK.

Abstract of Lecture III.—Part I.

The first part of Dr. Clark's third lecture was occupied by an account of the various experiments made upon animals for the artificial induction of phthisis, and by a critical review of their results. The modes of experiment performed by himself were four. The first plan consisted in keeping animals in conditions unfavourable to health; the second, in causing them to inhale irritating matters with the air; the third, in injecting various matters into the veins; and the fourth, in inoculating with grey tubercle, as first successfully practised by M. Villemin. The result of the first plan was the development in the lungs of yellow lumps which rapidly coalesced and converted the lung into a cheesy-like mass. These lumps were in the beginning composed of epithelium-like cells in various stages of endogenous development or molecular decay, and closely resembled lobular masses of scrofulous pneumonia. They were one of that large variety of lung deposits to which the term TUBERCLE was so vaguely applied, and whose claims to the title *tubercular* would be discussed further on. The second plan, less satisfactorily executed than either of the others, yielded less uniform and definite results. The most common effect was a sort of fibrous disease of lung with cheesy deposit, resembling in character, though never equalling in degree, the pathological changes induced in the lungs of masons, miners, grinders, and others by the inhalation of irritating particles. The injection of cuttle-fish powder or of sand into the veins was followed by the appearance in both lungs of spherical masses of a yellowish or greyish colour, varying in bulk from the size of a mustard seed to that of a pea. These masses were composed chiefly of cells like the white cells of the blood, having some portions of the injected matter in their midst. When cuttle-fish powder was used, it was readily disintegrated and absorbed, but previous to its final disappearance the crystalline forms contained in it were often found to have made their way from the blood-vessels through the lung to the pleura, upon whose surface they could be felt or seen. *Secondary deposits were sometimes found in the liver and kidney.* When sand was used, the lung deposits produced by it were less frequently absorbed; and in the lungs of dogs whose veins had been injected nine months before, yellowish-grey nodules were found, distantly resembling the grey granulation of man, but quite distinguishable from it by its physical and microscopic characters. In fact, these lumps were nothing more than groups of vesicles, affected with one of the two structural varieties of pneumonia already described. But by far the most interesting and important experiments were those of inoculation, first successfully practised by M. Villemin, and repeated immediately afterwards by Dr. Andrew Clark. When pieces of fresh grey tubercle were introduced into a subcutaneous wound in the neck of the rabbit, a hard swelling, often going on to suppuration, formed at the spot in three days, whilst, in the course of a fortnight or three weeks, grey granulations appeared in the lungs, and afterwards in other organs of the body. Similar results ensued in other rabbits when the inoculating material was taken from the swelling in the neck of a rabbit previously inoculated with grey tubercle from man. The tubercles thus produced in the lungs of rabbits had nearly all the naked-eye characters of the true grey granulation. They projected from the cut surface of the lung; were semi-transparent, dense, tough; and appeared to exist in all parts of the lung indiscriminately. They were, therefore, quite distinct from the masses indifferently called yellow tubercle, which was a common stage in the history of the most various products from grey granulations to pus; and they were quite distinct also from the nodules of scrofulous pneumonia already described as common to the rabbit when placed in conditions, with respect to food and air, unfavourable to health.

So far, then, as concerned the production of grey tubercles in the lungs of rabbits by the insertion of pieces of grey tubercle into subcutaneous wounds in their necks, Dr. Clark could testify, from repeated trials, that the experiments of M. Villemin were conclusive. But when it was inferred from these experiments that the grey granulation thus induced in rabbits was identical with that occurring in man, and that the grey granulation was the specific local expression of a specific virus capable, like that of syphilis, of being indefinitely propagated by inoculation, Dr. Clark held that the conclusions were not justified by the evidence adduced in their favour, and must be received with extreme reserve. The grey granulation of the rabbit differed in some important points from that of man. The former occurred as commonly at the base as at the apex of the lung; it was seldom, if ever, seated in the areolar tissue surrounding the bronchi and blood-vessels, or in the substance of the pleura; it was cellular instead of nuclear or corpuscular in structure; it was often absorbed; and as yet it had not been found to give rise to those secondary changes produced by the grey granulation in the lung of man. And, even admitting that the grey tubercle produced in the lung of the rabbit by inoculation was structurally identical with that of man, or homologous with it, it did not follow that its presence was due to the action of a specific virus communicable by inoculation, in the strict sense of that term. For, first, the experiment consisted in the introduction into a subcutaneous wound of pieces of grey tubercle, which there decomposed and gave rise to great local irritation; and this, therefore, was no mere affair of ordinary inoculation. And, in the next place, Dr. Clark had twice succeeded in producing grey granulations by using for inoculation non-tubercular instead of tubercular matters. Moreover, if tubercle were really inoculable in the sense that syphilis was, the disease would be more communicable from husband to wife, more extensively hereditary, and much more common than happily it is among men engaged in studying the morbid anatomy of phthisis.

Years ago a true inoculation was tried for the induction of tubercle by Klencke, among others. But it was plain, from such accounts of the results as had come down to us, that the lesions met with in the lung were not true grey granulations, but the so-called yellow tubercles or islets of scrofulous pneumonia, which was the peculiar disease of the lung of the rabbit, and had, in all probability, occurred in the cases referred to independently of the act of inoculation.

Dr. Clark considered it of the utmost importance to the right interpretation of the results of these experiments to keep before the mind the absolute distinction which exists between the grey granulation and the so-called yellow tubercle. Without the light of this distinction, there was no way out of the obscurity in which the subject was involved.

(To be continued.

Innervation of the Heart.—Drs. E. and M. Cyon, of St. Petersburg, have presented a note to the Paris Academy of Sciences detailing the results of their experiments made on dogs and rabbits. From these it appears that two or three branches of the lower cervical ganglion are the antagonists of the pneumogastric, insomuch that while irritation of this last nerve renders the pulsations of the heart slower and increases their amplitude, irritation of the cervical ganglion increases the number and diminishes the amplitude of the pulsations. In order to express this antagonism with precision, they propose denominating the branches of the cervical ganglion in question *accelerator* nerves of the heart, as opposed to the name *depressor* nerve already conferred by Ludwig on the cardiac nerve, which arises by two roots from the pneumogastric and superior laryngeal.—*Gaz. Médicale*, April 6.

REVIEWS.

Der Croup. Von Dr. F. Pauli. Wurtzburg.

Croup. By Dr. F. Pauli. Wurtzburg: Stahel. 182 pp.

About this volume there is much to admire, and a good deal to blame. It is founded on an experience of thirty years, but combines with the information thus acquired an immense deal of second-hand matter which would in many instances have been far better excluded. The whole book seems to be overlaid with erudition, so that the reader is frequently overwhelmed by the weight of authority adduced; for it is no unusual thing to encounter four or five lines filled with the names of authors, and in one case we counted no less than fifteen such lines consecutively. We must confess that we cannot see the good effects likely to be derived from such a procedure. As might have been expected also, we meet with indications of a good deal of this learning having been acquired at second hand; thus the name of *Vatrik* Blair does not look peculiarly English, nor does that of *Molloi* strike us as being very Irish in its aspect. Other instances might be cited, but these will suffice.

But let us abandon fault-finding, at all times an ungracious task, and turn our attention to the solid merits of the book. It is divided into four portions. The first discusses the true nature of croup, the second its diagnosis from other diseases, especially false croup, the third its medicinal treatment, and the fourth tracheotomy as applied to croup.

The earliest notices of croup appear to have been of English origin, and the first time it is distinctly mentioned appears to have been in a work published in London in 1656. We need not allude to its history, which our author discusses at considerable length, nor to its diagnosis as gradually evolved by successive writers, but we shall proceed to give the definition adopted by Dr. Pauli. "True croup," says he, "is a non-contagious local diphtheritis, usually appearing sporadically—a peculiar inflammation of the mucous membrane of the larynx and neighbouring respiratory passages, followed by formation of false membrane, which produces contraction of the respiratory tract, with all its accompaniments leading to asphyxia and death. Under favouring conditions, especially in epidemics, general diphtheritis, a kind of blood-poisoning as in typhus, and highly infectious, may accompany it and increase its danger."

As to the diagnosis of croup, Dr. Pauli founds it on its etiology as well as on its symptomatology. The disorders he enumerates as most likely to be confounded with it are general diphtheria, angina tonsillaris, laryngitis simplex, œdema glottidis, tracheitis pseudo-membranacea, capillary bronchitis with false membrane, angina herpetica of Guersant, not yet generally known in this country, retropharyngeal abscess, foreign bodies in the windpipe, angina gangrænosa, and lastly spurious croup or laryngismus stridulus. The grand diagnostic in this last case he makes the sudden accession of the attack, but in all cases he thinks it possible to arrive at an exact opinion as to the nature of the disease.

In treating croup our author declares against bleeding or blistering, and relies chiefly on emetics, especially after the membrane has begun to separate. Such substances as sulphuret of potassium and sulphate of copper he entirely rejects. Tracheotomy, with him, as with most continental authorities, is the favourite remedy, and, like most of them, he also prefers a peculiar instrument (which is described and figured) to the simple scalpel usually employed in this country.

The indications and counter-indications of the operation may interest our readers, and we shall therefore give them at length.

Tracheotomy is indicated—

1. When the child is not too young—from 6 to 10 is the best age—and it should usually be avoided when the child is under two years.
2. In strong healthy children.
3. In catarrhal croup and diphtheritic laryngitis, when general diphtheria is absent.
4. When there is no doubt of laryngeal impediment by false membrane, and ordinary remedies, especially emetics, have failed to remove it. Even then cyanosis should not be allowed to appear, but the operation should be promptly performed, especially when there is a strong tendency to sink.
5. Continued dyspnœa, with commencing asphyxia and absence of an attack of suffocation, affords the last and most pressing indication of tracheotomy.
6. Inflammation of the larger bronchi does not contra-indicate the operation, according to Guersant.
7. Diminution of the pulse during inspiration, showing a high degree of obstruction, indicates, in the absence of contra-indications, the immediate performance of the operation.
8. Albuminuria, as a result of simple *renal congestion*, indicates tracheotomy, according to Barbosa.
9. Violent attacks of suffocation indicate the operation, showing as they do the presence of considerable power and the absence of neuro-paralysis.
10. When the fever is sthenic, and the breathing not stertorous, the operation is indicated, nor do the opposite conditions altogether contra-indicate it.
11. The rapid approach of asphyxia as a result of local obstruction to the entrance and exit of the breath indicates immediate operation, according to Duhomme and Tonquet.

The operation is contra-indicated—

1. By decided general diphtheria along with coryza and great tenderness of the inflamed submaxillary glands, especially when they are much swollen.
2. In croup following measles or scarlatina, on the ground that the child has been weakened by the preceding disease, and that general diphtheria easily shows itself.
3. By delicacy of the patient, previous sickliness, weakening treatment, and tuberculosis.
4. By extensive pneumonia, especially on both sides, and by emphysema.
5. By paralysis of the soft palate and uvula, whether complete or partial.
6. By the inefficacy of emetics, as indicating the existence of neuro-paralysis, or of very great weakness.

At the end of the work we have a few carefully selected cases where tracheotomy was employed, and finally a number of deductions in the shape of aphorisms.

Take it all in all, notwithstanding the faults pointed out, the book is worthy of our attention, were it only for the experience conveyed in it. From a literary point of view we can scarcely say very much in its praise, but we think that those devoted to diseases of the respiratory organs will find it a useful addition to their libraries, more especially as it contains a great many references to other works.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

Paris, April 2.

The official opening of the Great International Exhibition took place yesterday in spite of the opinion heard on all sides that this would be impossible in consequence of the *exposants* being wofully behind in their arrangements. There were, however, I believe, potent reasons why it *should* be opened on April 1. Had it not been, a large indemnification would have been claimed by the interested parties.

Of ceremony there was almost none—a promenade of their Imperial Majesties, of two hours' duration, in the interior of the building, accompanied by a certain number of notabilities connected with the Court, and preceded by the Imperial Commission, comprising the whole affair. From the rumours afloat, emanating from those who daily visit the building, I was prepared to find a scene of greater confusion than that which presented itself—somehow they had *managed* to put aside unsightly objects, so that the *tout ensemble* was far beyond what might have been expected.

The most remarkable ignorance prevailed, however, as to whether this opening was *bonâ fide* or not, some declaring that the building was to be again closed for a few days, while others asserted that it would in future be open to all. In this state of blessed uncertainty I left the great palace, and neither from the Government official journal, where I had been told to look for information on the point, nor from any other source, civil or military, could I ascertain whether or not the doors would be open to the public on the morrow. Not knowing whether I could gain admission or not, I this morning, in spite of wind and rain, of which we had abundance, wended my way to the building, and it was only on reaching the turnstile that I found visitors really were admitted, the price *par personne* being five francs.

Yesterday the great centre of attraction was the Emperor and his fair consort, all else remaining as it were unnoticed. This morning the difficulty was to find any centre of attraction,

the sentiment possessing you being one of amazement at the immensity and the grandeur of the stupendous edifice, where, in spite of the most feverish activity displayed for the last few months, so much still remains to be done that at least five weeks or so must roll by before order can spring from the chaotic mass which surrounds you.

Thousands of workmen, hammering, sawing, planing, painting, and arranging, all shouting, singing, and talking, each in his own tongue—'tis a veritable Babel! It is to be hoped the Imperial Commission, in selecting the members of the Medical staff, made provision for every variety of accident; for besides danger to life and limb (incurred even by the visitors, who are in jeopardy of having their skulls fractured by the falling of some unlucky hammer), calling specially for the aid of the Surgeon, the Pyschological Physician may perhaps also find something to do, the noise and confusion being sufficient to madden all whose heads are not pretty solid. On a *first* visit it is, of course, impossible to gain more than a general idea, even when an Exhibition is in *order*, but in the midst of this monstrous chaos no adequate approach to an idea can be formed.

Amidst boxes, bales, ropes, and workmen, I endeavoured to make my way in search of something interesting to Medical science, and after a somewhat tortuous promenade along lines of stalls *all* being fitted up, *none* in a condition to be examined with anything like comfort, I stumbled on a small colony of pharmaceutical chemists, all English, and principally from London; for, to the honour of our country be it said, the English are about the only individuals who approach anything like completion in their arrangements. Advanced as they were, compared with their neighbours, they were, however, still in the act of unpacking, and it was with difficulty I could obtain an answer to any question. Visitors evidently *are*, and *will be for some little time to come*, considered as bores. How can anything like good humour or civil answers be expected from men who, in the act of opening a case, are every now and then finding some choice and magnificent specimen of a crystallised salt reduced to powder by the rough usage to which it had been exposed *in transitu?*

As regards the Medical, or rather Surgical, division, little is to be seen beyond a few artificial legs and eyes, and a splendid display of mineral teeth, which, at first sight, appear sufficient to supply the wants of the human race for at least a quarter of a century.

Among the British colonies furnishing specimens of their productions which bear on Medicine, the Mauritius merits a special notice. Of medicinal plants alone there are one hundred, all beautifully arranged, each labelled with its vulgar as well as with its scientific name. The collection is in great part indigenous to the colony, the rest being exotic, but acclimatised. It is the result of the efforts of Professor Bouton, the curator of the Colonial Museum, a botanist who has been well known for many years both in England and France for his valuable labours in connexion with this branch of science, conjointly with the late M. Desjardins and the late Professor Boyer. Moving forward, I found myself shortly within the precincts of the American department, where my attention was attracted a second time by a vast display of artificial teeth, and, lying *pêle-mêle*, in their immediate neighbourhood, immense quantities of artificial legs and arms. While looking at these mechanical appliances from a distance—for they were not within my reach—the idea occurred to me that in this particular branch of industry the Americans may possibly eclipse us all; for, owing to the fearful mutilations their late war must have inflicted on a vast number of the surviving combatants, it is certain that their Surgical instrument-makers have had great scope for the exercise of their ingenuity and their mechanical skill. In close proximity to America—which, I may remark *en passant*, is behind most of the other countries in its arrangements, and which cannot be in anything like condition for at least three weeks to come—is Sweden, where really some approach to order *does* exist. In the centre of this department my eye lighted upon a superbly fitted-up case of cod-liver oil, so pure, so beautiful in colour, as almost to make one desire to taste it. This, however, was the only Swedish medicinal product I observed. In the Austrian section, amid meerschaum pipes, clocks, and opera glasses, I spied out fragments of what, when completed, will, I am satisfied, turn out a highly interesting collection of anatomical preparations. The specimens, which were being laid out in order, are selections from the museum of Dr. Joseph Hyrtl, the famous German anatomist, whose models are to be met with in almost all the leading anatomical cabinets of Europe. It was to me a cause of regret, although my time was so limited, that this beautiful collection was but partially unpacked, as I could see only a portion here and there. Whilst I was looking on from one of the huge boxes, a case about two feet square was withdrawn, which, on being uncovered, proved to be the practical illustration of his famous work entitled "Researches on the Anatomy of the Organ of Hearing in Man and the Mammalia." This collection will not fail to be a source of much interest to Medical men visiting the Exhibition, and in a future communication I may make it the subject of a special and detailed notice. Some anatomical preparations, human and comparative, got up with great care and accuracy, illustrative of the relative position of the leading Surgical regions of the body, by Professor Teichmann, of Cracovia, are to be found in the same vicinity.

The Prussian department is a howling desert, and from the other German States few specimens have yet arrived. Our friends across the Rhine have had enough work upon their hands of late, and may well be excused for not being in readiness.

As to the French Medical exhibition, it is still in the embryotic state, but, as far as we can judge, it promises to stand fairly its ground. The few samples of Surgical industry which it was possible to see appeared both elegant and ingenious. The hydrotherapic mode of treatment is largely represented, and a large but hitherto empty space is reserved for Dental Surgery. An interesting innovation is the introduction of *books* into this division. Among these, the elaborate anatomical engravings, which most of your readers are no doubt already acquainted with, make a splendid figure, and a large case is devoted to the well-known anatomical models of Dr. Auzoux (*Anatomie Clastique*). By some unaccountable mistake, this box is placed among the mathematical instruments (*Instruments de Précision*). Is this to be interpreted as a flattering allusion to the accuracy of our anatomical knowledge?

A five hours' stroll round and about the monster building could furnish me with no more details of interest to the Profession. The treasures are still lying hid in immense cases, thousands of which are to be seen in all directions; and many days, even weeks, must elapse before the wonders they contain can fairly be brought to light. The incompleteness of the hurried and very imperfect sketch I have attempted to give is, you will perceive, in no small measure due to the extremely backward state of the Exhibition. The remark is trite, but on the present occasion not wanting in force, that things in a half-finished state should not be seen; and on quitting the building, I could not help indulging a regret that a month more, at least, had not been allowed to roll past before a criticising public had been formally permitted to pry into its contents. This would have been to the advantage of all—of the *exposants* themselves, who would thus have been permitted quietly and without interruption to complete their arrangements; and of the visitors, who could not have failed to form a better and a juster judgment of what they saw.

For ourselves, we paid a flying visit (for such only can a few hours be termed in a building so vast), partly from a sense of duty and in obedience to your urgent request, and we now feel constrained, with a view to the good of your numerous readers, to advise such of them as have the intention of visiting this gigantic show, not to cross the Channel for at least a couple of months to come. For the present, only such of them as have a marked ethnological turn can find food for their fancy, the building swarming with endless illustrations of every type and variety of the human species.

IRELAND.

DUBLIN, April 9.

YOUR last impression contained, at page 380, a statement that a very important meeting of the Medical Society of the King and Queen's College of Physicians in Ireland had been held in the Hall of the College on the evening of Wednesday, the 27th ult., under the presidency of Dr. Stokes, at which meeting reports from the several Dublin Hospitals which had opened their doors, during the late epidemic, for the admission of cholera patients, were received and read. Printed copies of the report having been placed in the hands of the members of the Society, adjourned meetings for the consideration of the data thus obtained were held in the same place, and under the same chairmanship, on the evenings of Thursday and Friday,

the 4th and 5th inst. It was originally intended that the discussion should on those evenings be confined to the returns from the Dublin Hospitals, but a very interesting report of a remarkably intense and limited outbreak which occurred in Utrecht during the prevalence of the epidemic there, bearing a strong resemblance in some points to the singular outbreak which took place in the Mountjoy Prison in December last, described by Dr. Robert McDonnell, F.R.S., in his report, and briefly referred to at page 39 of your number for Jan. 12, 1867, having in the meantime reached Dublin, leave was granted, by the President and Council, to Dr. W. D. Moore to read, previously to the proper business of the evening, an abstract of the report, from the pen of Dr. H. Snellen, of the outbreak in question, published in a recent number of the *Nederlandsch Archief voor Genees- en Natuurkunde*. The leading features of this singular outbreak may be shortly stated as follows:—It occurred in the Gasthuissteeg (Hospital-lane), a narrow passage, 150 yards in length by 4 in breadth (its breadth, according to the building regulations, should be at least eight yards), running from the north-east to the south-west, and connecting the Biltstraat (Bilt-street) and Witte-vrouwesingel (White Lady Counterscarp), but not used as a public way, being generally closed against carriages. The lane, including three adjoining courts, contained 75 one-storied houses, 83 families, and 380 inhabitants. The first case of cholera occurred in Utrecht on April 6, 1866; the first case occurred in the Hospital-lane on June 11. Cholera continued to prevail in Utrecht at the time of Dr. Snellen's report, the middle of September; but in the Hospital-lane there had not been a case since July 6. During the twenty-five days that the cholera raged in this very limited space it attacked between 16 and 17 per cent. of the population of the latter, and carried off 10 per cent., thus precisely *decimating* the inhabitants. One or two other remarkable points connected with this invasion deserve notice. Thus, while in a block of houses which had been raised and otherwise improved by the Society for the Improvement of Dwellings, where the rear was drained, etc., among 22 inhabitants 4, or 18 per cent., were attacked with cholera; in an adjoining block of *unimproved* houses, the yard behind which is in general a pool, while the block has only one privy ("not deserving of the name"), among 17 inhabitants not a single case occurred. The equality with which the sexes were attacked is also remarkable, of the men 16 per cent., and of the women 16·5 per cent., having been seized. Again, the accurate circumscription of the disease. While this fearful mortality occurred in the Hospital-lane, in the Stevens's-foundation—separated from it only by a wall, and containing 260 inhabitants in 50 houses, the privies of the latter discharging into the same channel as those of the lane—only one fatal case occurred, and in that instance the victim was a woman just returned from spending some time, day and night, in her son's family, where three persons were lying together in cholera. The most remarkable points in this invasion, therefore, were its limited duration, its marked limitation in space, its intensity and fatality, the equality with which it attacked the sexes, and the fact that the strictest investigation failed to discover a cause for it. Dr. Snellen's report is illustrated with a well-executed and highly instructive plan of the locality, exhibiting at a glance the number of inhabitants; the number of those attacked, and the number of those carried off, by cholera in each house; the situations of pumps, privies, and sewer-grates. The number (2) and residences of those who died during the period in the locality of other diseases are also indicated.

Dr. Darby next rose, and, in the course of his observations, handed in a return from the Loughlinstown Union. He argued that during the prevalence of epidemic cholera, especially at a season of the year, such as winter, when ordinary diarrhœa is not usually prevalent, cases of so-called choleraic diarrhœa, which, if allowed to go on, would probably become fully developed cholera, ought to be enumerated as cases of the disease. He had, accordingly, entered every case of vomiting and purging, combined with cramps, as cholera, whereby the mortality in his report was diminished to 17 per cent.

As it would be impossible, within the limits of this letter, to do justice to the speeches of the several gentlemen who took part in this very interesting and important debate, which will, no doubt, be fully reported elsewhere, I shall allude only to a few remarks of two or three of the principal speakers, and to the very able summary with which the learned President closed the proceedings.

Among the most interesting statements made in the course of the discussion were the descriptions given by some of the Army Surgeons present, of their experience of cholera in its "home." Of these, I would in particular mention the account given by Mr. Laing of the sudden descent of the disease on one occasion upon the troops under his charge in India. Mr. Haverty, too, made some remarks of great practical importance.

Sir Dominic Corrigan, Bart., referred to a map of the progress of the epidemic in Ireland in 1849, formerly published by him, the information afforded by which told, he argued, against the propagation of the disease on that occasion exclusively by contagion. From the map it appeared, he stated, that the cholera then raged more fiercely in districts such as Connaught, in which there was least commerce, and consequently less intercourse with other parts, than in the busy centres of trade and activity to be met with, especially in Ulster. It had been said that the "Connaught reapers," or harvest men, had been the means of introducing the epidemic to the western province. This proposition could not be sustained, as these people returned to their homes in the end of summer, to their own harvest, and the disease did not make its appearance in the province of Connaught until the following February. It is not likely that the germs of the disease should have lain dormant so long and have finally become developed.

The Rev. Professor Haughton, F.R.S., exhibited a map of the progress of the epidemic of 1866, which presented the same result as that just shown by Sir Dominic Corrigan, so far as the province of Ulster was concerned; the learned Professor, however, argued that his map explained Sir Dominic's, and led to an opposite view on the subject of contagion. Professor Haughton, in fact, attributed the comparative exemption of Ulster, in both instances, to the fact that that flourishing province contained many centres of independent industry, which had but little intercourse with distant parts. He had taken the trouble to make inquiry into the mode of invasion, by the disease, of the towns marked upon his map, and he found that they had been attacked in the order of their intercourse with Liverpool, and that the source whence the contagion in each case was derived was in general known. He was able to show that cholera had reached Ireland from Liverpool at four several points; in two instances only was the disease imported from other quarters. Of these, one was the town of Wexford, marked red upon the map, which port the cholera had reached from Milford in South Wales. It is the less necessary to enter more fully into Professor Haughton's remarks, as I am aware it is his intention to embody his observations, illustrated by the map, in the very interesting and important series of papers at present appearing, from his pen, in your journal.

Several other gentlemen having spoken, the President proceeded to lay before the meeting a summary of the facts and arguments elicited during the course of this important discussion. I must, however, hold over my report of this summary until next week.

GENERAL CORRESPONDENCE.

THE MEETING OF THE OBSTETRICAL SOCIETY.

LETTER FROM DR. C. H. F. ROUTH.

[To the Editor of the Medical Times and Gazette.]

SIR,—You have come down rather severely in your last upon me and my kindly intentions. But I cannot but feel that if I did speak the nonsense put into my mouth, you were quite right in finding fault with me.

What I believe I said, and what I certainly intended to say, in reference to the lady referred to by Dr. West, was not "that Mr. B. had operated against her consent," but "against her husband's consent, or, at least, without his knowledge." Mr B. admitted the latter error.

Again, I am made to say in reference to the unmarried cases operated on, "It is perfectly possible that in some of these the information was not given in special terms; therefore that it was done without any information at all." Whereas the words uttered in the last paragraph were "but not, therefore, that it was done," etc., which changes the entire sense. The inference which I meant to draw was not the ridiculous one attributed to me in your leader, but that Mr. B.'s ethical error did not merit so severe a punishment as removal.

That it is right to operate upon any woman without her consent or that of her husband, I never once admitted, nor ever could. I am, &c. C. H. F. Routh, M.D.

52, Montague-square, April 8.

Letter from Mr. F. Seymour Haden.

[To the Editor of the Medical Times and Gazette.]

Sir,—I shall be obliged by your allowing me, through the medium of your columns, to thank the many Professional friends who have written to me to express their approval of the course I felt it my duty to adopt at the meeting of the Obstetrical Society on Wednesday evening last.

Nothing but a growing conviction of the necessity for what was then done, and the apparent indisposition of better men to do it, induced me to take upon myself so odious a task. I trust it will do good. I am, &c.

62, Sloane-street, April 10. F. Seymour Haden.

LOCAL ANÆSTHESIA.

Letter from Dr. B. W. Richardson.

[To the Editor of the Medical Times and Gazette.]

Sir,—Personal controversy has always seemed to me to be born of jealousy, and jealousy to be born and nurtured of those only who have no mental possessions—a position I neither envy nor claim. I would forbear, therefore, from entering into any controversy with Dr. Arnott, but that no one may misinterpret me on the points he has raised on the subject of local anæsthesia, and out of respect to him, I crave permission for what follows.

1. I have never directly, indirectly, nor in any way whatever, laid claim to the natural discovery that extreme cold is a destroyer of sensation. Such a claim would be foolish. Neither have I claimed the first application of that natural discovery to the necessities of Medical practice. Such a claim would be false.

2. In respect to Dr. Arnott, my recognitions of his labours have been unbounded. In every paper I have written, in every address I have spoken, whenever the question of principle was under consideration, I have invariably put him foremost. At the Royal College of Physicians, at the British Medical Association, at the British Association for the Advancement of Science, I spoke of him and his work, and acknowledged him as fully as language untainted with flattery could permit me. Above all, I have rigorously disclaimed any of the credit that is due to him. I never felt the necessity, I never for a moment felt the desire, to trench either on him or on his researches.

3. In my first essays, as he says, it is quite true I did think the anæsthetic action produced by ether was due in part to cold and in part to the ether acting as an independent narcotic. It is equally true that this, in the vulgar sense, was an error. It was an error, however, detected almost as soon as it was made, and it was admitted and retracted instantly. But even as an error it was useful, because if I had not fallen into it I should hardly have discovered the fact or made the generalisation that local and general anæsthesia are the same processes, and that narcotics, one and all, act on the common principle of reducing organic calorific force.

4. I am convinced that Dr. Arnott cannot have made himself acquainted practically with the advantages of ether spray over any freezing mixture, or he would recognise those advantages as fully as the rest of his brethren. For local anæsthesia to be generally acceptable and useful in practice, it must be brought as a process within the requirements of practice. It must be at hand at all hours, at midnight and at noon the same; at all seasons, at midsummer and at midwinter the same; at all parts of the world, at the tropics and at the polar regions the same. Further, it must be so completely at hand that the administrator can go with it direct to the bedside and apply it cleanly, neatly, effectively, immediately. No freezing mixture answers at all to these imperative demands; the ether spray meets every one of them. The spray is ready as chloroform, and therefore it rivals with chloroform. Further, any one who has used the spray properly knows that in action it is better than any known freezing mixture, and for its purpose, indeed, is practically perfect. With a good compound ether and a fish-tail jet the production of insensibility is a matter of from two to six seconds—insensibility which, in twenty or thirty seconds more, can be extended over a surface large enough for any operation in Surgery: while for deep operations the insensibility can be carried wherever the knife can travel, and well nigh as fast. I have thus successfully used the spray for the largest as for the smallest of operations—for amputation of the breast, for removal of large and deep-seated tumours, and for Cæsarian section, as readily as for opening an abscess or incising a carbuncle. What is more, from the extreme rapidity of action now attainable, pain of application is reduced to the merest uneasiness, and slough is altogether prevented as a sequence. In like manner, for the treatment of deep-seated pain and inflammation the spray surpasses, not only in conveniency, but in efficiency, any freezing mixture. I have used it recently, with an effect almost magical, for removing the excruciating pain arising from the passage of a gall-stone. By experiment on an inferior animal, I can, moreover, demonstrate with it at any time the actual solidification of the brain substance itself, through the parietes of the skull.

Readiness for action, intensity of action, surety of action, success in action, control during action, and safety after action—these are the advantages of ether spray. They stand in happy combination, drawing the most listless to them irresistibly. These are the advantages which have made the spray invention so popular. With the invention the members of the Profession feel (and hundreds of them have expressed the feeling to me) that local anæsthesia is in truth an available remedy in the many cases in which, according to their judgments, it is likely to be a useful remedy. It is for this the Profession is satisfied with the part I have taken in constructing for it a simple, trusty, practical weapon against disease. If for centuries Medical men had known in such a manner we can produce insensibility to pain, but under conditions too remote to be always and immediately applicable, and nothing more, then for centuries local anæsthesia would have had no practical existence. It would have stood as the offering of bread and the giving of a stone: for a discovery, however grand, which would be useful if it could only be easily applied, stands often in worse estimation than does a discovery which is absolutely and confessedly useless. The first tantalises; the second beguiles.

5. These observations bearing upon local anæsthesia in practice on the human subject, are equally true in regard to practice on the lower animals. To the Veterinary Surgeon the ether spray proves useful as a constant remedy. It is always at hand, and as it prevents the pain of the seton, the knife, or the cautery, the resistance of the animals, a serious obstacle in operation, is so far met that time as well as suffering is saved.

6. Dr. Arnott is fond to pass slight on my work as a mere "modification." In doing so, he forgets the logic of history. There is no fact more patent than this fact, that in the motions or phenomena of mind, as of matter, Nature never lets men work towards perfection in anything by one set of powers. To reveal a new truth to a man is, with her, a sufficient favour. To bring that truth to usefulness, she distributes it to other men. In front, he is her herald, by whom she speaks; but behind him—often far behind—is the army and mailed force with which she works. In brief, there is not a useful working thing from science that has not come as a modification of some principle that did not work, or that worked badly. I do not admit, with Dr. Arnott, that local anæsthesia compares small with anything in science; it is in usefulness as big a thing as I know of; but still it compares with many things. The world esteems James Watt as the introducer of the steam engine; but Watt only "modified" the engine of Newcomen, so as to make it moveable, ready, and generally applicable. The world accepts Wheatstone as the introducer of telegraphic communication, but Cavallo actually discovered "electric intelligence," wrote about it, and even practised it; so that modern telegraphy, again, is a mere "modification." Harvey is the accepted discoverer of the circulation of the blood, but he only "modified" the argument of Ruini. Sir James Simpson stands first in the world's eye in respect to general anæsthesia, but he only "modified" the principle discovered by Sir Humphry Davy and practised by Horace Wells. And, not to grow wearisome, Dr. Jenner (to whom Dr. Arnott inaptly alludes, and who is received as the introducer of the protective agency of cowpox) was, in honest truth, as his own noble mind admitted, but the "modifier" of a discovery told to him by a milkmaid. The milkmaid knew all the facts about cow-pox and its power. She knew that a cow was subject to a special disease; she knew that persons with sore hands coming into

local contact with that disease could become infected; and she knew that persons who had been so infected were protected from small-pox. Here, then, was a principle discovered, and, in a good sense, a practice also, and Jenner, in acting upon the discovery, never claimed the principle, but simply "modified" the practice; *i.e.*, instead of sending the patient to the cow to take the infection, he brought the infection to the patient. It was not much to do, but it was the practical thing wanted, and so it won its way.

7. I confess myself candidly not to be amongst those who blindly acknowledge second or working powers, however successful, in any great practical application. That milkmaid who described the principle of vaccination to Jenner was, in my estimate, the most useful woman who has ever lived, not excepting the first mother herself. At the same time one cannot be blind to the stern fact that the world at large, ready at all times to recognise successful and useful practices, cares little about principles at their best, and, unless they are connected with the ready and useful, thinks nothing of principles at all. Perhaps, again, this is according to natural law; for if all honour and praise were bestowed on the authors of first principles, no person would venture to advance on any original design so as to make it directly serviceable. Thus the earth, filled with useless inventions, would become the lumber room of the planets, and stagnation would supplant inventive progress.

8. As regards my own work, I claim simply and honestly the introduction into practice of the method of applying ether or other volatile fluid in the form of spray, so as to produce anæsthesia by the natural benumbing agency of cold. I claim to have made this agency available to the immediate wants of every Medical Practitioner, and to have transformed local anæsthesia from virtual uselessness and even disrepute, into an instrument of living, daily, lasting service to the human race and to those below them in the scale of creation. I claim, further, that the improvement was the result of many years of laborious and thoughtful experimental study, and that it could not have followed a less severe line of research. Dr. Arnott might well have anticipated me in this had he pleased, for the road to advancement was by himself left wide open; but he was content with a good principle and a bad practice, while I strove and succeeded to bring the practice to a fair level with the principle.

9. The insinuation by Dr. Arnott that in inventing ether spray I was servilely copying some unsuccessful experiments conducted in France is so unjust—is so foundationless—I could hope, for his own sake, he will on reflection withdraw them. If by such innuendo he could for a moment strip me naked of all credit, he would in no way advance his own case, but would rather show how a really great mind can destroy its own character by littleness of heart. I can only repudiate the insinuation with sorrow. Not a case of any operation nor of any experiment with ether spray was published previous to mine, nor does any one in France make a claim to such position. On the contrary, the French have been amongst the first to recognise my advancement, and to identify it as mine. So large is the use of my instruments in Paris, that one well-known West-end firm of Surgical instrument-makers informed me lately of his supplying a single order to Paris "for thirty-six dozen of the Richardson apparatus for local anæsthesia."

In conclusion, Sir, there is not the slightest need for any disagreement between Dr. Arnott and me. I acknowledge freely, proudly, my respect for his genius, his originality, his industry, and, I do not hesitate to add, his prejudices. I have never touched his good fame except to try to do it honour, and the only fault he can find with my work is that it has brought a science which he founded to such good practical action that the world admires it. If that work had not been done, Dr. Arnott's preceding work had not been better known, and so much human suffering, for months past saved, had not been relieved. Following the bent of my own ambition, I might fret that our positions are not reversed. But I am content because I have been useful, and because I am clothed with the consciousness that any credit that has befallen me is no more than the natural sequence of an earnest desire to be useful according to the gifts which have been apportioned to me.

I am, Sir, your faithful friend and servant,

12, Hinde-street, W., March 30. B. W. Richardson.

Odontological Society.—At the meeting of the above Society, to be held on Monday, May 6, a paper will be read by Mr. Bridgeman, of Norwich, on "The Elements of Dental Nomenclature."

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, March 26, 1867.

Mr. Solly, President, in the Chair.

Dr. W. Jenner communicated a paper, by Dr. F. W. Gibson,

ON THE ANALYSIS OF THE URINE IN THREE CASES OF EPILEPSY.

Case 1: A man aged 21. (*a*) The twenty-four hours' excretion during twenty-eight days. (*b*) The excretion of thirteen days and of fifteen nights. (*c*) The mean hourly excretion before and after the fit on seven occasions. (*d*) Hourly excretion during nine hours following a fit. Case 2: A man aged 33. (*a*) The excretion on thirteen nights. (*b*) The excretion of the hours after and the hours before the fits. Case 3: A man aged 49. (*a*) Twenty-four hours' excretion during fourteen days. Deductions: 1. The average twenty-four hours' secretion of water a little above—of urea, chloride of sodium, and phosphoric acid, below—the normal amount. 2. The nightly average of water and chloride of sodium less than the daily; of urea, equal; of phosphoric acid, greater. 3. No constant change in the urine of the fit nights, but a tendency to increase of water, urea, and chloride of sodium. 4. Increase of all the constituents in the hours following the fits. Note: The temperature both during the attacks and in the intervals always normal.

Dr. Samuel Gee read a paper

ON ENLARGEMENT OF THE SPLEEN IN HEREDITARY SYPHILIS, AND IN SOME OTHER DISEASES OF CHILDREN.

In about one-fourth of the cases of hereditary syphilis the spleen is much enlarged. Sometimes enlargement of the liver and lymphatic glands is superadded. The degree of splenic enlargement may be taken as a sort of index of the severity of the cachexia; the majority of cases with great enlargement die, but sometimes such children survive, the spleen gradually diminishing in size as the health improves—not diminishing, however, *pari passu* with the improvement of health, but remaining for a long time a monument of past cachexia. Thus, the spleen can often be felt enlarged in children of three years old and upwards who bear the marks of past syphilis upon them. Sometimes an enlarged spleen is the only sign of an active syphilitic cachexia. In ague, also, it is sometimes the discovery of an enlarged spleen which first puts us upon the right scent, and enables us to detect the existence of ague which would be otherwise latent. Children in whom we can all but positively deny the existence of syphilis or ague occasionally acquire a greatly enlarged spleen, attended with a cachexia which is sometimes very profound. We can exclude leukæmia, lymphatic anæmia, rickets, idiopathic purpura, and primary disease of the liver in the cases referred to; whence it is inferred that children are subject to one or more cachexiæ not yet defined, or else that the known cachexiæ may present themselves shorn utterly of all the signs by which they may be recognised. For the cases in question the name of simple splenic cachexia was proposed: the analogy with lymphatic anæmia (Trousseau's Adénie) was pointed out. The statements made in the paper were illustrated by the histories of thirteen children.

Dr. Gee explained that the cases termed syphilitic were so beyond a doubt.

Dr. C. Drysdale considered this knowledge of the condition of the spleen in syphilis an acquisition to literature; he had observed it, but thought it of no importance, and supposed it to depend on engorgement of the portal system. Peritonitis and affections of the liver he considered to be not uncommon in syphilitic children. Enlarged mesenteric glands were also seen, as were ulcerations of Peyer's patches. He asked if Dr. Gee had observed this peritonitis in syphilitic children. He had just seen a case of congenital syphilis that day: the patient had keratitis; there were the usual marks about the mouth and teeth, and she was deaf; all the family were strumous. Boeck's impression, he said, was that syphilis caused rickets.

Mr. Henry Lee remarked that the number of deaths recorded did not say much for the natural history system of treatment. He, however, would question whether the lesion of the spleen was purely syphilitic or depending on the cachexia accompany-

ing the disease. He had many patients coming from the East in a cachectic condition, which was discovered in England to depend on syphilis. One patient he had who suffered from purpura and bleeding from every canal of the body; ultimately he died. This patient had a syphilitic history, but he attributed the cachectic condition rather to a blood poisoning from diseased bone in the nose, of course dependent on syphilis. Might it not be so with Dr. Gee's cases?

Mr. De Meric said that enlargement of the spleen in congenital syphilis, if it could clearly be made out, would be of great importance as a means of diagnosis. All the signs now employed were ante-mortem, and it would be of importance to obtain one which would infallibly indicate the nature of the disease after death, as many doubtful cases now occurred in every man's practice. Further investigation would, however, be necessary, and as a diagnostic during life its value would still to a certain extent remain doubtful, seeing that it depended on size, a thing not very readily made out. As there were so many other satisfactory signs, this ought to be closely examined before it was allowed to enter the list. Mr. Lee had thought that the diseased bone had produced the purpura in the case mentioned, but he had observed three cases where no bone was affected. The blood would be impoverished, and hence the purpura would be natural. In one case the patient suffered both from jaundice and purpura.

Dr. Hillier remarked that the title of the paper had misled many of the speakers, but the paper merely referred to enlargement of the spleen in children, whether syphilitic or not. In reply to Mr. De Meric he would say that the size of the spleen can readily be ascertained, but as any cachectic condition might give rise to enlarged spleen, it was doubtful whether the syphilitic differed from the ordinary forms. The interest of the paper lay in its showing the commonness of the disorder, and that certain cachexiæ existed which had not yet been recognised.

Mr. Weeden Cooke remarked that bad feeding might have something to do with the enlarged spleen, and that other hereditary disorders gave rise to cachexiæ, as there were often enlarged spleens in the children of cancerous and consumptive parents. In these cases it appeared to depend on simple congestion.

Mr. Savory, whilst valuing Dr. Gee's opinion, objected that the term enlargement was rather too vague. The microscope would prove valuable, as tending to show whether the enlargement depended on simple hypertrophy, degeneration, or deposit, and thus strike at the root of the matter. He would also ask what was the condition of other blood-elaborating glands, especially the thymus, as the spleen was not very active at an early age.

The President remarked that the paper contained the germs of something to follow, and it might tend to the elucidation of how many infants died with enlarged spleens, and how many of these were syphilitic.

Dr. Gee, in reply, stated that Dr. Hillier had anticipated many of his observations. The detection of an enlarged spleen, he said, was very easy and very useful. Excluding cases where it was pushed down, if detectible below the ribs it was probably enlarged. His paper was intended to be purely clinical, the microscopical examination being in many instances unattainable. He was sorry that the debate turned so strongly on syphilis, as there were evidently other cachexiæ not yet recognised. Peritonitis, he said, was not very common, whilst rickets and syphilis were not necessarily connected. The enlargement of the spleen was strictly chronic, and none of the patients presented any diseased bone. The condition was not invariable in syphilis, being present in about one-fourth of the cases only. Bad feeding did not necessarily cause it, and the thymus was not seen to be enlarged.

Dr. S. O. Habershon read a paper on

ACUTE POISONING BY PHOSPHORUS—JAUNDICE—DEATH ON THE FIFTH DAY—FATTY DEGENERATION OF THE LIVER, KIDNEYS, GASTRIC FOLLICLES, HEART, VOLUNTARY MUSCLES, ETC.

The patient, a young healthy woman, took some phosphorus rat poison mixed with water on January 10. It was supposed that about three grains of phosphorus were taken. Burning sensation in the mouth and throat came on; the breath was phosphorescent; vomiting and purging soon followed; but these primary symptoms subsided in two hours. The bowels were then freely acted on by salts and senna, and occasional vomiting took place; but for nearly forty-eight hours there was retention of urine. On the fifth day she was brought to Guy's Hospital. She was then jaundiced; the face was red and blotchy; the mind perfectly sensible, but irritable. She had slight pain at the stomach, but her principal complaint was of severe pain in the loins, which had commenced on the day of admission. The abdomen was distended, and the liver much enlarged; no pulse could be felt at the wrist, and the heart's action was extremely feeble. A small quantity of albuminous urine was passed after admission. The temperature of the body was very low. She subsequently rallied a little, but died suddenly nine hours later, after an attack of vomiting. On inspection, numerous ecchymoses were found in the skin, mucous membranes, glands, and serous membranes. The brain was healthy. The heart contained small clots of blood. In the stomach and small intestine were black fluid and mucus; the mucous membrane was much congested, especially in the ileum. There was no abrasion of surface. The liver was large and very fatty, and its cells were distended with oleaginous globules. The kidneys were pale, and the uriniferous tubes were distended, almost wholly with highly refracting granules; the pancreatic cells contained fat, and still more so the gastric follicles; the spleen presented numerous highly refracting granules instead of cells. The voluntary muscular fibres were partially degenerated, some fibres presenting transverse markings, others consisting of highly refracting granules; the heart also was similarly but partially degenerated. A single grain of the phosphorus paste given to a rabbit caused death on the fourth day, and its structures presented a striking contrast with those of a healthy rabbit; the liver was pale and fatty in a marked degree, and the voluntary muscular fibre from the thigh had undergone rapid degeneration. Reference was made to the chronic changes of the jaw produced by phosphorus, and to the frequent occurrence of poisoning by phosphorus on the Continent. It was mentioned that similar acute fatty degeneration, with jaundice, and unexpected death from a form of syncope, were described by Continental observers. Especial reference was made to the work of M. Tardieu, who describes poisoning by phosphorus under three forms. The first being accompanied by symptoms of gastro-intestinal irritation, followed by pains in the loins, jaundice, failing circulation, and sudden death, or death from coma. The second form, called nervous, on account of the predominant character of the cerebro-spinal symptoms. And the third hæmorrhagic, from the changes in the blood with purpura being more distinctive. In the last class of cases the course was slower. The author referred, first, to the low temperature of the patient on admission—89·8°, afterwards rising to 91°; secondly, to the exhausted functional state of the vaso-motor nerves; and, thirdly, to the comparative immunity from pain in the abdomen, although there was acute inflammation of the stomach and intestines. He also dwelt upon the importance of bearing in mind acute poisoning by phosphorus as a cause, first, of acute jaundice, with degeneration of the liver; secondly, as producing intense exhaustion of the power of the vaso-motor nerves; thirdly, as inducing somnolence and coma, like uræmic poisoning; and, lastly, as constituting one form of purpura hæmorrhagica.

MEDICAL NEWS.

Royal College of Surgeons of England.—The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Court of Examiners on the 9th inst., and, when eligible, will be admitted to the Pass Examination:—

Messrs. J. H. Gay, J. P. Doughty, C. D. Maynard, F. S. Tuck, A. H. Aldridge, W. H. Nicholls, Richard Stephen, M. H. Laxton, A. E. Kynaston, and D. W. C. Hood, students of Guy's Hospital; Meredith Townsend, C. N. Bell, L. M. Thomas, E. C. Seaton, Joseph Mitchell, J. A. Bell, and Edgar Cox, of St. Thomas's Hospital; C. E. Rowling, C. T. Vachell, Urban Pritchard, and Randolph Caldecott, of King's College; Edwin Sanders, A. A. Henley, C. J. Bennett, and F. J. Glencross, of St. Bartholomew's Hospital; H. F. E. Harrison, W. H. Staveley, and A. S. Drew, of St. Mary's Hospital; W. J. Williams and R. A. Prichard, of Dublin; Edward Swain, of the Westminster Hospital; and Enoch Snell, of University College.

The following passed on the 10th inst., viz.:—

Messrs. T. H. Henley, Edward Groves, E. A. Brickwell, J. T. Hartill, F. H. Hall, and A. W. Attwater, students of St. Bartholomew's Hospital; Stanley Peacock, J. G. E. Bolton, S. B. Brooks, James James, and F. C. Bennett, of University College; J. G. Christian and H. T. H. Chapman, of St. George's Hospital; K. M. Lloyd and S. C. Austin, of St. Mary's Hospital; J. R. Clouting and T. G. Johnson, of the London Hospital; T. B. Tracy and W. F. Taylor, of Kingston, Canada; F. S. Palmer and W. J. R. Ray, of the Westminster Hospital; Robert Atkinson and W. S. Ward, of Leeds; G. E. W. Turner and J. H. Foote, of Guy's Hospital; A. J. Bell, of King's College; J. L. Collier, of Manchester; Stephen Skinner, of Bristol; B. H. Moxon, of Hull; and Brook Thorp, of Liverpool.

The following passed on the 11th inst.:—

W. A. D. Fasken, Edwin Duke, F. J. Naish, W. P. Bridges, W. P. Mallam, W. C. Faraker, and C. T. Brookhouse, of Guy's Hospital; J. R. A. Taylor, Ethelbert Hosking, C. H. Mayhew, A. T. Gibbings, and G. S. Thom, of King's College; William Gill, Daniel Widdas, and Edmund Vialls, of the London Hospital; J. G. Williamson and David Smart, of St. Bartholomew's Hospital; T. H. Ravenhill and A. J. G. Waters, of Birmingham; F. J. A. Waring, of Dublin; George Norman, of St. George's Hospital; John Dixon, of Newcastle; R. W. Jones, of St. Mary's Hospital; and Henry Skelton, of the Charing-cross Hospital.

It is stated that nineteen candidates out of the 106 who were admitted to examination failed to acquit themselves to the satisfaction of the Court, and were consequently referred to their studies for three months, and one candidate, who had been detected copying, was at once referred for *six months*.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 4, 1867:—

Walter Moore, Menton, Warwickshire; Charles Trew Winckworth, Westminster Hospital; Henry Bland, King's College; Clement Dukes, Hackney; Henry Franklin, St. Bartholomew's Hospital; Edward Griffiths Clarke, Mold, Flintshire; Donald Fludyer Boulton, Usk, Monmouthshire; Jonas Richard Leake, Motcomb-street, Belgrave-square; Adam Wilkinson, Shaftesbury; Cecil Rogers, Manchester.

The following gentlemen also, on the same day, passed their First Examination:—

Charles John Bennett, St. Bartholomew's Hospital: John Gover Williamson, St. Bartholomew's Hospital; Thomas Lambert Lack, King's College; William Dobson, Leeds School of Medicine.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

CARTER, WM., M.B., B.Sc., LL.B. Lond., F.R.C.S.I., has been elected Honorary Medical Officer to the Northern Dispensary, Liverpool, *vice* Dr. McCaul, resigned.

CLARKE, J. ST. THOMAS, M.B. Lond., &c., has been appointed Surgeon to the Leicester Union Workhouse and Union Infirmary, *vice* John Moore, M.R.C.S., &c., resigned.

DRAPER, WILLIAM, M.R.C.S. Eng., L.S.A., L.M., late Resident Obstetric Assistant, Middlesex Hospital, has been appointed Resident Medical Officer to the York Dispensary, *vice* Thomas Collier, resigned.

EASTWOOD, J. W., M.D., has been appointed Physician to the General Dispensary and Fever Hospital, Newcastle-on-Tyne.

LANGSTAFF, CHARLES, M.D., M.R.C.S. Eng., has been elected Surgeon to the Royal South Hants Infirmary, Southampton, *vice* J. King Sampson, resigned.

MOON, R. C., M.R.C.S.E., has been appointed Assistant-Surgeon to the Ophthalmic Hospital, Southwark.

SHORTO, J. REEVE, M.R.C.S. Eng., L.S.A. Lond., has been elected Assistant-Surgeon to the Royal South Hants Infirmary, Southampton, *vice* C. Langstaff, M.D.

STREATFEILD, J. F., F.R.C.S., late Assistant-Surgeon in the Eye Department, University College Hospital, has been appointed Ophthalmic Surgeon to the Hospital.

WICKHAM, R. H. B., L.R.C.S.E., has been appointed House-Surgeon to Gray's Hospital, Elgin, N.B.

BIRTHS.

GRANT.—On March 28, at Manse of Kinnethmont, Aberdeenshire, the wife of J. G. Grant, M.D., 48th Regiment, of a daughter.

JONES.—On March 31, at Aberdare, Glamorganshire, the wife of E. Jones, M.R.C.S.E., of a daughter.

ROOME.—On April 4, at Parkhurst, Isle of Wight, the wife of H. Roome, M.D., of a daughter.

THORNE.—On April 4, at 22, Upper Seymour-street, Portman-square, the wife of Dr. R. T. Thorne, of a son.

WILLETT.—On April 6, at Wyke-house, Isleworth, the wife of Dr. E. S. Willett, M.D., of a daughter.

MARRIAGES.

BRIGHOUSE—HOWELL.—On March 23, at St. George's Church, Hanover-square, J. Brighouse, M.R.C.S.E., of Maddox-street, Hanover-square, to Mary Jane, only daughter of James Howell, Esq., Mare-street, Hackney. No cards.

OWLES—HOWELL.—On April 4, at Trinity Chapel, Wavertree, Liverpool, J. A. Owles, M.D., to Anne, youngest daughter of James Howell, Esq., Grove-park. No cards.

SABBEW—BIRKETT.—On April 3, at St. Mary's, Stoke Newington, J. T. Sabbew, M.D., to Mary Frances, relict of G. Birkett, M.D., Northumberland-house, Stoke Newington.

DEATHS.

ALGER, J. S., M.R.C.S.E., L.S.A., at Slough, Bucks, on April 4.

GREEN, J., L.R.C.P. Edin., at Cawood, Yorkshire, on March 28, aged 48.

MAUDE, F. W., M.R.C.S.E., at 8, St. Andrew's-place, Regent's-park, on April 6, aged 26.

PEEBLES, J. H., M.D., F.R.C.P. Edin., at Warwick, on April 4.

PRICHARD, J., F.R.C.S.E., of Apsley Guise, Bedfordshire, and late of Westrock-house, Leamington, at Rome, on March 25, in his 67th year.

RICHARDSON, F. H., M.D., R.N., at the Royal Naval Hospital, Jamaica, on February 25.

TEMPERLEY, G., M.R.C.S., L.S.A., at Carlisle, on March 27, aged 33.

TINSLEY, W. W., M.R.C.S.E., of Sheffield, on March 27, in his 40th year.

VACANCIES.

BIRMINGHAM AND MIDLAND EYE HOSPITAL.—House-Surgeon.
LONDON DISPENSARY, SPITALFIELDS.—Physician.
MARYLEBONE DISPENSARY.—Surgeon.
WESTERN GENERAL DISPENSARY.—Resident Surgeon.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Leicester Union.—Mr. John Moore has resigned the Workhouse; salary £65 per annum.

West Bromwich Union.—Mr. Charles T. Male has resigned the West Bromwich First District; salary £95 per annum. Also the Workhouse; salary £100 per annum.

APPOINTMENTS.

Andover Union.—Thelwell Pike, M.D., M.R.C.S.E., L.S.A., to the Fourth District. George Covey, M.R.C.S.E., L.S.A., to the Fifth District

Beverley Union.—Henry Walker, M.D. Edin., M.R.C.S.E., L.S.A., to the Fourth District.

Cricklade and Wootton Bassett Union.—Theodore T. Taylor, M.R.C.S.E., L.S.A., to the Third District.

Langport Union.—John Hughes, M.R.C.S.E., L.R.C.P. Edin., to the Third A. District.

Okehampton Union.—Francis Trimmer, M.R.C.S.E., L.S.A., to the Second District and the Workhouse.

Thornbury Union.—Isaac T. Bridgman, M.R.C.S.E., L.S.A., to the Berkeley District. Benjamin Simmons, M.R.C.S.E., L.S.A., to the Charfield and Tortworth District.

West Ham Union.—Thomas J. Vallance, M.D. St. And., M.R.C.S.E., L.S.A., to the Workhouse.

Wigan Union.—John G. Brayton, L.R.C.P. and S. Edin., to the Hindley District. Elisha H. Monks, M.R.C.S.E., L.S.A., to the Ince District.

UNIVERSITY COLLEGE HOSPITAL.—Notice has been received by the authorities of this institution of the munificent bequest of one thousand pounds to the Hospital funds by the late Mrs. Tildeslee de Bosset, of Holles-street, Cavendish-square.

STATISTICAL SOCIETY.—At the next meeting, to be held at 12, St. James's-square, on Tuesday, April 16, at 8 o'clock, a paper by Dr. Guy, "On the Mortality of London Hospitals and other Public Institutions," will be read.

THE *London Gazette* of Tuesday, April 9, contains the following announcement:—"Whitehall, April 8. The Queen has been pleased to direct letters patent to be passed under the Great Seal granting the dignity of a Baronet of the United Kingdom of Great Britain and Ireland to William Lawrence, of Ealing-park and of Whitehall-place, in the county of Middlesex, Esq., one of Her Majesty's Serjeant Surgeons, and the heirs male of his body lawfully begotten."

CATTLE PLAGUE INQUIRY.—In the week ending April 6 one attack of cattle-plague has been reported, being a decrease of four on the return for the previous week. This is a fresh outbreak of the disease, and it occurred on a farm containing thirty-one cattle at Birling, North Field, near Warkworth, in the petty sessional division of East Coquetdale (county of Northumberland); the animal, a bullock, was killed by order of the Inspector. One healthy bullock was slaughtered from having been in contact with the diseased animal. The number of cattle reported attacked in Great Britain since the commencement is 253,897, and 52,684 animals in the aggregate have been slaughtered healthy to prevent the spread of the disease.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—On Saturday afternoon, the 30th ultimo, at a special meeting, the Dr. James Watson Prize was awarded to Mr. Hugh W. Arbuckle, student of Medicine. In the absence of the president, Dr. Fleming, the chair was taken by Dr. A. Anderson, the visitor. Dr. Anderson made a few appropriate observations, explanatory of the object of the Faculty in instituting the prize—viz., to indicate grateful appreciation on the part of the Faculty of the many services rendered to them by Dr. Watson, and he trusted that gentleman would be long spared among them, to take part in the annual meetings which would be held to award the prize instituted in his honour. Dr. Watson, in addressing the students, stated that the reason the subjects for the annual essays were chosen from the scientific rather than from the practical branches of the curriculum, was the conviction on the part of the trustees of the Prize Fund of the immense advantage, not to say the absolute necessity, of a student of Medicine laying the foundation of his studies deep and strong in those branches—anatomy, physiology, and chemistry—from which the subjects of the essays are taken. No practice in Medicine or Surgery could be trustworthy, or lead to distinction, which is not based on the immutable laws of nature, of which these sciences are the exhibition and exponents. Dr. Watson con-

cluded by exhorting the students not to be deterred from being competitors by a feeling of false modesty, and to beware of that most dangerous form of dissipation, waste of time. The subject of essay for the prize to be awarded next year is "The Anatomy and Physiology of the Knee-joint."

GREENWICH HOSPITAL.—The statements that have been made as to the part of Greenwich Hospital apportioned to the Seaman's Hospital Society are somewhat premature. No definite arrangement of occupancy has yet been made or announced by the Admiralty, but there can be no doubt that the north-east wing, commonly called Queen Anne's quarter, is by far the most convenient for the purposes of the Society. It is self-contained, has a good river frontage, and is well provided with officers' quarters. The wards are, moreover, lofty and spacious, and a clear sweep from end to end of each can be obtained by removing the wooden partitions which at present divide them into so-called cabins. There is ample room for the construction of kitchen ranges on the basement story, and it is calculated that this wing will accommodate 300 patients, with all the working staff required for a Hospital receiving that number. On the other hand, it would be next to impossible to utilise the wards of the south-east wing for Hospital purposes, as partitions of stone or brickwork exist which could not be removed without interfering with the main superstructure. This defect would render the ventilation very imperfect, and be at variance with all established principles of sanitary arrangements for the sick. It has besides no river frontage, which the *Dreadnought* authorities have always maintained to be essential to their proper sphere of usefulness. We, however, regret to learn from a letter published in the *Times* of Thursday, that it is the intention of the naval authorities to offer to the Seaman's Hospital Society this portion of the Hospital, which is known as Queen Mary's Quarter. Of course, if the Admiralty persevere in their determination, the *Dreadnought* Society can only decline, as it would be impossible to use the building offered them for Hospital purposes. We feel convinced, however, that this was not the manner in which Lord Derby intended to accede to the request made him. We hope that, in deference to public opinion, the decision of the Admiralty will be abandoned.

COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN MARCH, 1867.—The following are the returns of the Metropolitan Association of Medical Officers of Health :—

Names of Water Companies.	Total Solid Matter per Gallon.	Loss by Ignition.(a)	Oxidisable Organic Matter.(b)	Hardness.	
				Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction . .	22·21	0 75	0·56	14·0	4·0
West Middlesex . .	21·21	1·00	0·56	13·0	4·0
Southwark and Vauxhall.	20·07	1·00	0·56	13·0	4·0
Chelsea	21·76	1·05	0·44	13·0	4·0
Lambeth	22·33	0·80	0·56	13·5	4·5
Other Companies.					
Kent	25·99	0·75	0·12	15·5	7·5
New River . . .	18 57	0·75	0·44	12·0	3·5
East London . . .	21·84	0·85	0·60	13·0	3·0

(a) The loss by ignition represents a variety of volatile matters as well as organic matter, as ammoniacal salts, moisture, and the volatile constituents of nitrates and nitrites.

(b) The oxidisable organic matter is determined by a standard solution of permanganate of potash, the available oxygen of which is to the organic matter as 1 is to 8; and the results are controlled by the examination of the colour of the water when seen through a glass tube two feet in length and two inches in diameter

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Mr. Parker, Bath.—We cannot enter on the controversy.

Subscriber, York.—1. Candidates are recommended by the Council, and afterwards ballotted for at a meeting of the Society. 2. There is an entrance fee and an annual subscription, or a compounding fee may be paid at the time of election. 3. We do not know of any pamphlet on the subject.

A Successful Candidate.—The person expelled the theatre on Saturday last for copying was a provincial student, and was rejected for *six* instead of three months.

Ovariotomist.—The award will be made at a meeting of the Council this day. The subjects will be published shortly.

An Invalid.—Carriages are made purposely for such removals. You can purchase or hire one from Messrs. Reading, of Langham-place, whose carriages are admirably adapted for the purpose.

Mercantile Marine.—The scurvy made its first appearance in Denmark in 1530. In 1625 the plague destroyed 35,000 persons.

A Pupil.—The next preliminary examination in Arts, etc., at the College of Surgeons will take place on June 18 and subsequent days. See the advertisement on another page.

Memb. Soc. Apothecaries.—In March, 1858, Mr. Tegart, Chairman of the Court of Examiners of the Society, was in communication with the President and Court of Examiners of the College of Surgeons on the subject of double qualifications, now so much occupying the attention of the latter body.

SUBSCRIPTIONS FOR MR. FIELD'S CASE.

C. A. Aikin, Esq., £2 2s.; Dr. D. J. Allen, £1 1s.; W. Adams, Esq., £2 2s.; Dr. Burrows, £5 5s.; Dr. T. Ballard, £1 1s.; Dr. Billing, £1 1s.; P. Hinckes Bird, Esq., £1 1s.; W. S. Britton, Esq., £1 1s.; Dr. Walter Bryant, £2 2s.; Cordy Burrows, Esq., £2 2s; Dr. Lawson Cape, £2 2s.; Dr. T. K. Chambers, £3 3s; E. Charlton, Esq., £1 1s.; Dr. Cleveland, £1 1s.; Dr. Collinson, £2 2s.; Weeden Cooke, Esq., £1 1s.; Dr. Copland, £5 5s.; J. B. Curgenven, Esq., £1 1s.; T. B. Curling, Esq., £2 2s.; F. Dunford, Esq., £1 1s.; J. Dorward, Esq., £5 5s.; Dr. Easton, £1 1s.; Dr. T. E. Edwards, £1 1s.; J. Evans, Esq, £1 1s.; Sir W. Fergusson, Bart., £5 5s.; J. G. Forbes, Esq., £2 2s.; W. H. Gardner, Esq., £1 1s.; G. G. Gascoyen, Esq., £2 2s.; Dr. Goolden, £1 1s.; Dr. Hare, £3 3s.; Ernest Hart, Esq., £2 2s.; Dr. Graily Hewitt, £1 1s.; T. H Hill, Esq., £2 2s.; H. W. Hitchcock, Esq., £5 5s.; Dr. Peter Hood, £2 2s.; J. Horncastle, Esq., £2 2s.; Dr. Bence Jones, £2 2s.; C. D. Kerr, Esq., £5 5s.; R. J. Kerr, Esq., £1 1s.; "The Lancet," £5 5s.; James R. Lane, Esq., £1 1s.; Dr. C. J. Langmore, £2 2s.; W. B. Langmore, Esq., £1 1s.; Dr. Markham, £1 1s.; C. Malton, Esq., £1 1s.; J. J. Merriman, Esq., £1 1s.; Dr. Musgrave, £1 1s.; Dr. Norton, £2 2s.; Dr. A. C. W. Norton, £1 1s.; W. B. Owen, Esq., £1 1s.; James Paget, Esq., £2 2s.; T. Page, Esq., £5 5s.; Dr. T. Palmer, £1 1s.; H. G. Prendergast, Esq., £2 2s.; John Propert, Esq., £3 3s.; Dr. J. E. Pollock, £1 1s.; Dr. R. Quain, £3 3s.; Dr. Owen Rees, £3 3s.; Dr. Randall, £1 1s.; Dr. Rowe (Margate), £1 1s.; G. G. Sandeman, Esq., £10 10s.; G. G. Sandeman, Esq., jun., £5 5s.; H. F. Sandeman, Esq., £2 2s.; Edwin Saunders, Esq., £2 2s.; Dr. Sibson, £5 5s.; Spencer Smith, Esq., £3 3s.; Dr. Tyler Smith, £3 3s.; J. Skelding, Esq., £1 1s.; G. Thomas, Esq., £2 2s.; Dr. E. J. Tilt, £1 1s.; J. W. Trotter, Esq., 10s. 6d.; Dr. Hart Vinen, £1 1s.; Sir Thomas Watson, Bart., £5 5s.; Dr. A. B. Wall, £2 2s.; Haynes Walton, Esq., £1 1s.; G. Webster, Esq., £1 1s.; Spencer Wells, Esq., £1 1s.; F. B. White, Esq., £1 1s.; Dr. C. J. B. Williams, £5 5s; T. Parker Young, Esq., £1 1s. Subscriptions may be forwarded to Dr. J. C. Langmore, 12, Sussex-gardens, W., or to the Paddington Branch of the London and County or National Bank.

LAW OF INTERMENT.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In your next issue will you kindly answer me the following question?—Is there any law which would prevent a person being buried in a private vault in the chancel of a church, the vicar and lay rector to whom the chancel belongs being willing, the parish of said church being under no local or other sanitary board?

I am, &c. HENRY WATTS.

P.S.—The vault is not yet made.

April 9.

ALFRED THE GREAT.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The Rev. Dr. Tweedie, in his most interesting and ably written little volume "The Life and Work of Earnest Men," states this good and great man died at the age of fifty-one after suffering for years under a most painful complaint. Can you name the complaint?

I am, &c. QUÆSTOR.

BLOOD AS AN ARTICLE OF DIET.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I have been a supporter of your valuable journal since it has been established, and I am anxious that you should kindly insert the following remarks in your next impression.

I am an old Practitioner of 75, and I have regretted to observe the loss of pure blood of animals that might be used to mix with food.

I have applied to a respectable butcher in this neighbourhood, who kills six healthy oxen every week, and he informs me that from each ox of fair size and condition he gets from two to three gallons of pure blood, from a calf about a gallon, and from a sheep half a gallon. This pure blood is thrown away upon the dunghill. How many gallons must be thrown away throughout the kingdom?

To test the value that this pure blood could be made use of, I had a pie made with a small quantity of meat and potatoes and half a pint of blood from an ox, mixed with oatmeal. I invited several Medical friends at the Dispensary to partake of it; they were all perfectly pleased, and made a good dinner. If this pure blood was mixed with oatmeal or flour as it is drawn from the animal, it would be a valuable addition to the poor man's meal to mix with the potatoes, etc. The black puddings made from the blood of pigs cannot be more pure than that of healthy animals.

In Yorkshire, where I came from, we should not think a giblet pie was worth eating without the blood of the goose, mixed with oatmeal, was added to it. To show the absurdity of objecting to the blood of animals, I would remark that all wild animals that are shot or killed are never bled; and who likes a leg of mutton without sufficient blood to make gravy?

The law of Moses having been abrogated since our Redeemer came, bloody sacrifices have been done away with.

Blood being the vital fluid of the body, out of which all the tissues are formed, and which fluid contains the most nutritious principle, 1000 parts containing 140 of red corpuscles containing iron, blood being used as an article of food should be taken into most serious consideration, as there can be no point to investigate whether it ought to be used or could be used safely, transfusion of blood from a healthy to an unhealthy person having been used for years as a last resource in cases of anæmia and other diseases where all the vital powers and actions of life are suddenly lost.

I am, &c. SEPTIMUS WRAY, M.D., M.R.C.P.

Tudor Lodge, Effra-road, Brixton, S.

THE ACARUS SCABIEI.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Your correspondent "C. L," from his first question, "Can the Fucus vesiculosus check obesity?" seems to be of a practical turn, and, if so, how can it profit him to know "whether the Acarus scabiei can resist a heat greater than clothes can?" I assume that he has settled in

his own mind what kind of clothes he intends to mean—linens or woollens—for the answer might well depend on the difference; but then, how are you to apply the heat to your acarus so as to find out? Does "C. L." imagine that the Acarus scabiei is ever to be found in the clothes? If so, he is gravely in error. The female acarus lives deep *in* the epidermis, and the male sticks tightly to the surface thereof, his instinct telling him what "C. L.," I fear, does not yet know—viz., that if he (the acarus) leaves the epidermis he forfeits his very existence.

The way in which scabies is communicated (for it is evidently the disinfecting of clothes that "C. L." has in his eye) is not as "C. L." and certain of his Professional brethren fondly imagine—viz., by the walking over of an acarus from the skin or clothes of the infector to the skin of the infectee, but by means of the germs or ova of the acarus. Now, if we can reduce the question down to that, "C. L." may call to mind, as a well-known fact, the very severe cooking that the ova of the lowest members of the animal kingdom will undergo (and the acarus is zoologically, as well as ethically, a very low insect indeed) without their suffering any very great damage. "But," "C. L." might interpose, "you *haven't* reduced the question down to that." Let me do so. In the first place, to establish a new colony, it will not suffice that a male acarus, however potent in himself, should step across from one person to another, nor that an unimpregnated female should alone. They must go in pairs, like the animals into Noah's ark, or else the race cannot be perpetuated. But imagine a single pregnant female crossing, and the thing is done. As soon as she brings forth her litter the colony has begun. But the acarus is not adapted for these Leotard-like feats, and the pregnant female is always deep in the epidermis, tunneling her way on, and laying her eggs as she goes. Now, as she tunnels, she, like all other engineers, makes air-holes through to the surface of the epidermis (these may be readily seen with a weak lens). Through these the young acari, when hatched, escape, to settle in some more or less distant part of the skin, if not disturbed before they are hatched. But the unhatched ova are a dust as fine as the pollen of a plant, and if the moist skin of the infectee only touch the skin of the infector, which is pierced with these little pores, which are full of half-extruded ova, several of them are sure to stick to the infectee's skin, and so (*nefandum dictu*) he catches the itch.

I do not suspect your correspondent, for he has not in anything that he has said deserved the imputation, of a notion that his question nevertheless reminds me of—a notion that was gravely broached to me by an old and respected Practitioner, who thought he perhaps had the itch. Said he, "I have taken hot-air baths, and they, I know, were hot enough to destroy any insect of any sort on my skin." "How so?" said I. "Well," he replied, "I don't know whether you call 250° hot, or whether you don't; *I do.*" He quite forgot, or perhaps he never knew, that it is the *surface* of the epidermis that is the great evaporating agent, by means of which the temperature of the body is constantly maintained at as low as 100°, or thereabouts, and that it would be so even under the circumstances he narrated, and, therefore, that everything within the surface of the epidermis (inclusive of any acari within its substance) would be quite unaffected in temperature by his "crucial" experiment—that, in point of fact, while he was at such pains to make himself uncomfortably warm, his acari, if he happened to have had any, would have remained "as cool as ever." I introduce this matter because it serves to explain a question I asked at the beginning of this letter, "How are you to apply the high temperature to your acarus?"

I am afraid that unless "C. L." is expert enough to pick the acarus out of the epidermis with the point of a pin, or resorts to the expedient of getting some of the ova and hatching them in, say, a Cautelo's incubator, he will never get the chance of finding out what they will resist in the way of temperature, unless, indeed, he frizzles them up, epidermis and all, with the actual cautery. For of this he may be well assured, that the acarus of man, woman, or child *never leaves the epidermis.*

April 2. I am, &c. X. Y. Z.

COMMUNICATIONS have been received from—

Mr. Cæsar; Subscriber; Mr. Moon; Dr. Fayrer; Dr. O'Hare; Dr. Routh; Mr. Duncan; Quæstor; Mr. W. Parker; Dr. Thorp; Mr. Watts; Dispenser; Dr. Balthazar W. Foster; Dr. B. W. Richardson; Mr. J. Chatto; Dr. J. Russell Reynolds; Dr. Andrew Clark.

BOOKS RECEIVED—

Journal of Mental Science, No. 61—Report of the Museums and Lecture-rooms of the University of Cambridge—Report of the Somerset County Lunatic Asylum.

NEWSPAPERS RECEIVED—

Sunday Gazette—York Star—Gazette Hebdomadaire—The Laboratory, No. 1.

VITAL STATISTICS OF LONDON.

Week ending Saturday, April 6, 1867.

BIRTHS.

Births of Boys, 1158; Girls, 1182; Total, 2340.
Average of 10 corresponding weeks, 1857-66, 1924·2.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	752	701	1453
Average of the ten years 1857-66	701·2	665·7	1366·9
Average corrected to increased population..	..	..	1503
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,383	3	3	1	..	11	8	6	..
North ..	618,210	15	4	4	..	16	21	2	..
Central	378,058	3	7	1	1	5	2	..	..
East ..	571,158	7	2	3	..	16	16	2	..
South ..	773,175	10	5	6	1	12	5	2	..
Total ..	2,803,989	38	21	15	2	60	52	12	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·968 in.
Mean temperature	48·6
Highest point of thermometer	62·1
Lowest point of thermometer	30·5
Mean dew-point temperature	41·7
General direction of wind	W.S.W. & N.W.
Whole amount of rain in the week	0·03

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, April 6, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending April 6.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending April 6.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	2340	1421	1453	62·1	30·5	48·6	0·03	3
Bristol (City) . .	165572	35·3	111	74	‡83	58·8	35·0	47·7	0·06	6
Birmingham (Boro')	343948	43·9	225	167	168	62·5	34·4	49·6	0·20	20
Liverpool (Borough)	492439	96·4	359	285	275	57·8	39·1	48·7	0·04	4
Manchester (City) .	362823	80·9	391	205	‡192	59·6	33·0	47·5	0·22	22
Salford (Borough) .	115013	22·2	77	58	61	56·5	33·5	46·6	0·25	25
Sheffield (Borough).	225199	9·9	178	119	109	58·0	32·0	46·4	0·10	10
Leeds (Borough) .	232428	10·8	109	118	134	61·5	29·0	48·6	0·05	5
Hull (Borough) .	106749	30·0	77	49	50	..	..	..	..	..
Nwcstl-on-Tyne, do.	124960	23·4	80	66	72	56·0	35·0	47·3	0·09	9
Edinburgh (City) .	176081	39·8	129	85	95	55·7	33·0	45·9	0·20	20
Glasgow (City) .	440979	87·1	363	257	284	51·9	33·3	45·6	0·46	46
Dublin (City and some suburbs) .	319210	32·8	187	‡157	172	63·0	37·3	52·1	0·04	4
Total of 13 large Towns . . .	6187764	34·8	4536	3061	3148	63·0	29·0	47·9	0·15	15
					Week ending Mar. 30.	Week ending Mar. 30.				
Vienna (City) . .	(1863) 560000	..	..	..	379	..	..	§47·1	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·968 in. The barometrical reading increased from 29·63 in. at the beginning of the week to 30·30 in. on Monday, April 1.

The general direction of the wind was W.S.W. and N.W.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 46·6°

APPOINTMENTS FOR THE WEEK.

April 13. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

Royal Institution, 3 p.m. Mr. Pengelly, "Antiquity of Man."

15. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

Medical Society of London, 8½ p.m. Mr. Weeden Cooke, "On the Relations of Phthisis and Cancer."

16. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

Anthropological Society of London, 8 p.m. Meeting.

Pathological Society, 8 p.m. Meeting.

17. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 2 p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.

18. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

Harveian Society of London, 8 p.m. Debate "On the Causes of Excessive Infant Mortality."

19. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.

ORIGINAL LECTURES.

LECTURES ON EXPERIMENTAL AND PRACTICAL MEDICINE.

By BENJAMIN W. RICHARDSON, M.A., M.D., F.R.C.P.,
Senior Physician to the Royal Infirmary for Diseases of the Chest.

(Continued from page 385.)

ON HEALING BY THE FIRST INTENTION.

The success attendant on the use of the styptic colloid fluid as a healer can only be understood when the simple natural principles of the process of healing by the first intention are fully comprehended. It will not, therefore, be lost time if I devote a minute or two to this subject.

Let us, then, first fix in our minds the all-important demonstration, that healing by the first intention in the case of even a large amputation with sawn bone in the wound is an accomplishable fact. In the case I have related this is well proved. We are brought, therefore, from what can be done to what ought to be done, and as it is an unvarying law that whatever has been can be again, we may be sure that healing by the first intention may be made a steadfast fact in Surgery whenever the exact conditions leading to such healing are known and applied.

To come to the point from the negative side, when a wound does *not* heal by the first intention, it is prevented from the intention by the interposition of a layer of decomposing albuminous matter lying between its divided surfaces. This layer may be very thin and transparent, or it may be thick and dense; it may give an offensive odour, or it may (when it exists as purulent matter) give little odour; it may be transparent and colourless, or it may have various shades of colour, from light grey to almost blackness. If we examine this fluid chemically, we find that it consists of modified albuminous matter, with or without fat; if we bring some of it in a state of actual decomposition into contact with other matter albuminoid in construction—such as blood, serum, dissolved fibrine, or even dissolved caseine—it quickly transforms all these into decomposing or decomposed matter like to itself, the conditions for the production of decomposition being supplied.

The fluid, as it was first exposed to the air by the knife, came from the blood. It was, in fact, the free interstitial plasma which before the wound was made was about to give form and substance to the solid structures, to muscle, connective tissue, or membrane. It was not a secretion, but a pre-existent fluid, which the knife disclosed, or rather exposed. If we tap a muscle under firm pressure, we can squeeze out this fluid. Squeezed from the limb of a sheep immediately after death, it is a thin slightly coloured alkaline serum, very easily coagulable. It is almost destitute of salts, and it has a mean specific of 1025. It decomposes with extreme rapidity under circumstances favourable to change, but it can be kept free of decomposition by extreme cold for an unlimited time.

When the living tissues are intact, this fluid plasma is always undergoing transformation from the fluid into the solid condition so as to make tissue; it thus binds and makes the connexion between the water of the tissues and the solids. I shall one day demonstrate to you how this change actually occurs; for my present purpose it is sufficient to state that it does occur.

When, then, a Surgeon puts his knife through a living structure, he exposes not vessels only, not nerves only, not solids only, not blood only, but this interstitial fluid, as it is proceeding for solidification.

Having exposed this fluid, he leaves a surface of it that has been exposed whenever he closes the wound; and this is the great point to remember, that healing by the first intention, or no such healing, turns precisely on the physical condition in which this fluid is thus left. If the wound be closely and well bound up before the fluid has had time to undergo change, then the fluid passes into solidification, becomes a bond of union of the divided parts, and sets up true healing by the first intention. But if the fluid has time to undergo change, to pass into one of the stages of its decomposition, then it does not solidify, and there is no true healing of a direct kind. Fresh fluid coming down presses before it the original fluid, and the process, as it is vulgarly called, of "healing from the bottom," is the natural sequence if the case goes well. It is astonishing how quickly, in some cases, the interstitial combining fluid undergoes change on exposure to the air. There is a physiological experiment which proves this very perfectly. You are aware Liebig once advanced the view that in the natural state the blood is alkaline, but that the muscular juice is acid. This view was maintained for years. In 1854, when I was working daily in the slaughter-house, studying the coagulation of blood, I was led to test the reaction of the muscles both of oxen and of sheep while the muscles were still irritable, and to my tests the reaction was always like that of the blood, alkaline. Such, however, was my respect for Liebig, and such the force of what may be called the habit of belief, I actually distrusted my own work, and thought, after all, Liebig must be correct, and I somewhere in error. At length, and while I was still hesitating on the matter, Du Bois Raymond boldly and truthfully came out with an exposition of the error of Liebig, by showing that during life the interstitial fluid in muscle is alkaline like the blood, but that if muscle be exposed to the air for the shortest period, there is a change to acidity. The facts are so; they admit of direct proof on the living animal, and, if care be taken in its preservation, they can be proved, for a short time, on the dead muscle, say the heart of a dead animal. We will test the point here with the heart of a sheep. This heart has been removed two hours, but kept excluded from air. I cut open a suface, test it instantly, and find a feeble alkaline reaction. I lay open the surface for so short a time as three minutes, and, testing again, I find it acid. In half an hour the reaction everywhere will be strongly acid. If the other tissues of a living animal be divided and tested in the same manner, the same phenomena are observed.

In some cases this change is so active that from three to four minutes is sufficient to create it over the whole of the surface of a large wound. In other cases it is longer deferred: in a warm perfectly dry air it is deferred, in a very dry cold air it is deferred. It is quickened intensely by a warm moist air; it is quickened by an air charged with organic matter living or dead; and it seems as if there were peculiar conditions of the oxygen of the air, conditions of activity which also quicken it; a result quite natural, because the process is one of oxidation. Just as blood oxidises in the lung on its exposure to air, so this interstitial fluid oxidises when it is exposed to the atmospheric oxygen.(a)

Suppose, then, the oxidation is established, what is the sequence? The sequence is disposition to further change. The fluid, modified in character, is no longer a fluid ready to enter into substance with the solid tissue with which it is in contact. It lies as foreign matter, preventing adhesion, and communicating acidity to the new plasma that is poured into it. From this state there may be three results:—

(*a*) The patient, being healthy and well provided with good plasma, and air, and specially water, being excluded from the wound, the new plasma may neutralise and throw off the old, and with some discharge there may be more or less of spaces in which there is healing by the first intention.

(*b*) The conditions being less favourable, the changed plasma, acting as a foreign body, may excite the production of great heat in the part—inflammation so called. In this state the plasma will sometimes be re-transformed into a plastic, coagulable fluid, which will form adhesions with partial healing and some production of pus. Or in this state all the fluid may be transformed into purulent fluid—abortive plasma, which will be alkaline but not adhesive, which will protect the parts shielded by it from external oxidation, and will allow the natural plasma to build up new tissue from beneath—healing from the bottom.

(*c*) There is one more major condition. The plasma, from becoming in the first place of acid reaction, may run rapidly into alkaline decomposition, with complete disorganisation of all the colloidal parts, the interstitial plasma, the effused blood, the fibroid membrane, the osteoid and tendinous gelatine. When this disintegration occurs the constituents of the plasma are transformed into new and soluble compounds, susceptible of re-absorption into the organism, and even of absorption into other organisms. During this form of

(a) I would repeat here a point I have urged more than once—viz, that the Surgeon will never have his science perfect until he carefully studies and understands those meteorological conditions which are favourable to and unfavourable to the process of healing by the first intention. It is one of the best known experiences that cases of an unfavourable character constantly occur in rapid succession, for which circumstance there must be a cause. It would be well if in our large Hospitals barometrical, hygrometrical, and thermometrical observations were made on every operating day, and carefully recorded.

degeneration, not during the purulent form as was once supposed, the systemic malady, misnamed pyæmia, finds its origin. These phases, which I have described from their physical side, you will all recognise, with shades of difference, as *bonâ fide* parts of practice and of practical observation.

Returning from these points to the treatment of an open wound, whether that be caused by accident or by operation, we are prepared to understand with precision many practical results to which we are blind so long as we are ignorant of the physics of the process of healing.

In the olden time, the chirurgeon, having no correct knowledge how to close a wound, and seeing bad results from bad closure, set his face against closing altogether, and, filling the wound with tar or pitch placed on tow, made it always heal, as he said, "from the bottom." In an age when there were no scientific principles to guide the Surgeon, this practice was not bad; it prolonged the cure, certainly, but it saved the consequences of alkaline decomposition. The dressing, containing a good antiseptic—that is to say, a powerful preventive of oxidation—allowed the new plasma to produce new tissue, and so there was healing. The surgery was rough, but, in the main, effective. It is still a sound practice in cases where a large surface or an abraded surface has been a long time exposed to air before coming under the hand of the Surgeon.

In time came Sir Kenelm Digby with his sympathetic powder as the bait and his reversal of the old practice as the success. Rub the instrument that inflicted the wound every day with the powder—that was the bait; tie up the wounded part quickly, tie it up in its own coagulating blood, and do not meddle with it for fourteen days—that was the cure.

Various facts since the time of the sympathetic knight have proven the soundness of his practice apart from his superstition. There have been many Practitioners who their lives through have acted on this plan in the extremest cases, and with the most surprising results. Mr. Adams, in one of his works, tells us of a Surgeon who treated every case of compound fracture with perfect success by simply bandaging, closely saturating the bandage with compound tincture of benzoin, and leaving the rest.

In the battle-fields of Egypt operations performed under canvas, in perfectly dry, heated air, in which all decomposition of albuminous matter is impossible—in which air, in fact, albumen itself dries into a horny covering—the process of rapid healing was a marvel to those who witnessed it.

But the crowning facts which bear on healing by the first intention are those connected with the practice of subcutaneous cutting. I cannot make out that any true case of pyæmia has ever occurred after neat subcutaneous operation. In fact, in the results of subcutaneous section we see absolutely how, in an open wound, the prevention of cure is caused by some external influence brought to bear upon the wound. Except for this experience and the lessons it brings us, we might dream of constitutional tendencies and such-like occult interferences with cure in open wounds; but the subcutaneous experience excludes them all.

The sum total of scientific fact lies, then, in this—that healing by the first intention is only prevented in any case by a change in the interstitial fluid which laves the tissues, and from which they are formed, the cause of this change being exposure to the combined influence of water and oxygen. With this understanding we learn the reason why some operations are more serious than others. The risk of opening serous cavities—for example, the peritoneum—is explained when we remember how large a surface, covered with easily decomposable fluid, is exposed to the danger of decomposition whenever such a serous cavity is presented to the air. The peritoneum should never be opened except under special conditions. Thus:—

1. Let the operating chamber be small, and let few persons be present.
2. Let the temperature of the air be low—never above 55° Fahr.
3. Let the air be dry.
4. Let the air be rendered faintly alkaline by ammonia.
5. Let the operator have his hands protected with oil.
6. Let the operator be content not to put water or wet sponges into the cavity.
7. Let the operator forbid any hands except his own entering the cavity.
8. Let no ligatures hang out of the closed wound to admit either air or water.
9. Let the air in the cavity be carefully expelled as the wound is being closed.
10. Let the closing of the wound be so absolute that no action of the diaphragm or emptying of the viscera shall draw air afterwards into the cavity.

To secure healing by the first intention in ordinary wounds, it is necessary to treat an open recent wound immediately before closing it as follows:—

To remove from it all long ligatures.

To wash off the fluid with which it is covered, and then thoroughly to dry the surface, so that no water may be left to excite decomposition.

To bring every part into close contact, so that no moist air may be left behind, and when the lips of the wound are closed with suture, to seal up resolutely with a fluid which perfectly anneals structure, like the fluid I have here brought under notice.

To leave the wound in dry air; or, if that is not possible, to surround the parts with a simple substance, eager for water, but not caustic in its action. Such a substance I place before you in the form of washed and dried laminaria or sea-weed; a substance clean, light, and excellent as an absorbent of fluid coming from the body, or of water suspended in the surrounding air.

From the time of Sir Kenelm Digby until this hour, Surgeons have fluctuated between the two extremes, of healing slowly "from the bottom," and of healing quickly through the mass "by the first intention."

I submit now that the time for this hesitation ought to be considered as over, and that the modern Surgeon should neither hesitate, nor pause, nor tire, until he has made healing by the first intention a sure and certain portion of his art, and until he has lifted up that dark pall of Surgical fever which the most eloquent of English Surgeons tells us still enshrouds the most brilliant Surgical exploits. I have aimed in the present lecture to give direction and solidity to this great work.

ORIGINAL COMMUNICATIONS.

ON THE APPLICATION OF THE GRAPHICAL METHOD TO THE STUDY OF THE DISEASES OF THE HEART AND GREAT VESSELS.

By BALTHAZAR W. FOSTER, M.D., M.R.C.P. Lond.,
Professor of Clinical Medicine in Queen's College; Physician to the Queen's Hospital, and to the General Dispensary, Birmingham, etc.

III.

The simple record of cases is often a dry and seldom an immediately productive task, but it is, nevertheless, a necessary one, for all progress in any new direction must, to be safe, be cautious and gradual: every step must be sure before it can serve as a *point d'appui* for further advance. In many parts of pathology, however, the collection and publication of isolated cases is scarcely an useful occupation, for we have already large and formless gatherings of materials on many subjects, which await the clear glance of some master to compare and classify them, and thence to evolve those laws which every true student so earnestly desires. But in the application of any new method of research to the study of disease, every fresh observation contains matter for study, and forms one of the many facts upon which the future elaboration of our knowledge must be based. The cases recorded in these papers are published for this purpose, and they are consequently arranged simply in the order of their occurrence.

In the following history, as in some others to appear hereafter, we have only the record of a fact; its bearing and importance further study can alone test, for in new tracts of inquiry it is a duty of the first importance not to uphold any explanations of phenomena unless a reliable basis is afforded for our theories.

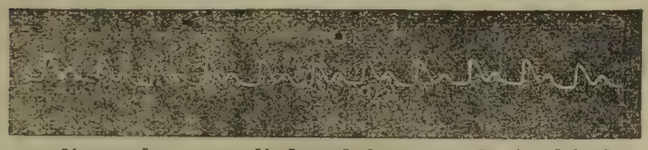
Case 3.—Adherent Pericardium—Mitral Insufficiency—Examination with Cardiograph and Sphygmograph—Albuminuria—Dropsy—Death—Autopsy.

William L., aged 13, was sent to me in August last by my friend, Mr. E. Mackey, of the General Dispensary. The boy's mother stated that her son had always been delicate, but had

suffered from no particular disease till October, 1865, when he was attacked by scarlatina, and subsequently by scarlatinal dropsy. Soon after the scarlatina the heart symptoms first manifested themselves. For the dropsy he was treated with success by Mr. Mackey, and when able to walk out was sent to see me. When I first saw him his face was pale and puffy, the expression anxious, his lips a little dusky, and his breathing evidently quick. He coughed a short dry cough from time to time, and complained that it harassed him constantly and broke his rest. There was a little mucus expectorated, but no blood; the ankles were slightly œdematous, and the face was remarked by his mother to be puffy every morning.

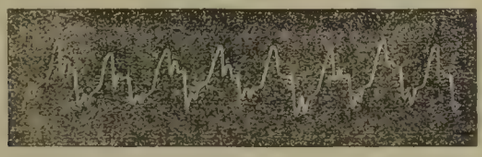
On examination, the chest was seen to be ill-formed, rounded and prominent above, and flattened at the sides; over the heart it was flattened as if drawn inwards. On auscultation, the breathing was harsh all over the front of the chest; and posteriorly occasional mucous rhonchi were heard. There was no pulmonary dulness on percussion either at front or back of chest. Respirations 30 per minute. The cardiac dulness was increased laterally, extending from an inch beyond the nipple to the right edge of the sternum; the area of dulness was fixed, and did not vary with inspiration or expiration. The apex beat was about two inches below and nearly one inch to the left of the nipple. The impulse was strong, wavy, and prolonged, producing a little movement of the chest wall, but ordinarily there was no sinking of the intercostal spaces with the systole. The first sound was accompanied by a loud blowing murmur, which lasted through the first pause, and was heard loudest at the apex. The murmur was well propagated towards the axilla, and could be heard all over the front of chest, as well as in the left vertebral groove. The second sound was inaudible at the apex, but was distinctly audible over the right ventricle; it was much intensified over the pulmonary artery, but was very feeble over the aorta. Pulse 90, weak, and regular. The sphygmographic trace is seen below.

Fig. 1.



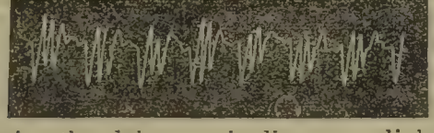
The cardiograph was applied, and the trace obtained is figured below. While the boy was under examination, an attack of

Fig. 2.



palpitation came on, the heart beating very tumultuously; the apex seemed to strike the chest several times with each systole, and with the contraction some sinking in of the chest wall was noticed. Under these conditions the cardiograph recorded the following trace of the heart movement:—

Fig. 3.



On examining the abdomen, the liver was slightly enlarged, there was no increase of splenic dulness, a slight tenderness on pressure over the kidneys, and the urine contained albumen ($\frac{1}{3}$ col.) and numerous tube casts.

Under treatment the boy improved, and after a few weeks ceased to attend.

The sphygmograph and cardiograph were applied on several occasions, and a large number of observations was made, the results of which are well represented by Figs. 1 and 2. The striking features of the third trace were not repeated to the same extent on any subsequent occasion, but whenever the action was more excited than usual, there was a decided tendency to approach the type seen in Fig. 3.

During the severe winter weather the boy became much worse; the dropsy returned, the heart symptoms urgently increased, and, an attack of bronchitis supervening, he died towards the end of January. No fresh inflammatory mischief connected with the heart occurred during his last illness. By the kindness of Mr. Mackey, I was present at the post-mortem examination. We were obliged to examine the body in the presence of the boy's friends; on this account a thorough examination of the cavities could not be made. I append the particulars of the examination of the heart and great vessels, to which we devoted our chief attention. When viewed, the body, and especially the legs, were seen to be very œdematous, and the abdominal cavity contained a large quantity of fluid. On opening the thorax, the pericardium was found bound to the left side of the chest walls by means of greatly thickened and dense cellular tissue, and its parietal layer was everywhere adherent to the heart itself. When *in situ*, the heart, covered with the pericardium, measured 5·18 inches transversely and 6·25 inches vertically. The right cavities were full of black clotted blood, the left auricle also contained clots, but the left ventricle was nearly empty. The aortic and pulmonic valves were healthy; the superior curtain of the mitral valve was much thickened and evidently shortened; the tendinous cords were thick and opaque; the inferior curtain of the valve was similarly affected, but in a less degree. Small warty vegetations were scattered at intervals all round the circumference of the mitral aperture. The following measurements were made:—

	Inches.
Length of the cavity of the right ventricle	3·56
„ „ „ left „	3·25
Thickness of the walls of the right ventricle: base	·25
Thickness of the walls of the right ventricle: midpoint	·22
Thickness of the walls of the right ventricle: apex	·13
„ „ „ left „: base	·75
„ „ „ left „: midpoint	·5
„ „ „ left „: apex	·43
Thickness of the septum of the ventricles	·5
Circumference of the right auriculo-ventricular aperture	5·25
„ „ left „ „ „	3·
„ „ orifice of the pulmonary artery	2·25
„ „ „ „ aorta	1·87

The amount of the hypertrophy of the ventricular walls can be easily gathered from the foregoing measurements, which also indicate that the orifices of the pulmonary artery and the aorta were small when compared with the rest of the heart, and that the right auriculo-ventricular aperture was considerably dilated, while the left was but little altered, if anything contracted.

The diagnosis of general adhesion of the pericardium, especially when the history of the antecedent pericarditis is wanting, is by no means easy. In the case under notice, the signs pointed with no very distinct finger to the obliteration of the heart-bag, while the loud indication of the existence of mitral disease was too apt to withdraw the attention to itself as the only lesion. The peculiar absence of the second sound at the apex, however, particularly struck me, and, connecting it with the value assigned to this diagnostic by Aran, (a) I was led to seek more closely for other confirmatory evidence. The flattening of the side, the peculiarity of the impulse (coming, as it seemed to do, when the heart acted strongly, before the first sound), and the unchanging area of cardiac dulness, all spoke strongly in support of the diagnosis of pericardial adhesion. The careful examination of the chest from time to time favoured this view, and particularly the observation of the heart's movements; when the organ acted more violently than under ordinary circumstances, then the dragging of the chest wall was evident, and the diagnosis most strongly confirmed.

The sphygmograph did not unfold much information concerning the cardiac lesion. The vertical line of ascent, and the decided dicrotism in the pulse trace, told us that the blood stream entered the vessels quickly and forcibly, but that the arterial tension was nevertheless low. The regularity of the pulsations told us that we had to do, not with a weak and flabby ventricle, sending the greater part of its contents back through a dilated mitral orifice, but rather with a strong muscular cavity, acting with energy, and not frustrated by a widely dilated aperture enticing regurgitation.

The cardiograph, while it told us little of the mitral valve and its conditions, gave us pregnant indications concerning the movements of the heart. In the trace, Fig. 2, we see the two little undulations at the beginning of the line of ascent which correspond in health to the filling of the ventricle. (b) The first of these little waves in the trace before us is very

(a) "Recherches sur les Adhérences Générales du Péricarde," *Arch. Génér. de Méd.*, avril 1844.

(b) For a full explanation of the various parts of the trace of the heart's beat in health, see author's paper in *Medical Times and Gazette*, vol. ii. p. 339, 1866.

marked, and occurs almost immediately after the conclusion of the ventricular contraction—so soon after, indeed, that this alone excites some suspicion as to its connexion with the flow from the auricles. It must rather be referred, in my opinion, to the slight springing back of the chest wall after the action of the ventricles, the condition which produced the similar undulations in trace (Fig. 3). The fact that the primary undulation in Fig. 2 bears no constant proportion to the second (true auricular) wave is also an evidence against its production by the systole of the auricles. Throughout the trace we may remark, as in the pulse trace, the signs of strong ventricular action, and of sudden and perfect closure of the sigmoid valves. In the trace (Fig. 3) these latter points are equally well marked, but we have in addition a striking record of the curious succession of beats against the chest wall which was felt with each systole of the ventricles when the heart was excited. These beats, when the hand was placed over the heart region, were strong enough to call away the attention from the true impulse, and forcible enough to register in the tracing an altitude greater than that caused by the real apex beat. At first sight these great waves preceding the elevation caused by the contraction of the ventricle look like some marvellous intensification of the movements caused by the action of the auricles, but in some of the traces, and notably in the last two pulsations in Fig. 3, we see the little auricular undulation perfectly distinct from the preceding waves.

These two large waves, then, were due, not to any exaggeration of the auricular systole, not to any forcible and sudden distension of the ventricles, but to some other condition causing a movement forwards of the chest wall during the early part of the diastole of the ventricles. In the adhesion existing between the pericardium and the chest wall we have, I believe, the explanation of the fact. With each systole the wall was dragged upon by the heart muscle, and the recoil of the chest wall, and with it of the heart as soon as the ventricles were emptied, caused the movement registered by the instrument. This is a most important point, and, if my observation be confirmed, we shall have in this part of the trace a diagnostic sign of great value. Traube (c) and Friedreich (d) have already referred to the recoil of the chest wall after the ventricular contraction, but more especially when the pericardium had formed adhesions on its posterior aspect as well as anteriorly to the ribs. Potain (e) also some time before mentioned the distinct throb preceding the true impulse in cases of adherent pericardium. In the trace under our notice we see the experience of these observers confirmed by the record of an unerring instrument; we see the phenomenon which they vaguely felt telling its own tale in no uncertain lines.

ON A CASE OF INCISED WOUND OF KNEE-JOINT, WITH REMARKS.

By CHARLES ORTON, M.R.C.S. Eng. and L.S.A.

J. B., a delicate boy, aged 6, while climbing into bed on the morning of March 27, 1866, slipped down, falling with his right knee on the chamber utensil, knocking off a portion of the lip, and leaving the fractured edge very sharp. As the wound was bleeding freely, the mother wrapped around it immediately some linen, and I saw it shortly afterwards. On examination, I found the whole interior of the knee-joint visible, the crucial ligaments, semilunar cartilages, and articular surface of the femur. The external wound was about one inch and a half in length. The tendon of the quadriceps and a small portion of the upper border of the patella were cleanly divided. Much synovia escaped. No blood in joint. The fascial attachments between skin and patella and skin and quadriceps were firm. Straightening the leg, I passed a needle, carrying thick silver wire, deeply, as near to the patella and quadriceps as I could, bringing the lips of the wound into close apposition, and drawing the skin around in folds with soap plaster, so as to have as little tension on the wound as possible. I then placed a splint behind the joint, and kept it strictly at rest, leaving it with only a piece of lint thrown over for about twelve hours, to allow the film of plasma to form, afterwards applying collodion and a piece of dry lint.

March 28.—Synovia flowing freely from outside of wound; other parts healing. A little thirsty. Ordered a saline draught. Was seen by Mr. Garner, who made no alteration in the treatment.

30th.—Has partially burst open the wound by bending the knee, the splint having slipped. There is some swelling, and the wound looks angry. The edges of wound again brought into close contact, and a tin splint nearly encircling the limb from ankle to the gluteal region, and warm water dressing, applied.

For a few days afterwards a little pus was mixed with the discharge, but it came only from the flesh wound. The swelling and redness gradually subsided. A few pale granulations rose in the centre of the wound, and remained for ten or twelve days, yielding to the application of nitrate of silver. I kept on the tin splint for two months afterwards, when I replaced it by a gum and chalk bandage. Four months after the occurrence of the accident he walked well without any aid, and has now been able for some time past to run and hop on it. The limp is scarcely perceptible, and the motion of the joint is almost perfect.

Remarks.—A most important point in the treatment of incised wounds of joints is to get them closed quickly and thoroughly; not only the skin, but the deep structures, should be placed in accurate apposition. We are told in some text-books to place the sutures through the "skin" only; but with a non-irritating substance like wire this matters little. Again, one is recommended to use collodion, and I have always seen it applied as soon as possible: I think it better to wait before using it until the lips of the wound are naturally closed, agglutinated by the plasma which is thrown out in all cases of incised wounds. In this case Nature was almost entirely left to effect a cure. I employed no antiphlogistic measures, nor do I think they need be so general, if perfect rest could be insured from the commencement of the accident, and the wound be early closed.

I may mention as a peculiar coincidence that on the same day, caused by a similar fall on a similar article, a case of puncture of the temporal artery came under my care. I divided the vessel and applied pressure. The case did well.

Newcastle-under-Lyne.

FATTY DEGENERATION OF MUSCLE.

By C. MACNAMARA,
Surgeon to the Calcutta Ophthalmic Hospital.

It seems probable that, in proportion as advances are made by opticians in the perfection of the higher powers of the microscope, it will be necessary for us to reconsider some of our ideas regarding various points of pathology, and in connexion with this subject I purpose making some remarks on fatty degeneration of muscle.

I shall confine my observations to a specimen sent me by Dr. Francis, being a portion of the walls of the heart of a patient who died rather suddenly in the Medical College Hospital from fever. On making a post-mortem examination, the heart was found to be in an advanced state of fatty degeneration, portions of it looking more like tough yellow adipose tissue than muscular fibre.

I divided this specimen into two parts. The first (A) was put by to soak in Price's glycerine for a month, and the second (B) was submitted to the action of an alkaline solution of carmine. The power employed in examining these specimens was a Powell and Lealand's fiftiéth of an inch glass.

The first point which struck me on looking at the portion marked (A) was the disintegrated appearance of the muscular fibre. It seemed as if it had been minced up into small particles on the glass slide, or as if the pressure of the covering glass had pulverised it, having evidently lost its toughness and elasticity.

A considerable quantity of fatty matter was observed adhering to, or replacing the sarcolemma, and concealing to a great extent the transverse bands of contractile tissue within it, the specimen seeming at first sight to consist of an amorphous mass of fatty matter. On making a more careful examination, however, a large proportion of the characteristic elements of striped muscle could be seen within the fatty sarcolemma; and even in a preparation such as that under consideration, representing an extreme case of fatty degeneration, I believe I am within the mark when I assert that one-half of its contractile bands were in working order, although the whole of the sarcolemma was altered in character. The

(c) Zur Lehre von der Verwachsung des Herzens mit dem Herzbeutel, *Med. Zeitung des Vereins f. Heilkde. in Preussen*, No. 11, 1858.

(d) Virchow's "Handbuch der Pathologie und Therapie."

(e) *Bullet. de la Soc. Anat. de Paris*, août 1856.

revised by Allen Thomson, of Glasgow, and Cleland, of Galway, the systematic portion of the work is of a very high character; but there can be no doubt but the great charm of these volumes rests with that classical division on general anatomy by Professor Sharpey. This also has been completely overhauled by its author, and now constitutes probably the best account of the minute structure of the tissues, in our own or any other language. The size of the page has been increased, and the three volumes made into two—a convenience every way. Many new illustrations have been added, with much original matter. Altogether we have no fears of this work continuing, under its new editors, to occupy the high place it has long held as an anatomical text-book; but when a work has reached its seventh edition little need be said in its praise.

Chemistry, Inorganic and Organic; with Experiments. By C. L. Bloxam, Professor of Practical Chemistry, King's College, London, and Lecturer on Chemistry, Royal Military Academy, Woolwich. London: John Churchill and Sons. Pp. 676.

*** "Abel and Bloxam" has long been one of the best known and most extensively used of our chemical text-books. A new edition being required, and press of work preventing Prof. Abel from undertaking his share, the whole has been relegated to Prof. Bloxam, who has turned out a completely new and, we must say, even a more useful book than the old one. Prof. Bloxam still adheres to the old system of notation. Whether to admire or find fault with him for so doing we scarcely know; at all events he justifies his step by saying that he does not know which of the new schemes to adopt. In the organic portion, however, he makes use of symbols possessing the new equivalents, but distinguishes these from the others by a cross-bar, as Θ, $\bar{C}$, etc. The work is most profusely and beautifully illustrated, and the number of experiments described is very great. Altogether we must confess that we are delighted with the book; only we have a slight hankering after the new notation.

Intestinal Obstruction. By William Brinton, M.D., F.R.S. Edited by Thomas Buzzard, M.D., London. London: John Churchill and Sons. Pp. 136.

*** The name of Dr. Brinton is indelibly associated with the subject of intestinal obstruction, the true pathology of which he was the first to elucidate. Strangely enough, his doctrines, which were first brought prominently before the Profession in the Croonian Lectures of 1859, have not been published in a separate form up to this date. Now they bring with them the melancholy thought that they are the last of his contributions to Medicine. But little had to be done by the Editor, for Dr. Brinton had arranged all his matter in proper order before his death. Dr. Buzzard has, however, injudiciously, as we think, added one or two illustrative cases selected from his own practice. The work consists of two chapters only, but how much valuable matter is therein contained! Many men will be glad of this opportunity of refreshing their memories as to facts and ideas which have hitherto come to them only at second hand.

Injuries of the Eye, Orbit, and Eyelids. By George Lawson, F.R.C.S., Assistant-Surgeon to the Royal London Ophthalmic, and Middlesex Hospitals. London: Longmans. Pp. 430.

*** One would almost have thought that enough of ophthalmological works had recently appeared, but Mr. Lawson's book certainly makes us hesitate before offering such an opinion. Dealing with those injuries which any Medical man may be called upon to treat, every point illustrated by a case, the directions being of the clearest kind, this work is pre-eminently adapted for the use of general Practitioners who want to know what to do and how to do it, when they come across any injury of the eye they have not before encountered.

Lectures on Pathology and Therapeutics. By H. Bence Jones, M.D., F.R.S., etc., late Physician to St. George's Hospital. London: Churchill and Sons. Pp. 314.

*** No reader of the *Medical Times and Gazette* can fail to recollect Dr. Bence Jones's lectures on the Relations of Chemistry, Pathology, and Therapeutics. These he now gives to the world at large. A more suggestive and valuable work we have seldom perused; but the book can speak for itself.

Lectures on the Study of Fever. By Alfred Hudson, M.D., M.R.I.A., Physician to the Meath Hospital, Dublin. Dublin: McGee. Pp. 336.

*** Dublin unfortunately presents only too much scope for the study of fever, and the works on the subject which have issued from its Practitioners have always been of corresponding value. The above-named work is one of a very high class. Its descriptions are remarkably clear and terse, and the portion on complicating lesions is particularly valuable.

The Physiology and Pathology of the Mind. By Henry Maudsley, M.D. Lond, etc. London: Macmillan. Pp. 442.

*** The study of mind may be attempted in two ways—either abstractly, or as associated with physiology and pathology. We need not say that the latter is most likely to yield valuable results, more especially as treated by Dr. Maudsley. The present volume is uniform with the "System of Medicine" now being brought out by the same publishers. We find in it, first a chapter on the study of mind; the various portions of the nervous system are next considered, and the mental faculties are discussed in order. Probably the most valuable portion of the work is that which treats of insanity, and which constitutes the latter part of the volume.

The Laryngoscope in Diseases of the Throat; with a Chapter on Rhinoscopy. By G. D. Gibb, M.D., LL.D., Assistant-Physician, Westminster Hospital. Second Edition. London: Churchill. Pp. 155.

*** One of the first to appreciate the merits of laryngoscopy in this country, Dr. Gibb, who had already distinguished himself by his researches on "Diseases of the Throat," early published a little work on the subject, which, having now passed through a large edition, he has republished in a more solid style. The present work partakes extensively of a clinical character, almost every variety of laryngeal affection being illustrated by cases and figures.

Blind People: their Works and Ways. By Rev. B. G. Johns, M.A., Chaplain of the Blind School, St. George's-fields. London: Murray. Pp. 196.

*** If anything were needed to rouse the interest of the busy world—and we fear that something of this kind is occasionally necessary—in those who, by their defective senses, are rendered incapable of taking that share in the work of life they might otherwise have done, Mr. Johns' little book is just fitted for this part. Pleasant in every way, nicely printed on fine tinted paper, well illustrated, and full of anecdote, the work at once amuses and instructs, tells how the blind are taught, and how, untutored, they obtain ideas of the outer world; of the various methods had recourse to for their instruction; and of the wonderful results obtained. With Mr. Johns the labour has evidently been one of love.

Historical Sketch of the Edinburgh Anatomical School. By John Struthers, M.D., Professor of Anatomy in the University of Aberdeen. Edinburgh: Maclachlan and Stewart. Pp. 94.

*** This sketch, as a lecture originally delivered in the College of Surgeons, Edinburgh, and published in the *Edinburgh Medical Journal*, has already received our approbation. Unfortunately, another chapter has now to be added to it, since the lamented Goodsir is no more.

An Introduction to Chemical Philosophy. By Adolphe C. Wurtz, F.R.S. Translated by W. C. Crookes. London: *Chemical News* Office. Pp. 192.

*** A little work of singular merit, and appearing at a most opportune period; it gives a remarkably clear *exposé* of the changes taking place in chemical nomenclature, with the reasons for their adoption.

Lectures on Hysteria. By F. C. Skey, F.R.S., late President of the Royal College of Surgeons, etc., etc. London: Longmans. Pp. 186.

*** These lectures, which are not unknown to our readers, are certainly remarkable for the simplicity and unity of their aim. All disease, Mr. Skey holds, implies a lowering of vitality, and should consequently be treated by stimulants. It is, however, a question whether Mr. Skey does not carry this to as great an extreme as was at one period the now obsolete *régime* of universal depletion.

Nouveau Dictionnaire de Médecine et de Chirurgie Pratique. Directeur de la Rédaction le Dr. Jaccoud. Tome 6ème. Cab — Chal. Paris et Londres: Baillière. Pp. 831.

New Dictionary of Practical Medicine and Surgery. Principal editor Dr. Jaccoud.

*** We have already had occasion more than once to refer to this valuable work; suffice it now to say that the present volume is quite equal to its predecessors. Among other valuable matter, it contains capital articles on bodily temperature, by Bert, Hirtz, and Demarquay; on cartilage, by Boeckel; on catheterism, by Desormeaux; on cataract, by Liebreich; on the capillaries, by Rauvier; on the carotids, by Richet, etc.

On Hay Fever. By Dr. W. Abbotts Smith. 4th edition. London: Renshaw. Pp. 62.

*** The value of this little work is indicated by the rapidity with which it has passed through its former editions. Its suggestions will be found to be sound and practical by any Practitioner who comes across the disease.

A Report on the Hygienic Condition of the Mercantile Marine. By Harry Leach, Resident Medical Officer, Hospital Ship *Dreadnought*. London: Walker. Pp. 32.

*** Mr. Leach republishes this useful report, which originally appeared in the columns of a contemporary. The subject is of great interest, and Mr. Leach's suggestions are sound and, what is more, practicable. We regret, however, that Mr. Leach has not thought proper to modify the work in some respects from the form in which it originally appeared; a good deal of obliquity of narration would thus have been got rid of.

Bulletin of the New York Academy of Medicine: Vivisection. By John C. Dalton, M.D., Professor of Physiology in the College of Physicians and Surgeons, New York. New York: Baillière. Pp. 40.

*** So much has been said against vivisection, and its proper and legitimate use confounded with its abuse, that we are glad to find an advocate as able as Dr. Dalton come forward and point out its advantages when judiciously employed. This Dr. Dalton does in the above remarkably able *brochure* by an enumeration of the various advances physiology has made by its means. We recommend the little work to all interested in the subject. They will find it contains a plain and straightforward account of what has been done for science by vivisection.

Dictionnaire Annuel des Progrès des Sciences et Institutions Médicales. Par M. P. Garnier. 3ème année. Paris: Baillière. Pp. 523.
Annual Dictionary of the Progress of Medical Science and Institutions. By M. P. Garnier.

*** A French congener of the annual works of Ranking and Braithwaite, far from being an unworthy representative of the class. To those who desire a synopsis of what is done, more especially in France, we can recommend nothing better than this little work.

Etude Sommaire sur l'Importation du Choléra, et les Moyens de la prévenir. Par le Dr. Sirus Pirondi et par le Dr. Augustin Fabre. Marseille et Paris: Baillière. 1865.

*** Although this work was published before the great epidemic of 1866, we notice it at the request of a valued correspondent, in order to give due praise to the interesting and apparently accurate account it gives of the movements of the cholera over the world since 1817, and especially of its importation into Marseilles in June and July, 1865. The author's views on quarantine and on the hygienic treatment of passengers and of baggage are judicious.

Classification of the Functions of the Human Body, and the Principles on which it rests. By Andrew Buchanan, M.D., Professor of Physiology, Glasgow. London: John Churchill and Sons. Pp. 25.

*** Dr. Buchanan holds that there are two divisions of functions—the mental and the material. Mind he believes to be diffused throughout the whole organism in combination with its plastic elements, whose molecular changes it modifies.

A Dictionary of Chemistry. By Henry Watts, B.A., F.R.S., etc. Part XXXVIII., Sodium—Stilbite. London: Longmans.

*** The thirty-eighth part of this invaluable work has just appeared. It contains articles, valuable as their predecessors, on solanine, specific gravity, spectral analysis, starch, stearine, steel, etc.

Third Report of the Liverpool Medical Missionary Society for the Year 1866-67.

*** Some time ago we noticed an address delivered by Dr. H. Taylor on the subject of Medical missions. One of the kind has now, it seems, been established in Liverpool. The following is the programme adopted:—"The doors are opened at half-past 12 o'clock, and the patients are admitted till 1. Punctually at that hour the Medical superintendent goes down to the waiting-room, which he finds completely filled, and latterly, in addition, the back yard also. A large window in the room which looks

into the yard being open, all are able to hear. He then reads a few verses of Scripture, following them with some remarks of a simple and practical character, tending to place the great truths of the Gospel clearly before the minds of his hearers. After this there is a short prayer, the whole service occupying not more than ten or fifteen minutes. This portion of the work being concluded, the patients are admitted in rotation to the adjoining room, and their various cases are investigated and prescribed for by the superintendent, as in other Dispensaries."

Eighth Annual Report of the Sussex County Asylum, Hayward's Heath.

*** This institution, under its able superintendent, Dr. L. Robertson, continues to attract the approbation of the lunacy authorities. The present report is of especial interest, as showing how much efficient and skilled labour can be performed by the inmates of an Asylum.

Observations on the Comparative Advantages of affording Obstetric Attendance on Poor Women in Lying-in Hospitals or at their own Homes. By Denis Phelan, M.R.C.S.E. Reprint. Dublin: Falconer.

*** The high mortality of Lying-in Hospitals, compared with that occurring among women attended at their own homes, has recently been attracting much and just attention. Mr. Phelan presents us with a very useful paper on the subject, estimating the relative advantages of the two schemes, and advising an extension of the latter, especially among those who have, comparatively speaking, comfortable homes.

Annual Report of the Devonshire Hospital and Buxton Bath Charity, 1866.

*** As a measure intended for the relief, not of people belonging to any particular district, but of the whole island, this Charity has unusual claims, which we would the more urge, seeing that the finances of the Hospital are not so flourishing as they might be, chiefly owing, as the trustees say, to the unrestricted dietary afforded the poor patients.

On the Amendment of the Vaccination Laws in England. By H. W. Rumsey, Member of the Medical Council. Pamphlet. Reprint.

On the Value of Life Tables, National and Local, as Evidence of Sanitary Condition. By the same Author.

*** Mr. Rumsey is no stranger to our readers, and his writings are well known and highly valued by the whole Profession. In the former pamphlet he gives his opinion against the principle of compulsory vaccination, and insists on the importance of attending more to results, especially by registration, than is now done. In the second, he treats of life tables as produced by Dr. Farr, and shows how imperfect they must of necessity be; he advocates the addition of the birthplace to each registration of a death, in order that local life tables may be produced, there being now no accurate foundation for any such.

Glasgow Medical Journal. March, 1867.

*** This number contains a remarkably useful account of the waters of Harrogate, by A. S. Myrtle, M.D., and a Case of Hydatids of the Lungs and Heart, by J. Barclay, M.D., C.M.

The Laboratory: a Weekly Record of Scientific Research. Office, 42A, Cannon-street, London.

*** A new scientific journal, chiefly devoted to chemistry. It has not, however, as yet shown very great evidence of strength. We suspect that it is intended to represent the opinions of a party rather than to furnish a full exposition of chemical science.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At a general meeting of the Fellows held on Monday, April 15, James Alderson, M.D.Oxon., F.R.S., was elected the President of the College. At the same meeting the following gentlemen, having undergone the necessary Examination, were duly admitted Members of the College:—

Frederick Simms, M.B. Lond., 46, Wimpole-street; Charles Gainer, M.D. Pisa, St. Remy de Provence, France; William Matterson, M.D. St. Andrew's, York.

Also at this meeting the following gentlemen, having undergone the necessary Examination, and satisfied the College of their proficiency in the Science and Practice of Medicine, Surgery, and Midwifery, were duly admitted to practise Physic as Licentiates of the College:—

James Goodridge Anderson, St. Mary's Hospital; William Jones Williams, M.D. Edin., 32, Grafton-street East; William Alexander Slater Royds, 28, Pentonville-road; Francis Rhodes, M.B. Glasgow, Withington, near Manchester; Joseph Moore, M.D. McGill College, Toronto, Canada West; Herbert Chrippes Upton, Petworth-park, Sussex; Newton Ramsey Colter, M.D. Harvard, Canada; William Alsept Richards, 42, Carey-street; Henry Morris, 15, Merrick-square, Southwark; Frederick William Young, University College Hospital; Charles Marchant Jones, Amoy, China; James Nicholls, M.D. St. Andrew's, Chelmsford, Essex; Walter Bayne Geikie, M.D. Victoria College, Aurora, Canada West.

The following gentlemen were reported by the Examiners to have passed the Primary Examination for the Licence:—

Charles Aldridge, Leeds; Henry Trentham Butlin, St. Bartholomew's Hospital; Thomas Smith, St. Bartholomew's Hospital; James Charlesworth, Middlesex Hospital; Robert Harris, Guy's Hospital; William Kipling, University College; Baron Alfred Rugg, University College; James Ryall Rouch, 180, Strand; John Pennock Sleightholme, Manchester; Leonard Smith, St. George's Hospital.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH—DOUBLE QUALIFICATION.—The following gentlemen passed their *first professional* examinations during the recent sittings of Examiners:—

John Dewar, Glasgow; William Mackie, Glasgow; John Gillies, Skye; Enoch Davies, South Wales; John Sayer Bridgford, London; William John Cuthbert Ward, Lanchester, Durham; George Watters, Caithness; William Gowans, Prestonkirk; David James Hamilton, Falkirk; William John Campbell, Poonagh.

The following gentlemen passed their final examinations, and were admitted L.R.C.P. Edinburgh, and L.R.C.S. Edinburgh:—

John Cascaden, Ballintra, Ireland; Eli James Barrick, Canada West; John Brosnan, Kerry; John Kerr Davidson, Caithness-shire; Robert Stevenson, Kilwinning; John Leader, County Cork; Thomas Todhunter; Whitchaven; Richard Vooght Clampitt, Devon; William Easby, Durham; David Edgar Jones, Cardiganshire; John Alexander, Caithness-shire; Samuel Brown, Jamaica; William Munden Allan, Newfoundland; John M'Rae, Ross-shire; Alfred Bennison Atherton, New Brunswick; Thomas Richard Vaux, Woodifield, Sunderland; Francis Vacher, London.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Court of Examiners on the 16th inst., and, when eligible, will be admitted to the Pass Examination:—

Edward Elphick, J. Franks Chittenden, A. Appleby Thomas, John T. Jones, John Phillips, Frederick Robertson, R. Bowen Hogg, George W. Shipman, W. Egerton Saunders, George Bradley, and John Tuck, students of Guy's Hospital; Charles E. Little, Thomas C. Thornicroft, W. Prideaux Adams, W. H. Montgomery Smith, and Edward H. Hugo, of the Charing-cross Hospital; Walter Rosser, E. Allan Waterworth, William Harris, Henry Harris, and James Tompsett, of St. Thomas's Hospital; John G. Colborne, H. Adney Bale, James Charlesworth, and Thomas E. Clarke, of the Middlesex Hospital; Andrew Boutflower, J. Pennock Sleightholme, and Charles F. Rigg, of the Manchester School; Thomas Briscoe and William Bishop, of University College; William Little, of King's College; J. De Vere Hill, of Liverpool; and John W. Wood, of St. Bartholomew's Hospital.

The following passed on the 17th inst., viz.:—

Thomas A. Somerville, Hugh W. Boddy, J. Parkinson Anderton, R. Worthington Williams, Edward Perkins, R. Corston Wade, H. Rather Collinson, Arthur E. Sutcliffe, and Arthur Roberts, of the Manchester School; George H. Pedler, W. Beach Whitmore, Edward Madeley, J. A. Tatam Cartwright, John Knowles, and W. Lake Roberts, of King's College; Daniel Ainley, J. Griffith Lock, B. Stewart Ringer, and H. Francis Baker, of St. Bartholomew's Hospital; B. Gidley Derry and W. Bartlett Dalby, of St. George's Hospital; E. Forbes Gaitskell and John Taylor, of Guy's Hospital; Charles H. Harral and Frederick Greenwood, of the Leeds School; John Sleman and Shuckburgh D. Shakleford, of St. Mary's Hospital; George Smith, of the Newcastle School; Pharez Shore and John Green, of the Birmingham School; J. Waterhouse Daniel, of New York and the London Hospital; Arthur Rayner, of University College.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—The following gentlemen passed their final examinations, and were admitted Licentiates of the College, during the recent sittings of the Examiners:—

Robert Shand Turner, Banffshire; James M'Ilroy, Bushmills, Ireland; Titus Cumins Crooker, Canada West; Robert Hunter, Kilrea, Ireland; Charles Holden, New Brunswick; William Alexander Finlay, Edinburgh; Alfred William Lupton, Wakefield; Edward Heyns, County Clare; Walter Bayne Geikie, Edinburgh; Andrew David Barrie, Madras; James Gairdner, Crieff.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 11, 1867:—

Robert Languet Sheffield (London Hospital), Redman's-row, Mile-end; John Waller (University College), Tallingstone, Ipswich; Alfred Pern (St. Thomas's), Winchester; John Coleman Barr (St. Mary's), Lock Hospital, Westbourne-terrace; and William Turner, Reading, on the 4th inst.

The following gentlemen also, on the same day, passed their First Examination:—

William Price, University College; Alfred Hollis, Middlesex Hospital; John Rigby Hughes, Guy's Hospital; Thomas Smith, St. Bartholomew's Hospital; Henry Trentham Butlin, St. Bartholomew's Hospital; John Pennock Sleightholme, Manchester.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BARTLEET, T. H., M.B., has been elected one of the Surgeons to the General Hospital, Birmingham.

BATTEN, R. W., M.D., has been appointed Physician to the Gloucester Infirmary.

BOTT, J., M.R.C.S.E., has been appointed House-Surgeon to the Ardwick and Ancoats Dispensary.

BRAMLEY, L., F.R.C.S.E., has been appointed Consulting Surgeon to the Halifax Infirmary.

DAVY, RICHARD, M.R.C.S., has been elected Surgeon to the St. Marylebone General Dispensary.

DUCKWORTH, DYCE, M.D., has been elected Physician to the Royal General Dispensary, Bartholomew-close, *vice* Dr. Church, resigned.

FREEMAN, A. J., M.B., has been appointed Resident Medical Officer to the Islington Dispensary.

NOWELL, W., M.R.C.S.E., has been elected Surgeon to the Halifax Infirmary and Dispensary.

POLLOCK, EDWARD, M.R.C.S., L.S.A., has been appointed Surgeon to the Farringdon General Dispensary.

apparent brittleness of the muscle above noticed extended to the ultimate fibres, so that longitudinal pieces of them were in places chipped or broken off, and the extremities of the separate transverse bands could be clearly seen. In other places one or more of the transverse bands protruded from the end of a broken ultimate fibre, like a coil or shred of tissue, and if altered by fatty changes it reminded me of a small piece of worm-eaten wood. Consequently, although the contractile bands appear, after long soaking in glycerine, to consist of a homogeneous substance, they are, nevertheless, capable of undergoing fatty degeneration similar to that of the sarcolemma, and yet of retaining their form. These pathological conditions tended to confirm me in the ideas I had gained regarding the minute anatomy of muscle when studying that subject. I may remark that precisely similar abnormal appearances are to be found in the fibres of the lens in certain forms of cataract. It by no means follows, because in a specimen of this kind we find much of the contractile tissue in a comparatively normal condition, that other parts of it are not completely destroyed; on the contrary, a considerable part of it was disintegrated, forming an amorphous fatty mass, but retaining the general outline of the ultimate fibre.

We may readily conceive, however, that the contractile tissue remaining intact was sufficient to fulfil, although very imperfectly, the work for which it was required; and we may further understand, from the pathological changes above described, the reason why, in a case of this kind, the heart's action is so remarkably weak, nearly one-half of its working material having been destroyed or rendered almost useless. This fact also accounts for the feebleness of the heart's sounds in a case of fatty degeneration: the intensity of the sounds evidently depends somewhat upon the degree of its muscular development, and, consequently, if nearly half of the muscle is destroyed, the sounds must be reduced in an equal proportion—assuming that the sound heard over every muscle in the act of contracting or dilating is caused by the friction and coiling of its bands of contractile tissue.

Doubtless the sounds of the heart are for the most part due to other agencies, which would also be influenced by the weakened state of the fatty muscle, but still one-half of the sound, whatever its intensity in health, which is produced by the friction of the bands of contractile tissue against one another, must be wanting in a case of excessive fatty degeneration. I will venture a step further, and assume that a portion of the heat of the body arises from the action of these contractile transverse bands. It is almost impossible to form an idea of their number, but the space covered by them must be prodigious, and, considering the constant movements to which the muscles are subjected, and, therefore, the amount of friction thus brought into play, we may well conceive that a part of the heat of the body is engendered from this source; for not only have we to consider the amount produced by friction, but also by the forces necessary to maintain the tension and relaxation of the contractile bands, which are as capable of generating heat as combustion. It appears doubtful if muscular force ever ceases, unless as a result of disease (paralysis and the like); certainly the heart's action continues as long as life lasts, so that the apparent inaction of the muscles during sleep is no valid objection against that of its heat-producing powers. If this be the case, it is not improbable that electricity is developed from the same source; and it is the fact that indications exist of the presence of an electric current in a muscle during sleep which made me state it was likely a certain amount of force was exerted by its contractile bands, although apparently at rest. I am well aware that the chemical changes going on in the body may produce the phenomenon of heat and electricity referred to, but when we have evidence of the existence of a source of these forces as palpable as that presented to us by the minute anatomy of muscle, we should certainly allow it its due weight when considering these matters. If, therefore, my premises are true, a less amount of sound, heat, and electricity should be evolved from a muscle in a state of fatty degeneration than in a healthy muscle, because in the former a vast quantity of the friction, tension, and relaxation of the tissue which occur in the latter must be destroyed.

The second portion of the specimen under consideration (B) was examined more particularly with regard to its germinal matter. From this and other examples of the same kind, I would lay it down as a general rule that so long as the germinal matter remains intact the longitudinal and transverse bands of contractile tissue will be found in working order. In certain forms of disease—as, for instance, in paralysis—they become atrophied; but if the germinal matter remains healthy, no sooner is it thrown into action by a restoration of the communication with the nervous centre than it at once takes on an increased action, and the wasted muscle is brought into use and resumes its former bulk. It is doubtless an assumption to a certain extent to talk of the pathological changes, noticed in a specimen of this kind, depending on faulty action in the germinal matter, and not on chemical changes; in fact, both these forces appear to bear a share in the process. It is evident, however, that so long as the germinal matter presents its normal appearance, the contractile tissue retains its usual form and functions; as the germinal matter becomes broken up and destroyed, the contractile tissue entirely disappears, and an amorphous fatty substance takes its place, no new formed material (contractile tissue) being produced, and the old structure having undergone disintegration and decay.

I am hardly, as I before remarked, in a position to assert that the diseased action commenced in the germinal matter, because it may reasonably be asked, why resort to such a theory and not take it for granted that these fatty changes begin in the sarcolemma, and gradually involve the germinal matter and all the other structures of which the muscle is constructed? From analogy, however, I judge that the disease in this instance is attributable to a fault in the formative process, because, as Dr. Beale has long since demonstrated, the opposite condition to fatty degeneration exists in the germinal matter of parts marked by excessive growth—as, for example, in scirrhus. The amount of germinal matter to be seen in a specimen of scirrhus is very remarkable; the tissue, when coloured with carmine, appears in a perfect blaze, giving one the idea of intense action going on in the part. In abnormal specimens of less active growth, the germinal matter, though in excess, is far from assuming the proportions it does in scirrhus; or, in other words, excess of germinal matter is tantamount to rapidity of growth. If this be an axiom in pathology, then the converse probably holds good, and the decrease of germinal matter noticed in the specimen under examination is consistent with the absence of formed material, and in its place the product of the changed contractile tissue. The blood is doubtless necessary to the life of the tissues, but whether it is capable of maintaining the structures of the body in a normal condition without the intervention of the germinal matter is more than doubtful. Like a river, the blood supplies necessary moisture to the part through which it flows, and in turn receives back its watery particles laden with the used-up material of the soil, to be reconverted into useful substance or otherwise employed. The blood, however, may be perfectly healthy, but as the vital force (the peculiar property of germinal matter) lessens—as, for instance, in old age—fatty changes occur in the tissues. On the other hand, if the circulating fluid is wanting in certain elements demanded by the germinal matter for the production of formed material, fatty degeneration also follows. In this way we can account for the reparative changes sometimes noticed in tissues that have undergone fatty degeneration; for so long as the abnormal state of the blood continues, upon which the disease depends, the contractile tissue of muscle, for instance, degenerates and cannot be reformed, but immediately the blood improves in quality, the germinal matter is again able to perform its function, and formed material is produced, the diseased structures being replaced by healthy ones.

28, Chowringhee.

Dr. Tofts and the Guildford Guardians.—The petty officiousness of the guardians in suspending Dr. Tofts will probably cost the union upwards of £100. During the Doctor's suspension, the ordinary duties of the district had to be discharged by another Medical gentleman, whose charges for attendances, etc., will be the ordinary Medical fees. In addition to this, as the Doctor's suspension has been reversed by the Poor-law Board, his salary during the time of suspension will have to be paid to him. The costs of witnesses, etc., will be somewhat heavy. And all this expense cast upon the ratepayers merely to gratify the cantankerous temperament of one or two nobodies! Verily Bumbledom is all-powerful for meaningless mischief! Dr. Tofts is a thoroughly experienced and qualified Practitioner, and we are glad to learn that his complete vindication by the Poor-law Board is received with feelings of the liveliest satisfaction throughout the neighbourhood.—*West Surrey Times.*

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0
Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.
Terms of Subscription for India, £1 15*s. per annum.*
The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6*s. per Annum.*
Post-office Orders and Drafts on Army or Navy Agents, should be made in favour of Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d. | A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d. | A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, APRIL 20, 1867.

THE RIGHTS AND THE WRONGS OF THE GREENWICH HOSPITAL QUESTION.

We have already alluded to the matter now in dispute between "the *Dreadnought*" authorities and the Admiralty, but, anxious to have an exact knowledge of the whole affair, we have personally inspected the quarters assigned to the "Seamen's Hospital Society," and those which they appear to covet. The facts are these: Queen Anne's Quarters have a frontage to the river, Queen Mary's have not. The former consists of a hollow square, or rather a rectangle; the latter of an extended frontage, with no buildings behind to obstruct ventilation. Queen Anne's have three stories and a basement, constituted by the cellars of the original palace, almost entirely without light, and certainly incapable of being turned into the offices, culinary and others, required by a large Hospital, save at great expense and great inconvenience. Queen Mary's Quarters have a magnificent kitchen, bath-rooms more extensive than could be required by any Hospital, laundry with the most recent appliances, all waiting to be used; whilst, above these, in three stories, lie the wards allotted to the sick seamen. In Queen Anne's Quarters, two of the three stories are rather lofty, but the highest is excessively low, and in certain parts only lighted by skylights, without any additional means of ventilation, except by breaking through the wall, and completely spoiling the elevation of the building. In short, these wards may be pronounced as useless for Hospital purposes, yet they would be wanted to make up the complement of 300 beds. But, worse than all this, each block of buildings is intersected lengthwise by a brick wall three feet thick, extending from the base to the roof of the building, and constituting one of its supports. The two wards constituted by this division are only lighted on one side, and in one half of them there is no communication whatever between the two, except by walking out into the passage traversing the building. The width of each half is in the east wing 16 feet, in the west wing 22 feet 6 inches. It is mere tomfoolery to talk of such wards being of the same construction as those of St. Bartholomew's Hospital. Could this party wall be done away with entirely, which unfortunately is impossible, there would be a single large ward having a width of 35 feet in the one wing, and 48 feet in the other, with through ventilation from side to side; but after that there is the objection of the close and confined inner court into which the windows of one side of the buildings open. In Queen Mary's Quarters the wards are arranged in an entirely different manner. There is a long central groined passage stretching from one end of the ward to the other. Right and left there are lath and plaster, and in some instances brick, partitions dividing into a number of cabins what could, by the removal of these—which could easily be effected—be readily converted into two or three magnificent wards, with complete through ventilation unobstructed on either side by adjacent buildings. In Queen Anne's Quarters the staircases are extremely narrow, winding, and badly adapted for Hospital purposes. In Queen Mary's they are wider, and instead of being situated in a well, as are those in the other, they, being double, occupy the whole width of the building, and are thus a great aid to the proper ventilation of the apartments above. There is one little feature which, however, may weigh with the authorities of the *Dreadnought* in their persistent efforts to obtain what we cannot help pronouncing inferior accommodation—there is in Queen Anne's Quarters a magnificent set of officers' rooms overlooking the river, that portion of the buildings which the Seamen's Hospital Society so ardently desire; in Queen Mary's, although there is plenty of room for constructing all the necessary offices and apartments for a resident staff quite large enough for the wants of the Hospital, these are not ready made, nor when they were would they have the fine river prospect which the others possess. What the Hospital for Seamen—men of all kindreds, tongues, and religions—should want with a *resident* chaplain, we cannot conceive, yet we believe that such an office is likely to be introduced should the Society obtain the quarters they now want.

WHAT IS TUBERCLE?

Those who listened to the debate at the Pathological Society on the evening of the second of April could hardly fail to put to themselves in dire perplexity the question—What then is tubercle? We do not say that we can answer the interrogation either to our own satisfaction or to that of any one else, but we may succeed in laying the matter in dispute plainly and intelligibly, as far as our knowledge at present extends, before our readers.

Originally, of course, the word tubercle bore with it no distinct meaning beyond the idea of a small tumour; but Laennec, applying it to the diseased condition so often encountered in the lungs, spoke of tubercular granulations and infiltrations, in the latter term departing entirely from the original idea of tubercle, besides bestowing upon it a character of specificity. What then was this specific product, for there were and are recognised two varieties of tubercle—the grey or miliary, and the yellow or crude? According to Bayle, the grey granulations were non-tubercular; Laennec, on the other hand, regarded them as essentially so—in fact, the invariable precursors of the yellow or crude variety of tubercle; whilst most moderns look upon them as the only correct representatives of that substance. Until lately Laennec's view has been the one accepted in this country, yellow tubercle being looked upon as the ultimate result of the miliary, although by many the cheesy stage was accepted as a starting-point for the interpretation of the whole process of tuberculisation. Miliary tubercle was supposed to be the result of inflammation and consequent exudation, but, the blood being vitiated and the constitution depraved, the effused product assumed this imperfect form instead of that ordinarily investing healthy lymph. The granular tubercles thus formed were supposed to be incapable of reproducing themselves, having no power of cell formation, and consequently only increasing by accretion. They involved none of the surrounding tissues, only appearing to affect them as any foreign body would, whilst, being gifted with but a lowly organisation, they were extremely liable to degeneration. In this way the large cheesy masses encountered in the lung were supposed to be produced, and these masses were by many accepted as the true representatives of tubercle. Still, till recently, no one doubted the accuracy of the views just cited, but two great blows were struck, and the stability of these doctrines, thus roughly tested, was found to be deficient. Probably the first of these in point of

time was the discovery that the cheesy mass constituting crude tubercle was very far from being invariably of a tuberculous nature; in fact, after a certain stage, it could not be made out whether the mass had been originally tubercular, or was the degenerate remains of pus, cancer, sarcoma, or pneumonic deposits. The other was Virchow's discovery of the history of tubercle, and his tracing it through all its stages, from its earliest origin in connective-tissue cells, to its final softening and expulsion. By the former, the unfailing certainty with which any cheesy mass encountered in the lungs or elsewhere was pronounced tubercular, was rudely dispelled; by the latter the inflammatory and exudative origin of tubercle was treated in a similarly summary manner. As a further consequence of the discovery of the essentially cellular nature of tubercle, its type is no longer sought for in its commonest situation, the lungs, but in other organs whose constituents are of a less perplexing character—as, for instance, in serous membranes. There the proliferation of badly formed and nourished connective-tissue cells may be readily observed, their products assuming that shrivelled, unwholesome, and granular aspect seen in tubercle. One situation seems to be peculiarly well adapted for examining the growth of tubercle—that is, the lining membranes of the skull and coverings of the brain; yet many French observers, including no less an authority than Robin, hampered by the old notions as to the cheesy nature of tubercle, refuse to accept the bodies produced there as tubercular. Recent researches by Dr. Bastian as to the origin and growth of tubercle in that situation would seem to prove that meningeal tubercle does not originate from connective-tissue corpuscles, but rather by the excessive proliferation of the epithelial cells and nuclei lining a series of peri-vascular canals which have been demonstrated by His to surround the vessels of the brain and meninges. There the process of proliferation goes on at an increased rate, but for want of proper nourishment the cells become worse and worse formed, and their contents more and more granular, until the mass almost entirely loses its cellular character. There is no exudation, but the deteriorated quality of the blood influences the process so far as to give rise to a granular instead of a cellular product. Is this, then, inflammation? Essentially it is, for according to the doctrines of the new school inflammation only consists in excessive proliferation of cells, accompanied by certain manifestations of local and general disturbance.

But of late the matter has assumed an entirely new aspect by the experiments of M. Villemin. Investigating the history of tubercle, and seeking some more satisfactory information as to its origin than had hitherto been given, M. Villemin was induced to try the effects of inoculation. A small quantity of that substance was introduced into a little wound behind the ear of a rabbit, and the opening closed. When examined, tubercle of the grey or miliary kind was found in various parts of the body, particularly in the lungs. The experiments were repeated again and again, but in all cases with a like result, and M. Villemin came to the conclusion that tubercle was thus transmissible from one being to another. Other experimenters came forward, among them the famed Lebert, who also confirmed Villemin's results. The attention of many of our indefatigable pathologists being thus drawn to the investigation, they, being far from satisfied with the accuracy of the experiments, resolved to undertake fresh ones for themselves. Among others, Mr. J. Simon and Dr. Andrew Clark had been working at the subject, and both laid their results before the Pathological Society. In some very important particulars Mr. Simon's results differ from those of previous investigators. Thus he made use of yelow or crudel tubercle, a product which, as we have already seen, is of by no means a certain origin; even of this he used but a very small quantity, which was introduced into a wound of, comparatively speaking, a small size; further, the substance produced possessed more of the characters of crude than of miliary tubercle, and this was found in various parts of the body.

Dr. Andrew Clark had made use of grey tubercle, and had succeeded in producing something resembling grey or miliary tubercle, but which he maintained had altogether a different structure, being distinctly cellular in its texture and having characters identical with the products of lobular or epithelial pneumonia. This product, he maintained, had not the same destructive influence on life as tubercle in the human subject had, and as to its being miliary tubercle, the eye alone was not a sufficient test. But by far the most important point was that *he had been able to produce similar matter by inoculating with substances of a non-tuberculous nature*, as cancer and pus. Further, he argued, were tubercle so readily transmissible, why do we not more frequently find the husband infect the wife, and *vice versa?* And so the matter rests.

Shortly, the facts may be stated thus:—The true or miliary form of tubercle seems invariably to originate by the proliferation of certain cells, the products, from the vitiated condition of the blood, being more or less imperfect (Virchow, Vulpian, Bastian). Some local stimulus is, however, wanting in addition to the ordinarily deteriorated state of the constitution, and this may be supplied by the introduction of miliary tubercle (Villemin, etc.), by crude tubercle (Simon), or other morbid substances (Clark) into the system. The products of the cell proliferation would seem, however, probably from the healthy condition of the animal, to possess more of a cellular and less of a granular character than in man (Clark). It is obviously foolish to talk of the immediate product of Mr. Simon's experiments as crude tubercle—a decaying or degenerating substance; it may have been of the nature of miliary tubercle originally, or it may not; but to suppose that this half-dead matter was the *immediate* result of introducing other half-dead matter into the system is absurd.

Stripped of all garnishing, these are the facts. As yet they are too scanty in number to allow of any extensive generalisation; but the field is now filled with able and willing workers, and we hope that before long the veil will be raised still further, and we shall have a nearer insight into this most interesting morbid process.

CONTROLLED RESPIRATION AND WIND-INSTRUMENT PLAYING.

The influence of physical forces on physiological processes admits of far more study than it has hitherto received. One or two distinguished men have made special departments their undisputed property, and we are beginning to have tolerably exhaustive accounts of certain common trades and occupations as they react upon the animal economy. But the idiosyncrasies of sweeps or butchers, though universally acknowledged, are not entirely explained; and, even in this laryngoscope-loving era, no observer seems to have pursued a costermonger to the death, and demonstrated anatomically the cause of his stentorian organ—powerful in some two or three musical notes, but feeble on all others. The use of wind-instruments comes under this category. It is a recognised business, fostered by all the royal services, subsidised (somewhat scantily) in the army to the extent of drums, fifes, and bagpipes; liberally supported by individual contributions of the officers, not excepting Doctors, in every corps and regiment; forming part of every large man-of-war's crew; especially patronised by the volunteers, whose band at times outnumbers their battalions—and yet observations as to the physical effects of the employment are totally wanting. If an opinion is sought on this subject, the Practitioner is only too apt, as in many other departments of Medicine, to let a vague *à priori* line of theory influence his views, and to condemn indiscriminately, without the slightest systematic attempt to obtain a real induction from trustworthy facts.

Even the very obvious results of forced respiration on the circulatory system have only recently been examined by Dr. Sanderson. Regarding the effect of playing wind-instruments, we know of no record absolutely Medical in its character. An excellent substitute, indeed, exists in the observations of one intelligent man, though he is not a Physician, but a musician. M. Sax, whose name is well known to all amateurs as the inventor of several original and beautiful instruments which pass under the various patronymics of saxhorn, saxiphone, saxotromba, and the like, has paid much attention to the effects of this exercise on the general health. He vigorously opposes the common fallacy of its injurious tendency, and corroborates the assertion by a very instructive and remarkable fact:—The family of which he is a distinguished member were, it seems, originally eleven in number. All of these have died from consumption but three, and the three who remain in health are the very three who have been professionally educated as players of wind-instruments. A single authentic history of this nature demands a careful review of our scanty knowledge on the subject, and that none the less since it comes from extra-Medical sources.

The writer, as a wind-instrument player himself, and from connexion with a Hospital where affections of the vocal apparatus are frequently under observation, has had special opportunities for collecting information. At present the inquiry has been limited to instrumental performers, though at some future period he hopes to extend the examination to the results of singing and speaking on the respiratory functions, a problem which presents far greater complexity.

Certain physiological considerations lie at the root of this matter, and to these attention will first be drawn. In the thorax we have a closed cavity, expansible or compressible by muscular action. The main agent in altering its internal capacity is, of course, the diaphragm, while any great elevation or depression of the bony walls is for the most part occasional and supplementary. The cavity is said to be closed, because it is an essential point to be noted that the only air-tube which does communicate externally—namely, the trachea—may be considered to end in blind terminations at the extreme points of the bronchial tree. This obvious fact is not without an important bearing on the mechanical conditions of respiration. For while the lungs contained loosely in the pleura are compressed directly in the act of forced expiration by the abdominal viscera, driven upwards against the diaphragm by the abdominal muscles, and by the bony walls of the thorax; the act of forcible inspiration, consisting in the flattening and consequent depression of the diaphragm, and the simultaneous enlargement of the thoracic walls by the outward tilting of the ribs, does not necessarily carry the lungs with it, except by the intermediary agency of atmospheric pressure. If any impediment exists in the trachea or smaller bronchi, the lung or that part supplied by the obstructed tube does not necessarily follow the dilating pleura. The result of these conditions has, indeed, long been recognised in infantile life, though its adaptation to morbid states of the adult lung has hardly been pointed out. In what Professor Jörg, of Leipzig, has named *atelectasis pulmonum*, we see exactly the above train of circumstances in operation. A bronchial affection, according to Rokitansky's observations, causes the occlusion of some bronchi with dense mucus, and the funnel-shaped tube allows a valvular action to be set up, by virtue of which any air already inspired is easily forced out during expiratory contraction, displacing for the moment the mucous plug; but on the commencement of the inspiratory effort this returns to its seat under atmospheric pressure, and that lobe of the lung remains airless, unexpanded, and non-crepitant. Meanwhile, from the necessity of filling the gap thus left, either the soft thoracic walls fall in, and form what is termed a pigeon-breast, or, more commonly, the neighbouring lung becomes abnormally expanded to supply the vacant space. Undoubtedly a not dissimilar process occurs more chronically in the spontaneous repair of tubercular lesions in after life—at least one observer has noticed the fact, and proposed to cure phthisis by delayed expiration: unfortunately, he has obscured his real meaning by a misuse of Medical terminology, and has apparently failed to appreciate an essential mechanical fact. The lung, expanded by exaggerated inflation, is not, strictly speaking, emphysematous until sufficient violence has been employed to rupture its substance. Emphysema is due to a totally different class of causes, and has another morbid history, from the lung which has overstepped its normal size and boundaries to compensate for a contracted and impervious fellow. It is true that in very old phthisical lungs, where Nature's long-continued efforts at repair have nearly, if not entirely, eliminated the original tubercle, we find much fibroid tissue of a cicatricial nature and low organisation, which, from its position in an air-holding organ, has become permeable to interstitial air, and emphysematous in the Surgical sense of the term; but it is only by the very vaguest nomenclature that this can be confused with healthy but unusually dilated lung-structure. The fibroid tissue is not strictly lung substance at all, but merely an accessory material with which former lesions have been repaired. It probably has no aërating power whatever, and, moreover, is separated by tolerably clear lines of demarcation from the overworked but not abnormal lung tissue which is supplying its shortcomings.

In the second case, besides the misapplication of the term emphysema to what is neither more nor less than complementary over-distension of the lung tissue, it seems as though the wrong element in the respiratory act had been chosen for exaggeration. A system of slow forced *expiration* through a capillary orifice can do nothing beyond gently compressing the lung substance, partially emptying it of its vascular contents; inspiration, however, practised in a similar way, the breath being drawn through an insufficient aperture, has a far more important physiological bearing. The lung substance, receiving scanty supplies, is only partially and slowly able to follow the expanding pleura and tightening diaphragm, so that it becomes subject to a steady elastic distension, which may most materially influence its intimate structure. This treatment was indeed brought under our notice a few years back by a French Practitioner, who not inaptly termed the process "*faire la gymnastique des poumons.*" Unfortunately, his method was unnecessarily overlaid by the addition of balsamic inhalations, supposed to be secret, and discredited by behaviour which was neither straightforward nor that of an experienced and impartial auscultator. There was, however, ground for belief that the method itself was of some real curative and prophylactic value, especially in the case of young, narrow-chested, and feeble patients. Physiologically considered, there is a certain similarity between this process and that which occurs in ascending great heights from the level of the sea, where the lungs are filled beyond their usual limit with an air of greater tenuity than at lower levels, and require for oxygenation of the blood much deeper and fuller inspirations. It has of late been very satisfactorily shown by Dr. Weber and other observers that these mountain climates exercise no inconsiderable curative power in diseases of the respiratory organs, and it is not improbable that such influence is quite as much due to alterations of condition explainable by physics as to that rather mysterious vital or atmospheric power which too often figures in Medicine as the *Deus ex machinâ* to avert lame conclusions. This branch of the subject will be adverted to more fully; but many of the good results thus aimed at may undoubtedly be obtained by a judicious use of wind-instruments. M. Sax, who has carried his theory into practice by forming classes of persons whose chests are weak and ill-formed, with a view to their development, points triumphantly to the average of our best reputed orchestras. "Look at the stringed-instrument players," he says; "for the

most part they are ill-nourished, stooping in habit, contracted in chest, and bent over their instrument, as if with premature old age; then turn to the wind instruments—to a man they will be erect, full-chested, rosy, and strong." The contrast, we must allow, is in a measure just, though the common school for the latter class being the army, and the great bulk of the players being regularly drilled and inured to out-of-door exercise goes far to explain their healthier aspect. Still the measured and regulated breathing which is essential to good methods of playing undeniably expands the chest, counteracts stooping habits, and actually increases the girth round the thorax to the extent of several inches. It is of the first importance, however, that a system should from the first be inculcated on the learner which combines healthy exertion with the promise of ultimate musical proficiency. Among the comparatively few cases which have fallen under the writer's observation where injurious effects could be distinctly traced to this occupation, nearly all were those of adults who had begun difficult wind-instruments late in life, as a diversion, or without having proper professional teachers. Several of these patients belonged to the police bands recently established, and others to bands which Messrs. Maudslay and some other large manufacturing firms have liberally started among their workmen. The error was sometimes not far to seek, and was easily corrected by the transfer of the player's attention to a lighter and less exhausting instrument.

It would be inexact to conclude this preliminary paper without mentioning what is often the real drawback to the use of wind instruments. The stress they lay upon the lungs is far less than common opinion warrants, but the strain felt by the soft palate, the posterior fauces, and the tonsils is very great. It is in the mouth that all the articulation of musical phrasing is formed, and the full force of the compressed air issuing from the whole chest is there concentrated, as in the "wind-chest" of an organ. The soft palate is the only structure which forms a valve to prevent the breath from passing uselessly through the nasal orifice. It can be shown by a simple apparatus contrived for the purpose that the pressure in the cavity of the mouth during the sounding of various instruments differs greatly with the instrument, but that for those of the "reed" family it is often sufficient to support a column of two feet of water; so that, taking the approximate height of 30 feet for the water barometer, and the usual atmospheric pressure at 15 lbs. per square inch, we have at least a force of 1 lb. bearing on every square inch of surface. Estimating the size of the soft palate at about two square inches, it follows that in playing reed instruments it sustains an intermittent strain of 2 lbs. avoirdupois. It is not surprising that relaxations of its substance and much congestion of its mucous surface follow from assiduous practice, especially in the earlier and less regulated efforts of pupilage. It is past denial that this local and temporary affection has often been mistaken for serious disease of the lungs themselves; and it is within the writer's knowledge that a musician, now holding a high appointment as bandmaster under Government, was, when a youth, sent off to India on account of suffocative cough following practice on the clarionet, who has now returned in perfect health, many years later, without presenting a single sign, physical or general, of pulmonary phthisis.

THE WEEK.

THE GENERAL MEDICAL COUNCIL.

We understand that the proposed May meeting of the Medical Council has been postponed, as Mr. Walpole has not yet declared his intention of bringing forward a Bill to amend the Medical Act of 1858.

THE NEW PRESIDENT OF THE ROYAL COLLEGE OF PHYSICIANS.

At a numerously attended meeting of the Fellows of the College of Physicians on Monday last, Dr. James Alderson, F.R.S., was elected President. This honour is a fit climax to his official career as Treasurer and Representative in the Medical Council of the College. All who know the new President will need no assurance that he will worthily occupy the Chair which has been filled with so much grace and dignity by Sir Thomas Watson. Dr. Alderson, although a Doctor of Medicine of Oxford, graduated in Arts at Cambridge in the year 1822, obtaining the rank of sixth wrangler in the mathematical tripos, and a Fellowship in Pembroke College. In the early part of his career he practised with distinction at Hull; afterwards he settled in London, and on the opening of St. Mary's Hospital he accepted the office of Physician and Lecturer on Clinical Medicine. We congratulate the School of St. Mary's on the honour of giving a President to our first Medical Corporation.

MEDICAL QUALIFICATION REQUIRED FOR THE MEMBERSHIP OF THE COLLEGE OF SURGEONS.

We are able to state that the Council of the Royal College of Surgeons have determined to require that candidates for the diploma of Membership of that College shall possess a Medical licence, which they may obtain from any of the Examining Bodies recognised by the Medical Council. If a candidate for the Membership have not such a licence, he will be required either to obtain one before receiving his diploma or to undergo an examination before a board composed of Fellows of the College of Physicians, who will sit at the College of Surgeons.

IMPERIAL AND ROYAL PATIENTS.

Private advices from Paris describe the state of the Prince Imperial as causing some anxiety. The fact that injections of iodine have been employed is seized on as affording proof of some constitutional delicacy, and disease of the bone is mentioned as a possibility; but this is mere conjecture. The Princess of Wales is described as slowly improving.

DR. GUY ON THE MORTALITY OF HOSPITALS.

Dr. Guy, in an elaborate paper read before the Statistical Society on Tuesday evening, went a good way towards establishing the truth of the paradoxical axiom, that the more useful a Hospital is, the higher is its rate of mortality. He showed conclusively that Hospital mortality in England is influenced mainly by the condition of the patients who are received into them, and not by differences in the situation and salubrity of the Hospital. Given a rapid succession of patients with acute dangerous diseases, the mortality must be high. The death-rate of General Hospitals is also affected by the causes which influence the mortality in other public institutions, and amongst the surrounding populations. The existence of special wards, and even the mode of admission of patients, are also causes which modify the death-rate. It was noticed in the discussion in reference to Special Hospitals for Consumption, that the death-rate must be largely affected by the stage of the disease in which patients are admitted, and by the length of time they are allowed to remain. We believe it is a practice in some institutions of this kind that incurable cases shall not be admitted at all, or, on the other hand, that when a case assumes a hopeless aspect it shall be discharged. Under both regulations, a high death-rate would be avoided. Whilst, however, analysing most fully the relative mortality of various Hospitals compared one with another, Dr. Guy did not attempt the more complex question of the relative mortality of patients treated at home with that of patients of the same class, sex, age, and disease treated in Hospitals. He was understood, also, to say that the sanitary arrangements of London Hospitals were as near perfection as could be. Still, he did not deny the occasional outbreak of Hospital disease, and the general necessity of the isolation of patients after

*

wounds, operations, etc. The practical question is, whether in civil and military service a young man in the prime of life and health who suffers an injury or undergoes an operation in hot weather, would not be better off under any tent, or in any barn or shed, than in the most magnificent Hospital that ever was built.

THE SURGEON OF THE "DIANA."

MANY of our readers will have seen an account of the disastrous voyage of the whaling steamer *Diana*. This ship became surrounded with ice, and was icebound from the beginning of September, 1866, until the middle of March, 1867. The tale of the sufferings and endurance of the crew, as detailed in the *Times* of April 16, is of as great interest as anything we remember to have read in the narratives of Arctic voyagers. The captain and nine men succumbed to the combined effect of scurvy, starvation, and cold. That one of the crew of fifty men returned to tell the tale is mainly due to the courage, patience, and care of the Surgeon of the ship, Mr. Charles E. Smith. All accounts we have seen unite in speaking in high praise of his steadfastness and skill. The following quotation is from a letter that appeared in the *Scotsman* :—

"About twenty of the crew are in a fearful state with scurvy, some not expected to live, and the rest quite unfit for work. Every possible attention has been paid to the men since their arrival. The ship sprang a leak in December, and has only been kept afloat by incessantly working the pumps. The Surgeon, Mr. Charles E. Smith, deserves great credit for his exertion, not only in his own Profession, but also in assisting to work the ship. Had it not been for his attention to the men, it is doubtful whether any of them would have survived."

THE MODE OF ELECTION OF RESIDENT MEDICAL OFFICERS IN COUNTY HOSPITALS.

THOSE of our readers who have canvassed a county for the appointment of House-Surgeon to its infirmary, will, we are certain, acquiesce in an utter condemnation of the whole proceeding as a test for the professional fitness of the candidates. The governors and governesses of county infirmaries are, undoubtedly, usually very charming excellent people—probably they may include the best specimens of English men and women that are to be found in the district; but the very sense and candour which distinguish them make them perfectly aware of the fact that by education they are not qualified to assign precedence to different degrees of Surgical attainment, and therefore in nine cases out of ten they, wisely from their point of view, abandon all attempt to choose on the score of merit, and simply vote or sign their proxy papers from motives of personal favour or local interest. To instance a case, which is not altogether an imaginary one—what chance would the best student of St. Bartholomew's or Guy's have in such a contest against the respectable but mediocre son of a county-town tradesman, in whose books the names of many of the rural oligarchy might have been found for well-nigh half a century? There are other evils in the ordinary mode of electing these officers. A vacancy is announced by advertisement, and young men from London are invited to throw themselves into the contest. Bribery, of course, there can be none, but money not the less is necessary. Printing, postage, and travelling expenses amount to a considerable sum; and this, with the loss of time, is a heavy fine to impose upon the unsuccessful candidates. We are glad, however, to see that there is a movement for a reform in this matter. At a recent meeting of the Governors of the Norfolk and Norwich Hospital Dr. Bateman proposed and carried a law—"That in future the House-Surgeon be elected by the board of management and the Medical staff conjointly." In the course of an admirable speech Dr. Bateman read extracts of letters from Sir Thomas Watson, Sir William Fergusson, Mr. Cock, Professor Erichsen, Dr. Chadwick, of Leeds, and Dr. Symonds, of Bristol, all of whom agreed in the propriety of narrowing the area of election, both on the general grounds of the manifest unfitness of the present constituencies, and the unjust tax in the way of money and time imposed on the candidates. We trust that in this age of reform the example set by the Governors of the Norfolk and Norwich County Hospital will be followed by others, and we are sure that a considerable boon will be afforded to the hardest-working and best-qualified students, who form the class for whom these appointments have the greatest attraction.

A PLEA OF INSANE DELUSION.

A TRIAL took place at the Central Criminal Court on Friday, April 12, in which the plea of insanity was unsuccessfully urged on behalf of a Swedish sailor who was charged with the murder of one of his shipmates. It appears that there is a superstition amongst sailors that a ship having a Russian Finn on board is certain to founder. The murdered man, although in reality a mulatto, was believed by the ship's crew, and by his murderer, to be a Russian Finn. The culprit, there was considerable evidence to prove, was a man of weak intellect. Although he did his duty, he was considered amongst his comrades to be "a little soft," and a master of a ship under whom he had served said he appeared to him to be an idiot. The superstitious dread of the supposed Russian Finn seems to have become the dominant idea in the Swede's weak mind; and he took the opportunity, when they were keeping night watch together, to murder him, in order, as he said, "to save all hands in the ship, and prevent her running on shore." The jury have found him guilty, and he has been condemned to death. We hope, however, that before the sentence is carried into effect, the man's mental condition will be examined by some competent Medical men. We think on public grounds that this is the more necessary, as in the report of the trial we have seen there is no notice of any Medical evidence having been given.

DWELLINGS OF THE POOR.

DR. HARRIS, the Health Officer of New York, in his report on the mortality of the city for the week ending March 2, calls attention to the prevalence of zymotic disease and the destruction of life consequent on "an alliance between Death and our city tenant-houses" that needs to be broken. Dr. Harris remarks:—"The certificates of death received from the Physicians, now made out with great accuracy and care, tell what weapons death is using, and the thanks of the Board of Health are due for such thoughtful care by Medical attendants; but whoever will walk up Mulberry, Mott, or Baxter streets, from Chatham, or from Franklin-square up Cherry, Oak, James, and Roosevelt streets, and look in upon *the rotting masses of human beings*, in their crowded, unventilated, and ill-drained domiciles on every side, will see why disease and death riot in such places. The wonder is, that so few die in the crowd-poisons there. Typhus and small-pox have gained footholds at points where they are now testing the value of cleaning and fresh air." Dr. Harris says it is not so much the fault of the poor themselves as of the public that forgets them, and the "greedy middle-men" who neglect them, that the tenant-house crowds of the city seem to be, as Ruskin has it, "insisting on their right to helpless death." These poor people testify by their struggles and aspirations that they are worthy of a better fate. "Whoever helps them to healthy homes will build himself a monument more enduring than the memorial piles in our public squares." How true it is that human nature is everywhere very much the same! Avarice is a passion whose existence in the human heart is unaffected by forms of national government, and the grinding landlord is evidently as much at home under a republic as under a monarchy or a despotism. "Landlords," says Mr. Liddle, in his report on cholera in Whitechapel, "have it in their power to do more than any other persons to

elevate the poor from their present condition, by providing them with proper sanitary appliances, and teaching them the use of them." It is to be feared that, unless we can induce the owners of houses inhabited by the poor to believe that it will pay better to keep them in a healthy condition than to let them become the charnel-houses they too commonly are, it will be a long time before sanitary legislative enactments will secure the desired improvement. The "rights of property," here as elsewhere, too frequently imply a power for evil against which sanitary reformers protest in vain.

NEW YORK "MILK FROM THE COW."

Mr. Stephen Buckland, in the current number of *Fraser*, gives a startling account of the nature of the supply of milk to the inhabitants of New York. The dairies of that city are, in fact, large appendages to the whisky distilleries, the cows being exclusively fed upon "swill," or the waste liquor left after the evaporation of the pure spirit. This "swill" is a powerful stimulant to the production of milk, and the animals acquire a morbid liking for it. In some establishments there are as many as 3000 cows, which are stabled, above and below ground, within the most incredibly small space, and they are tied together in close rows, so that lying down is a physical impossibility, and when an unfortunate creature's legs will no longer bear their burden, this has to be supported by the two adjoining cows between which it is wedged. For five years the horrible sufferings incident to this state of things may have to be endured, the animals sometimes lingering as long. On admission, an incision is made into the tail, and inoculation performed for the "swill-disease," the consequence of which is that the tail rots off, leaving only a stump, and the rows of tailless creatures wedged together in dark, noisome, stinking vaults, are represented as being one of the most revolting of spectacles. After a while the cows also lose their teeth, for which, indeed, they have no further necessity, "swill" constituting their exclusive food for the rest of their lives. This is brought to their troughs by means of pipes from the distillery, and is drunk in enormous quantities, the animals falling into a kind of stupid intoxication. The lungs and other vital organs become sooner or later affected, and bad ulcers attack the udders. Joined to this poisonous food there are the infected state of the atmosphere and the most filthy condition of the stables, utensils, and of the low Irishmen who are the attendants. It is from such "dairies" that New York is exclusively supplied with milk; for although public opinion is occasionally excited against them, they have, in fact, secured the entire monopoly of the supply. It is nowise surprising, therefore, to learn that infant mortality is more frightful in New York than in any other city in the world.

FROM ABROAD.—THE FRENCH ACADEMY REPORT ON ANIMAL VACCINATION—CUTANEOUS ABSORPTION.

The French Academy of Medicine, the body to which is assigned the management of the public and gratuitous vaccinations in Paris and the distribution of lymph, has been for some time past engaged in practically investigating the claims of the practice of "animal vaccination," introduced into France from Naples by M. Lanoix. At the last meeting of this learned body, M. Depaul read his report on the results of the investigation, the chief conclusions of which we subjoin. 1. The transmission of cow-pock by its inoculation from heifer to heifer is obtained without difficulty. 2. No accident occurred to any of the heifers from the fact of inoculation. 3. The three first heifers were inoculated by the Naples cow-pock, and forty-two others by that obtained from Beaugency. 4. The cow-pock has lost none of its properties through successive inoculations. 5. The course of the eruption has been more rapid on the heifer than on the human subject, the pimple appearing on the third day and suppurating in the course of the seventh or eighth. 6. In sick heifers the pustules presented less development than in the healthy ones. 7. The eruption was entirely confined to the inoculated spots. 8. Little or no reaction was observed. 9. It would be easy, especially in great centres of population, to organise services for animal vaccination. 10. The quantity of lymph which each heifer can supply is sufficient for the most extensive service. 11. According to our experiments, syphilis is not conveyable to the bovine species by inoculation. 12. When taken under proper conditions, this lymph succeeds as frequently as lymph derived from an infant. 13. Taken later than the seventh day, it produces less satisfactory results. 14. It is not unusual after inoculation of infants with the cow-pock to find the period of incubation prolonged, the eruption not manifesting itself until between the ninth and twelfth days. 15. Sometimes on the same individual the pustules pursue an unequal and irregular course. 16. The pustules obtained by this cow-pock are more voluminous, and the phenomena of general reaction, especially at the period of suppuration, are more sensible than after human vaccination. 17. These manifestations have never taken on a serious character in any of the infants inoculated by us. 18. The number of resulting pustules is alike in both kinds of vaccination. 19. A single puncture has sometimes given rise to the appearance of one, two, three, or even four pustules—a phenomenon which is of much rarer occurrence after human vaccination. 20. The cow-pock, like the lymph from the infant, often fails when it has been preserved between glasses or in tubes, and in this respect human vaccination seems to possess some advantage over animal vaccination. Still, the cow-pock lymph which has been kept in tubes during a month has been successfully used, and specimens which have been sent to the provinces and abroad have furnished satisfactory results. 21. We have made too few trials of cow-pock for revaccination to be able to form an opinion. 22. During the prevalence of epidemics of small-pox, one or more inoculated heifers might be sent into the districts, which would supply all the lymph necessary for the vaccinations and revaccinations.

M. Hoffmann related at a recent meeting of the Academy of Sciences some experiments which he had performed on himself in illustration of the question of cutaneous absorption:—

"1. During 44 days I took 16 baths, each consisting of 300 litres of water and 250 grammes of digitalis leaves. After the third bath only, I began to feel the peculiar uneasiness proper to the action of the medicine, my pulse at the same time becoming slower by four or five beats, this condition persisting for several hours. By the eighth bath the *malaise* had increased, and my pulse had descended from its ordinary number of 68 to 61, while after the sixteenth bath it had descended to 48. It is evident, then, that the active principles of digitalis had been absorbed, but only in a slow and progressive manner. 2. Every third day during six weeks I took a bath to which 50 grammes of iodide of potassium had been added. After the fifth bath I recognised the presence of the iodide in the urine, this condition persisting for twelve days after all treatment had ceased, excretion being, in this case, as slow as the absorption. 3. A bath was taken every third day during a month, to which 5 kilogrammes of marine salt had been added, and the chlorides of the urine rose progressively from 2·15 gr. to 3·47 gr. per litre. The general conclusions arrived at from these and other experiments are—(1) Chemical and other agents, dissolved in water, penetrate very slowly, but still manifestly, into the economy by the channel of the external integuments; and it is only when the blood and other liquids have become saturated with them that they are excreted by the economy. (2) All medicinal agents are not absorbed in the same degree. (3) The contradictory results hitherto obtained are solely due to the fact that the experiments upon which they have been founded have not been pursued for a sufficiently prolonged period."

PARLIAMENTARY.—AGRICULTURAL GANGS—METROPOLIS GAS BILL—GREENWICH HOSPITAL AND THE MERCHANT SEAMEN'S HOSPITAL SOCIETY—THE MEDICAL OFFICERS OF THE ARMY.

In the House of Lords on Thursday, April 11,

Lord Shaftesbury drew attention to the system of agricultural gangs common in some of the eastern counties, and quoted largely from the report of the Commissioners who had inquired into the subject, to show that the system entailed cruelty, immorality, and disease among the children of the agricultural class in the districts where it existed. Combatting an opinion that had been put forth in the House of Commons, that the evils could not be remedied by Parliamentary enactments, he cited the Factory Acts to prove that such interference might be proper and beneficial, and announced his intention of bringing in a Bill to prohibit the employment of females under 18 in public gangs, to prevent the employment of children under 8, and females under 11, in any field labour.

Lord Kimberley confirmed from his own experience the statements of Lord Shaftesbury as to the great evils of the gang system, and cordially approved some such legislation as that suggested.

Lord Belmore, on the part of the Government, promised that any measure upon the subject should receive careful attention, and stated that the reason why the Home Secretary had not introduced any Bill was because he thought some further inquiry was needed.

In the House of Commons a short debate took place on the Metropolis Gas Bill, Sir S. Northcote moving that it should be read a second time on April 29, Mr. Crauford that it should be read that day six months. Sir S. Northcote said it was the intention of the Government that after the second reading of the Bill it should be referred to a Select Committee, and that proposals for a settlement of the questions in dispute had been made by the gas companies to the Government. The debate was finally adjourned on the motion of Mr. Ayrton. We trust, however, that Parliament will be able to cheapen the price and improve the quality of the gas supplied to the metropolis. We have no desire to see any confiscation of private property; but it must be remembered that the gas companies have been making large profits on an inferior article, and had they behaved with more liberality to the public this agitation would not have arisen.

Mr. Liddell asked the First Lord of the Admiralty whether his attention had been directed to a public letter on the subject of the assignment of a portion of Greenwich Hospital to the use of the Seamen's Hospital, and whether he had any objection to state the reasons which had induced the Admiralty to select a quarter described to be the most unsuitable, upon sanitary grounds and general convenience, for the accommodation of sick and infirm sailors.

Mr. Corry was very glad his hon. friend had given him the opportunity of disabusing the public mind of the most unfounded impression which the letter to which he alluded was calculated to convey. The writer of the letter, adverting to an undertaking on the part of the Board before he went to the Admiralty, said, "Since then there was a new lord;" but he omitted to state that the new Lord of the Admiralty had been the first to urge on the late Government to assign a portion of Greenwich Hospital to the use of the Seamen's Hospital; therefore, it was not likely that he should be the person to throw any obstructions in the way. When he went to the Admiralty his right hon. friend the present Secretary of State for War had, according to the usual course, called on the Medical Director-General and the Admiralty Director of Works to report on the subject; and, as the matter had created some agitation, he might be allowed to read one or two extracts from their reports. The letter to the *Times* stated:—"The Admiralty have now the assurance to offer to the Seamen's Hospital Society a part of Queen Mary's quarter, which for the reasons I am about to describe is wholly unsuited as a Hospital for the sick, and which the Admiralty know perfectly well cannot possibly be accepted by the Society." Now, he held in his hand the report of the Medical Director-General, one of the ablest officers in Her Majesty's service. He said:—"I previously visited the *Dreadnought* in order to ascertain the probable amount of accommodation that would be required. I next, accompanied by the Captain Superintendent and the Medical Inspector-General, examined the entire range of buildings in Greenwich Hospital known as Queen Anne's, facing the east, and Queen Mary's, also facing the east and south. In the first-mentioned range of buildings the wards or floors are divided longitudinally by a massive wall, and again subdivided by wooden partitions into small cabins or compartments, each capable of containing two beds. These, though they may have been suitable for old men in good health, are by no means suited to the kind of patients admitted into the Seamen's Hospital, even if all the cabins and bulkheads were removed. Besides, in this quarter there is no kitchen or means of cooking for so many patients. On the opposite side of the public road which passes through the Hospital is Queen Mary's quarter, forming an angle facing east and south. The ground-floor in the eastern portion contains an excellent kitchen, in good repair and fit for use, capable of cooking for 800 men, with a good scullery, laundry, and washhouse, ample cellarage, and store rooms. It also contains a large number of baths, besides foot-baths, with an abundant supply of hot and cold water. In the first, second, and third stories above the ground floor, extending round to the centre of the portion facing the school-ground, there are nine large wards, capable of containing upwards of 300 patients. I would, therefore, for these reasons, beg to propose that the portion of the building called Queen Mary's quarter, with the exception of the western half of the south block, might be offered to the Committee of the Seamen's Hospital." The director of works generally concurred in this report. He might also state that the letter in the *Times* had been laid before the Board, and they decided to write to the Lord President of the Council and request him to permit Mr. Simon, of the Privy Council-office, to visit Greenwich Hospital and give his advice on the subject. As soon as the Board receive his report they will pronounce their opinion, but that opinion will not be at all influenced by the anonymous letter which appeared in the *Times*.

Mr. Synan gave notice that he would call attention to the injurious operation of recent regulations affecting the Medical officers of the army.

After the decisive division on Mr. Gladstone's amendment, in committee, on the Reform Bill, the House adjourned until Monday, the 29th instant.

LUMLEIAN LECTURES.

DELIVERED BEFORE THE ROYAL COLLEGE OF PHYSICIANS.

By J. RUSSELL REYNOLDS, M.D., F.R.C.P.,

Holme Professor of Clinical Medicine in University College, and Physician to University College Hospital, and to the National Hospital for the Paralysed and Epileptic.

ON SOME OF THE RELATIONS BETWEEN MEDICAL AND LEGAL PRACTICE.

Lecture III.

It has been already shown that Medical testimony may fail of its legitimate effect sometimes because it is not scientific, and sometimes because it is. The purpose of the present lecture is to prove that in the established mode of taking scientific evidence, and in the pitting, as it were, of one expert against another, scientific testimony virtually destroys itself. The theory upon which the production of expert testimony rests is this, that it should be such as to guide the jury. It is presumed that the juryman does not know certain things, and that with regard to them he needs direction from a scientific person. This he may obtain, or might obtain if the evidence of experts were given as it was intended that it should be; but, as a trial is now conducted, the jury is not guided by the scientific witness, but is asked to decide between a number of witnesses, each presumedly more learned than himself. In order to do this satisfactorily each juryman ought to be wiser and more learned than each and all of the scientific witnesses. If he be so, it is a great waste of time, words, and money to produce scientific evidence; if he be not, it is absurd to ask him to decide such a disputed question between such disputants. The points to be decided, for example, in opposed cases of claims for compensation on account of injury are those of diagnosis and prognosis, and a jury is asked to determine these points in very obscure cases where and when the most learned Doctors fail to see eye to eye. The injustice of such a proceeding is often very great; it is felt by all concerned in the inquiry—by plaintiff, defendant, scientific witness, counsel, judge, and jury.

The injured man is not fairly treated or represented, for the accounts that are given of his state are those of many Medical examiners who have seen him at different times, under different circumstances, in diverse places, and with opposite intentions. Each examiner on each "side" takes his own impressions and conveys them to the court; and there is no free interchange of scientific thought between the contending witnesses. There is an undue reserve in the matter of consultation, and often what is termed a consultation does not deserve the name.

The expert is asked questions which he cannot answer positively; a line of defence is often set up so wide of the mark that it had not been previously considered; and the expression of honest scientific doubt is often made the means of doing great injustice.

The counsel, by being informed on one side only, often make confusion worse confounded, for they are dealing with matters that they do not fully comprehend, and often fail entirely in their attempts to perceive the points of difference between the scientific witnesses.

The judge is often entangled in a web of words from which even he cannot manage to extricate himself, and the onus of diagnosis lies upon the unfortunate jury.

The jury is asked to make a diagnosis and furnish a prognosis; and twelve unscientific gentlemen are requested to agree when half a dozen scientific gentlemen cannot do so, the points upon which they are to agree being precisely those with regard to which the Doctors differ in opinion; and the materials for their decision, moreover, being the statements which these Doctors make. The juryman has to weigh not only facts, but men, and to decide which witness is the most entitled to his credence. He must, under these difficult circumstances, make a diagnosis for himself, because he cannot rely upon either the age, experience, reputation, or skill of the opposing witnesses, for all these may be so evenly balanced that they neutralise each other. The production of expert testimony is therefore so elaborate that it virtually destroys itself.

In order to meet the evils that have been enumerated, the following suggestions are made:—1. That in all scientific evidence there be a clear line of distinction between facts and opinions. 2. That there be a clear statement, on both sides, of *all* relevant matter, and that due credit be accorded to opinions which differ from those of the particular individuals giving evidence. 3. That the symptoms as described or felt by the patient be clearly distinguished from those observed by the Physician; for with regard to one set of symptoms there is the testimony only of the plaintiff, with regard to the other there is the evidence of the expert. 4. That there should be constructed some fixed schemes, or schedules, for the observation of cases; analogous to those, for example, which are employed in life insurance offices. 5. That there should be some general Professional agreement as to the use and meaning of words of constant occurrence in the common cases for Medico-legal inquiry. 6. That the Profession should abstain, as far as possible, from the attempt at prognosis, with the view of obtaining a more equitable mode of dealing with cases in which the future of the patient is the real point upon which the claim depends —such, for example, as the payment of an annuity, or the insurance of a life. 7. That Commissions should be appointed to report upon the progress of science, and thus demonstrate the necessity for the removal of old and artificial lines of distinction. 8. That the question of the appointment of Medical assessors to the courts of law should be considered by the Profession, and its conclusion on that matter authoritatively stated. 9. That there should be the fullest, freest interchange of opinion between the witnesses on the two sides of a disputed case, it being believed that by such a method of procedure nothing would be lost except what it would be well to lose, and that much now quite unattainable would be gained by our Profession and the public.

King and Queen's College of Physicians in Ireland.—The following gentlemen obtained the Licence in Medicine during January, February, and March, 1867:—W. A. Atwood, London; T. S. Cogan, Dublin; G. L. Griffin, Rathmines; W. G. Grimshaw (M.B.), Dublin; W. J. Hepburn (L.R.C.P. Edin.), Dublin; G. C. Irving, Donnybrook; S. Kellett, Virginia, co. Cavan; E. A. Mullins, Ennis; A. O'Flynn, Sligo; J. H. Scott, Dromore. The following gentlemen obtained the Midwifery Diploma during the same period:—W. A. Atwood, T. S. Cogan, G. L. Griffin, G. C. Irving, S. Kellett, J. H. Scott.

REVIEWS.

Gout and Rheumatism, in relation to Disease of the Heart. By A. W. Barclay, M.D. Cantab. et Edin., F.R.C.P., Physician to St. George's Hospital, &c. London: John Churchill and Sons. 1866. Pp. 214.

A work from the pen of Dr. Barclay is always welcomed by the Profession, for it is always sure, in addition to being well and carefully written, to be thoughtful and suggestive in no common degree. We are almost ashamed, in noticing his writings, to employ the services of such literary hacks as these terms "thoughtful" and "suggestive" have become; but, used as they now are, they express eminently well the character of the work now before us. It is divided into ten chapters, which treat of "The Origin of Gout," of "Acute Rheumatism in relation to Disease of the Heart," of "Rheumatic Inflammation of the Heart," of the "Treatment of Rheumatic Fever and Inflammation of the Heart," of "The Relation of Gout to Cardiac Disease," of "Disease of the Heart in Gouty Subjects," "The Gouty Paroxysm as it affects the Heart," the "General View of Disease of the Heart," "The Treatment of that Disease," and of "Treatment of Gouty Affections of the Heart." And, as an introduction to the subjects treated of, short clear rules are given "for the diagnosis of cardiac murmurs." Dr. Barclay appears to have been moved to writing, not so much by having anything absolutely new to tell us about his subjects, as because he wished to give his matured experience on points of diagnosis and treatment, and to express his dissatisfaction with the chemical theory of the nature and cause of gout. He observes that "to Dr. Garrod we owe the certainty of the existence of an excess of uric acid in the blood during the gouty paroxysm, and its absence in rheumatism," and that "we are now in possession of the knowledge that the uric acid is circulating in the system; we know, too, that it gets fixed in the inflamed joint;" but he considers that "nearly all that associates these two facts with the attack of gout is purely hypothetical." And he is of opinion that "it is far too mechanical a view to suppose that gout is nothing more than an accidental excess of uric acid in the blood; that the inflammation of the joint is simply the effect of the same acid, in the form of urate of soda, exuding through the vessels, and irritating the ligamentous and synovial structures." He particularly objects to Dr. Garrod's statement that "true gouty inflammation is always accompanied with a deposition of urate of soda in the inflamed part;" in the case of the joints he admits that gout, the local inflammation, and the deposit do concur—"we find them all harmonising together"—but he refuses to admit that "no gouty inflammation can occur till such a deposit has taken place, and that it must have happened wherever it exists." Must we of necessity, he asks, "find urate of soda in the stomach and the bronchi before we can admit gouty gastritis or gouty bronchitis?" and he answers the query by asserting that "urate of soda is not found in parts such as the bronchi, where an inflamed condition of the membrane is so often associated with gout." We are not sure Dr. Barclay does not rather overstate or strain Dr. Garrod's theory, but leaving that aside, we should like to know on what authority Dr. Barclay states that urate of soda is not found in gouty bronchitis. It is well enough known that bronchitis is particularly apt to occur in persons of gouty diathesis, and that severe bronchitis is not seldom observed to alternate with paroxysms of true articular gout; but has any chemical examination ever been made of the sputa in gouty bronchitis? Has the expectoration been shown not to contain urate of soda or uric acid? We confess that we do not know of any record of any such research. The theory offered, or rather suggested, by Dr. Barclay in place of the chemical theory, makes the essential vice in gout consist in some change in the blood-globules. The first departure from health must no doubt, he says, be found in an altered condition of the blood; alterations in the blood-serum are too transient and unstable to cause such a disease and its diathesis; but some vice in the nutrition of the blood-globules may have the necessary permanence, just as that change by which one attack of a blood-disease—variola, scarlatina, etc.—protects the individual more or less completely from a second attack, is probably a change of some kind in the blood-globules. Dr. Barclay freely allows that all this is purely hypothetical, and indeed the chief argument adduced in support of it is that he has "particularly

heard his friend, Dr. Gairdner, who is so great an authority on gout, express the opinion, as the result of his thoughtful investigations, that change in the blood-globules was the foundation of the disease." Granting for a moment that this theoretical "change in the blood-globules" has any real existence, why call it "the foundation of the disease?" It cannot be a spontaneous change; there must surely be some pre-existing vice of nutrition or excretion to produce it—at least, in acquired gout. But Dr. Barclay has a remarkable admiration—reverence, we might almost say—for Dr. Gairdner, so far as gout is concerned at least; so much so that he refers us to his friend's treatise on gout for the treatment of the disease, confessing that he "should scarcely feel justified in laying down rules which must so entirely coincide with his, except in his own words." This is very candid, certainly; but we hope we may be pardoned if we confess that somehow or other it *will* remind us of the gentleman who, after replying in the negative to the query "whether he was musical," added, "But my brother has a snuff-box that is."

The chapters on rheumatism are, we think, the most valuable part of the work, and they contain much that is very practical and valuable as to both diagnosis and treatment. Careful and accurate observers will generally agree with the author's appreciation of the importance of noting any alteration of the rhythm of the heart sounds during rheumatic fever. "The earliest intimation," he writes, "we have of inflammation attacking the heart or pericardium in cases of acute rheumatism comes in the form of altered rhythm of the heart's sounds. This generally precedes the development of any abnormal sound whatever." And all that follows on this subject, on friction sounds and murmurs, and on the treatment of rheumatic fever, is well worth careful study.

As to the degree of liability to heart disease in rheumatic affections, Dr. Barclay is, no doubt, in the main correct, when he says that "the association of inflammation of the heart with subacute rheumatism is certainly a rare event, except in childhood. Some amount of inflammatory action and of febrile disturbance would seem to be essential to its development. Subacute rheumatism is generally only rheumatic fever deficient in these particulars, and therefore we are not surprised to find that the risk of cardiac inflammation is so small. Practically, it is very difficult to specify the conditions to which the term subacute is really applicable. In childhood the joint affection may be very slight while the febrile disturbance is very considerable, and perhaps the evidence derived from general symptoms is more useful as a guide in attempting to discriminate the two sets of cases than any other." But in no case should most careful watching over the heart be omitted. We lately admitted into Hospital, on account of general anasarca, a stout, well-grown boy, aged 13, who had had only one attack of rheumatism, a few months previously; his knees and ankles were affected, so that he was confined to the house, but the constitutional disturbance was so slight throughout that he was not confined to bed a single day. Yet there is extensive cardiac mischief; the heart is much dilated, and there are both systolic and diastolic murmurs, together with small, feeble, "locomotive" pulse, and dyspnœa. As to treatment, most Practitioners will perhaps agree, more or less, with Dr. Barclay, that "the whole train of antiphlogistic remedies—bleeding, blistering, leeches, calomel and opium, and antimony—have been miserable failures," but we suspect that not many possess his confidence in the alkaline treatment, or can say with him that "the lighting up of inflammation of the heart, after the system has been brought fully under the influence of the alkali, is one of the rarest events in pathology."

There are many other noteworthy points in the book; but our space is exhausted, and we must content ourselves with heartily thanking Dr. Barclay for it, and recommending it strongly to our readers.

THE PRINCE OF WALES AND ST. BARTHOLOMEW'S HOSPITAL.—At the recent ceremonial for inducting H.R.H. the Prince of Wales into the chair of President of St. Bartholomew's Hospital, the Prince, in acknowledging the respect shown him by his election, took occasion to pay a deserved tribute to the past and present Medical and Surgical staffs of the Hospital. Amongst the latter he made a graceful allusion to Mr. Paget, with whom he said he was personally acquainted. He also expressed the gratification he had derived from his recent visit to the Hospital with the King and Queen of Denmark. "On that occasion he found the institution in complete working order, just as it might be seen any day in the week, carrying on its humane and beneficent work."

PROVINCIAL CORRESPONDENCE.

IRELAND.

DUBLIN, April 13.

IN my last communication (see page 401), containing a very brief account of the meetings of the Medical Society of the King and Queen's College of Physicians, held on the 4th and 5th inst., I stated that I should be obliged to hold over, until your then next publication, my report of the very able summing-up, by the President, of the important discussion which had taken place on that occasion. Before proceeding, however, to reproduce Dr. Stokes's address, I wish to correct an error into which I fell, in my last letter, as to the mortality from cholera in the Rathdown Hospital, at Loughlinstown, as stated by Dr. Darby. The deaths, as stated by him, were 17 in 61 cases, or 27·86 per cent., and not 17 per cent., as I misunderstood him to say.

In summing up, the President observed that the subject of cholera and its modes of propagation had been, during this session of the Society, before them on four occasions. The first night was occupied with the Rev. Dr. Haughton's admirable paper on the modes of propagation of this disease, and the debate thereon. The second night was devoted to reading abstracts of reports from the four General Hospitals in Dublin which threw their doors open to patients in the disease, and, in addition, the Society received the report of the outbreak of cholera in the Mountjoy Prison. The proceedings of the third night commenced with the communication of a report on the late terrible outbreak of cholera in Utrecht, for which the Society was indebted to Dr. W. Daniel Moore. Dr. Darby also laid on the table the report of his Hospital at Loughlinstown.

The debate on the third and fourth nights travelled outside the mere consideration of the reports. It had a more general scope, and it was better that it had so. We had the assistance of several military Medical officers, who gave their experience of cholera in India, and most of whom were opposed to the doctrine of its contagious nature.

In speaking of the Dublin reports (continued the President), we may consider three questions—the Pathology, the Treatment, and the Mode of Propagation. In regard to the first, nothing of novelty or importance has been brought forward. And this is just what might have been expected. Cholera being in the category of the essential diseases, the results of anatomical investigation have as yet been negative, telling us, as in fever, rather what the disease is not than what it is. While the rapid course of the affection seems not to give time for the formation of secondary organic changes, with a thick and tarry blood, and a well-marked rigor mortis, a rising of the temperature of the body, as compared with that before death, was observed in the Hardwicke Hospital. In this last particular we are reminded of Dr. Baxter's paper "On Sunstroke in India," which he holds to have some points in common with malignant cholera. The lividity of the surface greatly lessened after death, and this has been observed in that terrible disease called Febris nigra, Purpura maligna, or black death, of which many examples have occurred in Dublin during the last year. In this the ecchymosed patches became of a bright red some time after death. The right chambers of the heart were loaded, and coagula were met with in the pulmonary artery. Dr. Henry Kennedy's interesting observation of the occurrence of puerile respiration with a single sound of the heart, similar to what is found in weak heart, is to be noted here.

The brain and ganglionic system were found healthy, and the mucous membrane of the alimentary canal had a washed appearance. In the report of the Mater Misericordiæ Hospital mention is made of the enlargement of the solitary and agminate glands and of the escape of their contents. And the last point worthy of notice is the occurrence of severe cadaveric twitching. The late Staff-Surgeon Marshall, who was head of the recruiting department in Dublin some thirty years ago, used to relate that in the cholera of India it often happened that on making the first incision over the sternum in post-mortem examinations the body would start up in violent spasms, as if acted on by a powerful galvanic battery, and he added that "it was hard to make the young hands go on."

Now, with respect to treatment, it is not surprising that our reports offer nothing new. After all, it must be held that there is no cure, no specific treatment for any continued

essential disease. No man has ever cured an essential fever—it may be doubted whether any man will ever do so—but he can guide it to recovery. He knows that two dangers threaten—one, debility; the other, the development of secondary disease—and so, recognising the law of periodicity, he steers the patient through both dangers, every day being a clear gain, until the clock strikes and the disease leaves or overwhelms the patient. But some points in therapeutics may be noticed. The use of chloroform inhalation for relieving the cramps; the employment of Sir Dominic Corrigan's button cautery along the spine in collapse; the use of creasote and acetic acid to relieve the vomiting; and the employment of cupping, with and without the scarificator, to the loins in cases of suppression of urine, has been very successful, even after uræmic symptoms had existed for forty-eight hours. In the Meath Hospital and in the Mater Misericordiæ, calomel, in frequently repeated doses, was a favourite, and the occurrence of bilious stools was always held to be a good prognostic. The permanganate of potash was tried at Sir Patrick Dun's, but without favourable results, as oxygen inhalations and the nitrite of amyle were tried, and in two cases saline injections, with the usual effect of temporary revival.

In the tables of treatment in the Hardwicke Hospital there are some columns which read as if they recorded the results of a special or exclusive treatment. Thus there is a column for calomel, a column for white of egg, a column for astringents. This is objectionable, as conveying the notion that such exclusive treatment was actually followed, and I do not doubt that in the corrected report this matter will be set right, and it will be shown that in this epidemic that true eclecticism, which has so long characterised Medicine in Dublin, has not been departed from.

To come now to the question of the communicability of cholera. Dr. Kennedy has insisted on the negative evidence, and quotes the views commonly entertained by observers in India. But it must be borne in mind that the questions of contagion as existing in India and in Europe are not the same. Nor, again, can we reason from the phenomena of disease among the coloured that similar circumstances will arise in the white races. It may be that the natives of the country where the disease originated are more liable to the first exciting cause than those of different localities; or it may be that the Europeans are less liable to contagion in India than they are at home; and I could collect from Dr. Mackesy, who unfortunately was unable to take part in the discussion, that this was his opinion.

The remarkable immunity of the Physicians, students, nurses, and attendants in our Hospitals was urged by Dr. Lyons as a powerful argument against the contagionists; and we must give it its due weight, especially when we remember the numbers of our brethren and students who have suffered in various epidemics of fever. It may be, however, that epidemics of the same general nature vary as to the communicability of disease, and none of us can forget the mortality of the Physicians engaged in the epidemic at Sligo in 1849. The immunity of attendants at the cholera Hospitals lately in Dublin goes only to show that the disease is less contagious than typhus.

The outbreak at the Mountjoy Prison, as reported by Dr. M'Donnell, is most remarkable, and seems to point to an origin of cholera independent of contagion. It will be remembered, however, that this outbreak occurred at the time of the general epidemic, and we have to balance the chances of some communication having occurred from without with those of the generation of the disease from within; and it is recorded that at the same time there was an outburst of choleraic diarrhœa in the prison. This furnishes an argument for either view.

And here I must allude to the views of Dr. Darby, who, in his speech, held that in estimating the mortality of cholera the cases of choleraic diarrhœa occurring contemporaneously with the more severe cases should be reckoned as minor examples of the disease, and included in the statistics of its mortality. In this view I wholly concur, and so the frightful mortality of 50 per cent. would be greatly reduced.

Two of the speeches demand especial notice—those of Sir Dominic Corrigan and Professor Haughton. Both were illustrated by maps of Ireland, in which the cholera stations were marked, and their maps referred to the epidemics of 1849 and 1866 respectively. The difference between their observations was that while Sir Dominic Corrigan did not wholly deny the possibility of contagion, he held the chances of such an occurrence to be greatly less in cholera than in fever. Professor Haughton, arguing from the fact that the disease had first appeared in those towns on the east coast which were in closest communication with Liverpool, and that its advent in the few western localities could be positively traced to importation, maintained that its spread could be accounted for only by contagion. It is remarkable, however, that in 1849 the western towns and districts were more engaged, as we see from Sir Dominic Corrigan's map, while both observers record the comparative immunity of the north of Ireland. This is accounted for by Dr. Haughton by the circumstance that many of the towns in the north are centres of an independent industry, and that they have little communication with Liverpool.

The evidences in favour of contagion in any epidemic depend on a balance of probabilities, and it would be well if, in the elucidation of the question as regards cholera, the application of the doctrine of chances was made. This, Dr. Stokes said, was done in reference to fever by his father, the late Dr. Whitley Stokes. He proposed to the celebrated Dr. Brinkley, Bishop of Cloyne, and formerly Professor of Astronomy in the University of Dublin, the following problems:—

"Problem I.—An epidemic prevails, so severe that one out of seven sickens. A family of twelve is selected in a particular district before the epidemic has visited it: what is the chance that eleven out of that family shall take the disease, supposing the sickness of one of the family does not promote the sickening of another, and supposing the family not unusually liable to disease?

"*Answer.*—The probability against the event is 189,600,000 to 1, if the population amount even to 7000.

"Problem II.—The same general conditions being assumed, and also that the number of the inhabitants in the district in question is 7000, what is the chance that in any family of twelve within the district eleven will sicken?

"*Answer.*—It is above 300,000 to 1 that no family of twelve persons in a population of 7000 will have eleven sick.

"All this according to the conditions that the sickening of one does not promote the sickening of another."

Now a similar method might be usefully employed in the present instance. For example, take the hypothesis that the disease is not propagated by contagion, but depends on atmospherical or telluric influences; what are the chances that it should appear first in a locality, previously unvisited, immediately after a patient who had arrived sick had died there? What are the chances against its following only the lines of communication as shown by Dr. Graves in his great history of cholera which was quoted by Dr. Kennedy? What are the chances, under the same conditions, that by means of quarantine, as adopted in the city of Waterford, the locality shall escape? The same method might be applied to test the correctness of the opposite views.

In conclusion, Dr. Stokes begged to express the sense of the Society as to the great industry and abilities displayed in the compilation of the reports.

On the termination of the President's address, a vote of thanks, proposed by Sir Dominic Corrigan, Bart., and seconded by the Rev. Professor Haughton, was unanimously passed to the Army Medical Officers, who had attended and contributed so much valuable information on the subject before the Society.

GENERAL CORRESPONDENCE.

LEATHER-FELT SPLINTS FOR FRACTURES.

Letter from Dr. James Braithwaite.

[To the Editor of the Medical Times and Gazette.]

Sir,—If you think the following case, in which Hide's patent leather-felt splints were used, worthy of insertion in your paper, I shall be glad if you will publish it. The patient, a girl of about fourteen years of age, fractured both radius and ulna of the right arm whilst in an epileptic fit. The fractures were transverse and about the middle of the bones. The arm had been fractured two years before from the same cause, and considerable deformity had been the result. In consequence of this I found it extremely difficult to apply efficiently the ordinary wooden splints, and as the fits recurred, sometimes two or three times a day, the splints and bandages were constantly displaced. At the end of five weeks in spite of all my own care and that of the patient's friends, there was not the least attempt at union. I found the felt splints which I

then used for the first time adapted themselves very accurately and firmly to the limb, and by the use of a good deal of bandage also soaked well with the liquid supplied with the splints, that the fracture was well supported and the ends of the bones kept well in apposition. At the end of three months from the time of the accident, there was union of the fracture. I did not think the union very firm, but I am convinced that without the use of these splints there would have been no union at all. I am, &c.

James Braithwaite, M.D.

Clarendon-road, Leeds, March.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, April 9, 1867.

Mr. Samuel Solly, F.R.S., President, in the Chair.

A paper, by Dr. Robert Lee, was read, being the

HISTORY OF A CASE OF DIFFICULT PARTURITION FROM GREAT DISTORTION OF THE PELVIS, WITH OBSERVATIONS ON THE INDUCTION OF PREMATURE LABOUR.

The patient resided at Hammersmith, and was under the care of Mr. Hunt. Her age was 27. She was pregnant for the first time. Labour commenced on Friday, March 25, 1864. Great difficulty was experienced in ascertaining the presentation. Craniotomy was performed the following day. On Sunday morning Dr. Lee was requested to see the patient. No part of the head could be reached with the forefinger of the right hand, on account of the great deformity of the pelvis. Delivery was accomplished by introducing the whole of the left hand into the vagina, passing the two forefingers up between the head and the uterus, thus protecting it from injury, while the bones of the cranium were removed with the crotchet. The neck was tied and held while the thorax was perforated, the thoracic viscera removed, the right arm brought down, the abdominal viscera removed, the left arm removed, and the body extracted. The crotchet was firmly fixed upon the pelvis of the child, and gradually the delivery accomplished. The whole time occupied in this operation was nearly two hours. The placenta was removed without difficulty soon after. The following summer the patient was again pregnant. Dr. Lee advised the induction of premature labour when she was in the fourth month of pregnancy. The advice was neglected.

Dr. Greenhalgh said the case related was a good illustration of the difficulties occasionally met with by Obstetricians from great distortion of the pelvis. This patient in the fourth month of her pregnancy applied to Dr. Lee, but he declined attending her on account of her being under the care of another Physician at the Samaritan Hospital for vesico-vaginal fistula. He (Dr. Greenhalgh) saw the patient for the first time on September 12, she then being little more than seven months advanced in pregnancy. He carefully examined her pelvis, and found it distorted in every part. He at once came to the decision that the proper proceeding was the induction of premature labour. In consequence of his (Dr. Greenhalgh) having punctured his thumb in dissection, Mr. Dewsnap officiated, and on the 24th punctured the membranes. (He should state that the parts were damaged, there being vesico-vaginal fistula.) Labour came on on the 26th, and proceeded for twenty-four hours. At the end of that time the left foot presented, and he (Dr. Greenhalgh) was sent for. He immediately pulled the foot and limb down, then the pelvis, and afterwards the body. He perforated the head in two places, but could not get it through the pelvis. During this time Mr. Dewsnap was making traction on the body, and the head separated. The patient had been under the influence of chloroform, and as she was very low and in danger, it was decided, on consultation, to perform the Cæsarean section. This was done by making an incision from above downwards. The head was found in the abdomen, and was removed. The rupture of the uterus had extended from the vesico-vaginal fistula. The patient rallied, and lived fifty-six hours. This case he had recorded in the Obstetrical Society's *Transactions*. It might be asked, Why attempt delivery in such a case at the eighth month? He would never do it again, particularly if vesico-vaginal fistula existed. Whatever the presentation, when the pelvis was less than two inches in its antero-posterior diameter he would not attempt delivery at the full time. If the patient came sufficiently early to him, he would induce premature labour; but he should not be justified in trying to deliver when the child was at the full period of utero-gestation, and the Cæsarean section was to be preferred.

Dr. Barnes adhered to the leading rule of English Midwifery, that the first duty was to save the mother; and he believed that in all but the most extreme cases craniotomy, properly carried out with the best appliances, was safer than the Cæsarean section. He contended that the power given by a good craniotomy forceps was infinitely greater than that of the crotchet, whilst it was also safer and easier. He had worked out the crotchet, and had abandoned it for a forceps of his own contriving, which he used to pick off the parietal and occipital bones; then seizing the forehead and face, the face was first brought through the brim of the pelvis. In this way an antero-posterior diameter of two inches, if there was any lateral space at all, was amply sufficient for safe delivery. In this manner he had successfully delivered a dwarf in the country whose pelvis was not more than an inch and a half in the conjugate diameter. At seven months, induction of labour was commenced at night; the next morning, by help of his dilators, the uterus was expanded, and labour was completed by noon. This case had previously been seen by Dr. Lee. In these extreme cases labour should be induced as early as possible. He believed the limit justifying Cæsarean section, although difficult to fix absolutely, was below two inches conjugate diameter.

Mr. Philip Harper thought that the case just related was a further proof of the value of the plan recommended many years ago, in cases of great deformity, of puncturing the head of the child, breaking down the brain, and then allowing incipient decomposition to come on before we proceed to take away the remainder of the child. Upon the necessity of craniotomy in certain cases of deformity, of inducing premature labour in such cases wherever possible, and of preserving the life of the mother in preference to that of the child, all English Accoucheurs are agreed. There is, however, another view which should not be entirely put aside. The relative mortality of craniotomy and gastrotomy is not at present in a fit state for comparison. The latter operation has hitherto been performed quite as a last resort, and when all other methods had been tried and failed—the mother perfectly exhausted, the tissues involved in the operation with shortened vitality, and even, perhaps, as we have heard in the present case, at a subsequent labour, with a rupture of the uterus itself. In the present greatly improved state of abdominal Surgery, it may fairly be asked whether we could not perform gastrotomy at an early period with less risk to the mother, and of course with safety to the child. The best time to operate would be so soon as there were any signs of the uterus having assumed contractile powers—indeed, we might even excite this contractility, and then proceed to operate. The incision in the uterus itself might be carefully closed with a modified form of Glover's stitch, so inserted that the two ends might be brought through the os uteri and the vagina, and tightened over with one of Aveling's spring tubes, and could be withdrawn about the fourth day. The union of the edges would be insured, and all offensive lochial discharges prevented from escaping into the peritoneal cavity. It might then be found that gastrotomy might be compared with craniotomy in their relative mortality, and not appear in so unfavourable a light as at present. In a case of repeated pregnancies in a woman, knowing that the child could not be born alive, and in whom premature labour from a variety of causes was not induced, we might be justified in seriously entertaining the question of gastrotomy, even though delivery might be accomplished with craniotomy. We ought to try to save two lives, and the child should be thought of as well as the mother.

A desultory kind of discussion now ensued, which it would be all but impossible to report accurately, and if we could, it would be neither edifying nor instructive. It consisted chiefly in a kind of wordy duel between Dr. R. Lee and Dr. Greenhalgh, the chief point in dispute being the accuracy of Dr. Greenhalgh's report of the case he had just detailed in the Obstetrical *Transactions*. Dr. Lee said it was most inaccurate, and injurious to his reputation. Dr. Greenhalgh asserted that he had given the particulars faithfully as derived from the patient herself. Eventually he admitted that "Dr. Lee's statement was more likely to be true than the patient's." This passage of arms was occasionally interrupted by the

President, and by the asking of questions and the answers to them.

Dr. Wright inquired how it was the vesico-vaginal fistula was not treated previous to the woman's second pregnancy.

Dr. Lee had not seen her until the fourth month of her second pregnancy, and then, finding she was under the care of another Physician, he did not even examine her, but advised that premature labour should be induced.

After this discussion had finished, Dr. Lee requested permission to make some observations on craniotomy and the production of premature labour in cases of deformed pelvis. He proceeded to justify himself for having performed more than 200 operations of craniotomy, and said that for many years all the worst cases of midwifery occurring in several large public institutions, as well as a great number in private practice, had come under his notice. He was showing that he was not only justified in the course he took, but that it was the only one he could safely follow, when the President hinted that the discussion was not quite in order, and Dr. Lee desisted from any further observations.

Dr. Robert Greenhalgh communicated a paper, by Dr. Richard Dawson, on

THE FORMATION OF TUBERCLE.

The author drew attention to the great diversity of opinions as to the real nature of tubercle, quoting Virchow, Lecture XX., illustrative of the general ambiguity of definition. In that lecture tubercle is said to be a degenerative cell proliferation, thereby meaning that new corpuscles arise out of the previous organic morphological elements by a continued succession of divisions—a definition at best but vague even if accurate. The author produced specimens of tubercle disease in thin sections and photographs from the same, as supports of his arguments, putting in as few drawings as possible, since sun pictures were more reliable than microscopic drawings. He defined a cell to mean an individual having an outer case within which would be found other cell or cells with surrounding material; and he called a tubercle an abnormal collection of animal matter. The ultimate divisions of air-passages he called air-sacs. The author next proceeded to describe certain sections from the healthy lung, showing that organ to be composed of an elastic transparent tissue, covered with oval, transparent, nucleated cells, which by some were called the epithelium lining the air-sacs. He drew attention to the general characteristics of these cells—viz., their transparency, small oval form, and limited number of nuclei. He then passed to diseased structures, showing sections from miliary tubercle of the lung; and observing these same cells, they were seen in places to be no longer transparent, oval, small, and few nucleated, but to have become dark, enlarged, warty, and irregular in form, with many nuclei. This most remarkable change he further illustrated by specimens from the same bodies, as well as some pictures of them. Some of these showed the meningeal arteries and vessels pulled from the cerebral hemispheres; and it was seen most clearly in these that, at intervals along the course of the capillary vessels, bulbous enlargements occurred, and that these swellings were in the outer coat of the artery, for the calibre of the vessel was undiminished. The nature of this bulb-formation he showed to be disease arising in the cells composing the outer coat; and this disease he called "nuclear hypertrophy," from its nature; for it was seen that the long undulating fibre-cells composing the outer coat lost their length, while their nuclei became enlarged and greatly hypertrophied. Many cells taking on this change, the bulb was formed, gradually enlarging, and capable of eventually obliterating the vessels, though not doing so of necessity. The change occurring in the diseased lung-cells was of a very similar nature: their nuclei hypertrophied, and many cells taking on this change at once, a mass was formed of enlarged cells pressing on each other, and eventually shutting up the air-sac altogether, giving rise to a tubercle. There was, therefore, no foreign deposit, but an abnormal action set up in the nuclei of normal cells. Dr. Dawson concluded his paper by defining the mechanism of tubercle-formation to be that, from unseen causes, certain cells in a tissue took upon themselves diseased action of the nature of nuclear hypertrophy; that this action continuing in many cells at once, as in the lung-sac, the passage became choked, its function destroyed, and hence arose a tubercle. Tubercular disease was one not only manifesting itself in deposits visible to the naked eye, but which affected the microscopic elements of cell-tissues partially as regards the cells composing the organ, generally as relating to the human body diseased.

Dr. C. J. B. Williams, being called on by the President, said that he was not able to express any decided opinion on the preparations and photographs so ingeniously elaborated by the author. They deserved minute examination and careful consideration; for they bore the stamp of earnestness of purpose in the right direction, and he (Dr Williams) rejoiced to find another labourer in a field which he hesitated not to designate as one of the most important within the whole scope of Medical science. He was pleased to find that the author dissented from the views of Virchow and his host of obsequious followers, who, in his (Dr. Williams') opinion, had only mystified the subject of tubercle by infusing into it a hypothetical idea of a peculiar cell-life, thus confusing it with the very distinct formations commonly known under the term of growths. No doubt, in connexion with tubercle, cells are to be found, more or less perfect, and in various degrees of development and progress; but these are rather products of adjoining tissues than an essential part of the tuberculous matter itself. Such cells were more commonly seen in connexion with miliary tubercle, and on the outskirts of larger masses; but if the central parts of tubercle be taken, or the cheesy matter which occurs in larger masses, they had been found by the best English observers to show no traces of progressive cell-life or structure, but to consist of a mere granular or disintegrated material; and if here and there cells were seen, they were shrivelled, with imperfect nuclei, and therefore abortive. This was entirely in accordance with the views which he (Dr. Williams) had held and taught for upwards of thirty years, and which had been confirmed by most extensive observation on the history of tuberculous disease in all its forms—that tubercle is the plastic material of the body in a degraded state, incapable of proper organisation or tissue-life, and liable to degenerate still further into disintegrated granular, fatty, and calcareous matters. He would not at this late hour trespass on the patience of the Society by adducing a host of arguments that might be advanced in support of this view, but he would merely ask the members to expand their attention from the minute microscopic scrutiny now before them to a comprehensive survey of the general, almost universal, prevalence of tuberculous diseases in every part of the world, and in almost every description of animal. Wherever the nutrition of the body was degraded by bad food, damps, or impure air, insufficient exercise and clothing, and other deteriorating influences, there would tubercle be to a greater or less extent developed. The seat of the development would vary with the climate, the lungs suffering most in temperate climates; the liver and intestines in hot, and, perhaps, the cerebro-spinal meninges in cold. But all the world through here was a process decimating the population to an extent, and with a certainty, wholly unlike the behaviour of tumours or growths, or even of diseases resulting from specific poisons. In fact, the tuberculous process seemed to be too common to be any other than a lowered degree in the process of textural nutrition; so that for proper tissue a material is deposited insusceptible of proper organisation or life, and tending to further degeneration and destruction, variously injuring and involving adjoining parts, and eventually the whole body.

Dr. H. Wright alluded to the value of photography in pathology, and reminded the Fellows that the Society had a most beautiful and unique collection of specimens.

Dr. Dawson, in reply, said that he had read all the standard works on tubercle, and had only been confused by them. He determined to observe for himself, and the result had been the paper before the Society. He hoped to pursue the subject still further, as there were many points still to be cleared up.

THE PATHOLOGICAL SOCIETY.

Tuesday, April 2, 1867.

John Simon, Esq., President, in the Chair.

Dr. Dickenson read a report, by Mr. Hulke and himself, on Dr. Moxon's case of cancer of the gall-bladder. The origin of the tumour was not perfectly distinct, but its cells were nucleated and elongated, in some situations collected into nests, the intercellular substance being finely fibrillated. Its characters were purely malignant, in some parts it resembled epithelioma, in others encephaloid.

Mr. Henry Arnott gave an account of a cystic enchondroma, the size of a hen's egg, in the thyroid gland of an old man, who died of prostatic disease in Middlesex Hospital. Its base was of solid enchondroma, with intercellular fibrous

tissue; it contained a large cyst filled with greenish fluid, and having lamellæ projecting into its cavity.

Dr. Bagshaw brought forward a woman in whose subcutaneous tissues on each arm were a number of fatty tumours (about nine on each arm), there being none in any other part of the body. Some were the size of a pea, others of a bean, and they were distinctly fatty in their structure, mixed up, however, with a certain amount of fibrous tissue. The father and two sisters of the same family were thus affected. In one they had lasted eighteen years.

Dr. Murchison had seen a case of the same nature: three members of this family had been similarly affected with numerous tumours of a distinctly fatty nature.

The President had observed this multiplicity of fatty tumours in the same individual in the case of a brother and sister. In these cases they were chiefly arranged along the veins. The multiplicity of innocent tumours was of great interest, as malignant growths never attack the same individual simultaneously in more than one site.

Mr. Bryant showed a specimen of a fibro-plastic tumour removed from the fascia at the back of the leg. In the same patient another existed in the parotid region, and a third over the abdomen. Its characters were intermediate between those of a benign and those of a malignant growth; it had ruptured the skin, but not implicated it.

Dr. Wilson Fox remarked that a similar tumour had been encountered by Mr. Quain in the leg of a patient. It was also fibro-plastic, and recurred three times. Another of the same kind was found in the patient's mediastinum, and a third in the pelvis; these two had undergone fatty degeneration.

Mr. Moore asked if the limb had been amputated for the tumour. (Mr. Bryant informed him that excision and eversion had been employed.) Mr. Moore remarked that tumours of a non-cancerous character, when removed in early life, may, by repeated recurrence, become malignant.

Mr. Hulke asked Mr. Bryant's authority for considering the parotideal tumour fibro-plastic, as such were usually enchondromatous in their characters.

Mr. Bryant stated that he relied on the clinical characters only.

Dr. Murchison exhibited a hydatid tumour of the liver, ending in abscess, and giving rise to secondary deposits of a gangrenous nature. The condition was not known during the patient's life, and after death the odour of the whole body was excessively offensive. The lungs were not contaminated. There was a large tumour on the lower surface of the liver, and a separate one in front.

Mr. Hulke read a report, by himself and Mr. De Morgan, on Mr. Carr Jackson's case of tibial tumour. The cells were mostly spindle-shaped, but some were spherical, whilst some were greatly elongated. Many nuclei were present, and the intercellular substance was finely fibrillated. It was a specimen of a spindle-celled sarcoma.

Mr. Henry Smith exhibited the parts removed in a case of median lithotomy in a child aged 3 years. The stone lay in the bladder or posterior portion of the urethra, and after a consultation it was resolved to try median lithotomy. Great difficulty was encountered in getting into the bladder, as the child was very fat. The stone was small. It was removed; but in twenty-four hours the child died, apparently from shock. In the specimen there was not enough room to pass the finger, and he certainly considered that the operation was not so easy as the lateral one.

The President objected to too much Surgery being imported into the transactions.

Mr. A. Bruce exhibited portions of the ribs of a man who died in University College Hospital from emphysema, bronchitis, and heart disease. No injury to the ribs was known, but he had been run over by an omnibus some time before. When examined, the pleura was very thick, and near the angle of the fifth rib a hard mass containing a piece of bone existed. The ribs from the third to the sixth had been fractured, and in the fifth was a small hole, which was probably the source of the piece of bone found opposite it in the lung. A good deal of callus had been thrown out, and the bit of bone was very rough, probably from absorption.

Dr. A. Clark asked for the microscopic characters of the involving tissue, as it was usually of a fibrous nature.

Mr. Bruce said it was partly fibrous, partly corpuscular.

Dr. Andrew Clark then narrated a case of fatal hæmatemesis connected with thrombosis of the portal vein, the walls of which were calcareous, and its cavity obliterated by a clot. The patient was aged 53, and had suffered from hæmatemesis during the last year only. He died of exhaustion. Nothing else special was observed in the abdomen.

The same gentleman then produced the lungs of certain rabbits on which he had experimented as to the

INOCULABILITY OF TUBERCLE.

He had repeated M. Villemin's experiments at the time of their publication, and referred to them in his lectures at the College of Physicians last year; and had, moreover, some years before, with the assistance of Mr. Little and others, tried various experiments for the induction of phthisis. When pieces of fresh grey tubercle were introduced into a subcutaneous wound in the neck of the rabbit, a hard swelling or imperfect abscess formed at the spot in a few days, and in the course of two or three weeks, or even less, grey tubercles were formed in the lungs, and a little later in other parts of the body. These tubercles had all the naked-eye characters of the grey granulation in man, and so far he could testify from repeated trials that the experiments were conclusive. But the conclusions that the tubercles artificially induced were identical in nature with the grey granulation of man, and capable of indefinite propagation by inoculation, were to be received with the greatest reserve. For, in the first place, the grey tubercle artificially induced in the rabbit was essentially cellular in structure, whilst the ordinary grey granulation of man was essentially nuclear or corpuscular; secondly, the grey granulation of the rabbit was frequently absorbed; and thirdly, it never appeared to give rise to those secondary changes—pneumonia, fibrous degeneration, fatty usure, and emphysema, invariably induced, sooner or later, by the grey granulation in the lung of man. Lastly, Dr. Clark had succeeded in two instances in producing grey tubercle by the insertion of non-tubercular matter into the neck of the rabbit. Now, the experiments of the President differed from those of other experimenters in some points of cardinal importance worthy of the closest examination. (1) He made a slight wound; (2) he used yellow, not grey tubercle; and (3) instead of inserting little bits of tubercle, he used only rather more of the matter of tubercle than he would have done of lymph if he had been practising vaccination. The experiments, moreover, differed in one at least of their results; in the President's cases no swelling or abscess arose in the inoculated spot, one or other of which events had always happened in the hands of other experimenters. The President's experiments had been followed by the appearance of tubercle in the lungs and other organs; but as Dr. Clark had only cursorily examined the specimens, and as there existed the loosest notions as to what was and what was not tubercle, he reserved his judgment upon this important point. Dr. Clark, in conclusion, called the particular attention of the Society to the matter used for inoculation. When grey tubercle was used, one might form a sufficiently (but not quite) accurate notion of the uniform character of the inoculating material; but when, as in the President's cases, yellow tubercle was used, one could not form, without further explanation, any just idea of what was meant by that term. For it was demonstrable that the yellow deposits in the lung, indifferently called "yellow tubercle," were very various in their nature, and in the majority of instances quite unconnected with true grey tubercle. Such so-called yellow tubercles might be the cheesy transformation of inspissated pus, unabsorbed pneumonic deposits, syphilitic nodes, hæmorrhagic extravasations, embolisms, and the like. If a pneumonic deposit under the name of yellow tubercle could produce grey granulations, plainly the whole complexion of the case was changed. Lastly, if the insertion of pieces of tubercle into the neck of the rabbit was essential to the production of the grey granulation, the experiment was not a mere affair of inoculation, but of something else of which he had spoken elsewhere. Impure air and insufficient food soon produce in rabbits' lungs something like tubercle, but which is really the epithelial variety of pneumonic products.

Dr. Dickenson then read a report, by Mr. Sibley, Dr. Bristowe, and himself, on the President's specimens. The specimens were recent, and one lung was filled with an opaque white matter like crude tubercle, pretty evenly arranged, and with its granules projecting from the surface of the lung. In structure it was composed of cells, granules, nuclei, and earthy matter, some portions being mostly cellular, some granular. No grey tubercle was found, and the structure to the naked eye resembled crude tubercle. The only thing like it was pneumonic consolidation, but it certainly was not that.

Dr. Wilson Fox said that, on a question of so much

importance as whether the products of Mr. Simon's experiments were tubercles or not, he wished to demur to Dr. Andrew Clark's definition of tubercle as being corpuscular, meaning thereby nuclear, as capable of distinguishing it from growths containing cells. The examination of tubercle—that is, of the grey granulation in the lung—is very difficult from the fallacies to which the multiplication of epithelial elements gives rise. Dr. Fox stated as his belief that the grey granulations commence from the connective-tissue elements in the walls of the air vesicles and interlobular septa, but that in many cases, when forming rapidly, it as rapidly degenerated, and the resulting effects were often with difficulty distinguished from the yellow nodules of scrofulous pneumonia. When, however, grey tubercle is examined in other parts, as in the serous membranes or in false membranes upon these, it is essentially cellular in structure, though the cell walls are very delicate, and, breaking down with great facility, the nuclei easily are set free. The cells multiply, as a rule, by fissiparous division, and vary both in size and shape; some contain more than one nucleus, but, as a rule in these cases, single cells predominate, and approximate to the size and characters of the lymph cells, or white blood corpuscles. Dr. Fox doubted, however, whether in all cases tubercle of the lungs could at present be distinguished with absolute histological accuracy from all forms of pneumonic products.

Dr. Clark declared he would fall back on his specimens. All experimenters had used grey tubercle, the President had used yellow; by the former, what appeared to be grey tubercle was produced, by the President's method the latter had produced yellow. Why call it tubercle?

Dr. H. Greenhow objected that it might be the result of pneumonia in the lungs; but how did it originate in the mesentery and spleen?

Dr. C. J. B. Williams thought that the idea of tubercle originated by him was now coming out. A change of nutrition, it mattered not how produced, was at the bottom of the matter. The blood plasma was degenerate, and the results of this would first appear where nutrition was most active. He asked why the character of granular was restricted to miliary tubercle; it was common to deposits of pus, lymph, etc., all of which were subject to many subsequent changes. The report completely described the degenerative process, which was seen in perfection in tubercle. Tubercle was not produced by any peculiar substance; it was simply degeneration and subsequent deposit of the blood plasma.

Mr. Barwell narrated a collateral observation he had made whilst experimenting on the artificial inflammation of bone. The local changes alone had been noted at first, but afterwards the lungs had been examined, and a tubercular appearance detected. He had been struck with Dr. Clark's account of an abscess in the neck of the animals inoculated. Might not this be the cause of the pulmonary mischief?

The President, summing up, said that too much attention should not be paid to a name. Animals were inoculated with small quantities of matter—they die after months, and their lungs are found to be filled with a peculiar product. This looked like the result of contagion: what irritant could have done the same? Hence the idea of specificity could not be avoided. Many experimenters had used large quantities, as Lebert half a drachm to a drachm; hence the abscess was produced. Call it what you will, the results were incontrovertible as far as they went, subject, of course, to the definition of tubercle, which as yet was not exactly given.

Dr. Pye Smith exhibited a specimen of retro-peritoneal hernia encountered in the dissecting-room at Guy's Hospital. There had been no symptoms during life. The gut was found to have passed behind the superior mesenteric artery. A similar case was recorded by Mr. Hilton.

THE STATISTICAL SOCIETY.

Tuesday, April 16.

Dr. Guy read a paper on

THE MORTALITY OF LONDON HOSPITALS,

and incidentally on the deaths in the prisons and public institutions of the metropolis. The object of Dr. Guy was to show the necessity of great caution when we compare one Hospital with another situate within the limits of the same capital city, and a like caution in comparing the Hospitals of one country, or of one capital city, with those of another. The influence of size or site, of large or small pecuniary resources, upon the death-rate is small. Thus, if we take the London, St. George's, and Charing-cross—the first two of large size in open situations, the last small and joined to neighbouring buildings—in 1861 we shall find the death-rate of the three is 84, 83, and 83—almost identical. Again, in the case of St. Bartholomew's and Guy's, richly endowed, and University and King's, small and unendowed, the death-rates in 1861 were 110, 112, 113, 115, for King's, Bartholomew's, Guy's, and University respectively. As to influence of site: In the old dilapidated King's College Hospital the death-rate during 1840-44 was 80 per 1000, while in the new spacious Hospital, improved by the removal of nuisances, with better nursing arrangements, the death-rate for 1857-61 was 109 per 1000. Equal figures may result from unequal and wholly dissimilar combinations of causes. Thus, Guy's and St. Mary's, in 1862, have the same death-rate, 96 per 1000; in 1863, Guy's has a death-rate of 97; St. Mary's 98. Westminster and King's differ only as 101 and 103. In 1864 and 1865 the death-rates of Guy's, London, and Westminster present but little variation. The variation in the mortality is not influenced by causes within the Hospitals themselves, but is due to the causes which determine the nature and severity of the cases admitted, and principally by the proportion of *Medical and Surgical cases*. Medical cases present a much larger death-rate than Surgical. For example, in 1861 the death-rate for all cases ranged from 60 to 112 per 1000—for Medical from 77 to 187; for Surgical from 48 to 85. That Hospital which admits the largest proportion of Medical cases will have the highest death-rate. *Sex* has an influence upon the death-rate, males presenting a higher mortality than females in Medical and Surgical cases. *Special Wards*, having a much smaller death-rate, modify the returns. Thus, in 1864, of 5543 admitted into Bartholomew's, 617 died, or 111 per 1000; while in Guy's, of 4989, 480 died, or 96 per 1000. But there were only 848 admitted into the special wards of Bartholomew's, of whom 17 died; while at Guy's 1026 were special, of whom 12 only died. Deducting these special cases, Bartholomew's has a death-rate of 128 per 1000, Guy's of 118 per 1000. The modifying influence of Medical and Surgical cases is thus illustrated:—Of the 5543 cases, 2043 were Medical, 3500 Surgical, in Bartholomew's; while, in Guy's, of 4989, 1921 were Medical, 3068 Surgical. The death-rate of Medical cases in Bartholomew's was 196, in Guy's 151, per 1000; the death-rate of Surgical cases, 62 per 1000 in both Hospitals. *Age:* Age has great influence upon the death-rate, thus—

	Males.		Females.	
	25 and under.	Above 25.	25 and under.	Above 25.
Deaths	25	58	18	34
Recoveries	197	294	191	183
Total admissions	222	352	209	217
Deaths per 1000	113	165	86	157

It will be seen that the deaths per 1000 in persons above 25 greatly exceeds those under 25. *Mode of Admission.*—Free or by letter. Patients admitted by letter present a higher death-rate than free cases. In an equal number of cases at King's,

Letter patients, death-rate 184 per 1000.
Free " " 160 "

The mean residence of patients in Hospital rather indicates the class of patients admitted, than influences the death-rate. A short mean residence will bring with it a low death-rate. The main causes influencing death-rate are age, sex, and proportion of Medical and Surgical cases. The mean residence of Surgical cases is 34 days; of Medical, 30. It is probable that wealthy endowed Hospitals would keep their cases in longer than Hospitals supported with difficulty by voluntary contributions. Comparisons of different Hospitals should refer to the same year. How greatly years differ may be seen by the following table:—

	1861.	1862.	1863.	1864.	1865.
1. St. Bartholomew's	107	112	102	111	102
2. Guy's	94	96	97	96	93
3. St. Thomas's	98	97	103	125	101
4. London	84	76	87	105	89
5. St. George's	87	85	83	86	97
6. Westminster	98	103	91	106	92
7. King's College	107	101	123	151	126
8. St. Mary's	103	96	98	112	—
9. Royal Free	67	73	64	74	—
10. Charing-cross (three years)	83	87	77	—	—
11. Metropolitan Free (four years)	69	56	69	—	56
12. Great Northern (two years)	82	45	—	—	—

It would be obviously unfair to compare one Hospital with another by taking for one the highest rate of one year and for another a year presenting a much lower rate. We see that the death-rate in the same Hospital varies very much in different years. The year 1864 presents generally the highest death-rate, both Medical and Surgical; the lowest is in 1862. Do the death-rates of Hospitals coincide with those of other public institutions in London and of the districts in which they are situated in the several years? Dr. Guy gave tables to illustrate the fact that in the different districts the highest death-rate occurred in 1864, corresponding with Hospital returns, from which it appears that between the highest and lowest death-rates of Hospital and district there is such an amount of coincidence as fully justifies the assertion that one element in the mortality of our Hospitals is the population by which they are surrounded. If Hospitals drew their patients altogether from the district in which they are situated, this correspondence would be more exact. Cases from the immediate neighbourhood are the most severe, those from more remote districts less so, and those from the country, capable of removal from such distances, are obviously less acute. Public institutions present such a general resemblance as to justify the same general conclusion. *Diseases.*—As the year 1864 presents the highest death-rate in Hospitals, so we find in the same year the greatest amount of cases of bronchitis and of diseases of the organs of respiration. Tubercular diseases also correspond as to time. Zymotic diseases have their maximum in 1863 and minimum in 1861. Deaths in special Hospitals, as for phthisis and diseases of the chest, coincide with the general outdoor deaths from the same causes. Pulmonary consumption and bronchitis contribute largely to the excessive mortality in fatal years, and coincide in point of time in Hospitals, in other public institutions, and amongst the general public. The causes which influence the mortality of Hospitals may be thus summed up:—1. Causes affecting the applicants for admission. 2. Causes influencing the selection of cases. 3. Causes determining the fate of patients actually admitted.

Mortality of London Prisons.—Annual Mortality in London Prisons since 1850 *to* 1866 *inclusive.*

1850	. . 68	1856	. . 81	1862	. . 53
1851	. . 70	1857	. . 71	1863	. . 64
1852	. . 105	1858	. . 57	1864	. . 125
1853	. . 106	1859	. . 40	1865	. . 99
1854	. . 155	1860	. . 41	1866	. . 95
1855	. . 71	1861	. . 46		

These are the absolute number of deaths; the number of prisoners is not ascertained. The year 1864 has here also a sad pre-eminence. What is the cause of this? Other groups of institutions—workhouses, military and naval asylums, and Hospitals—coincide in displaying a minimum mortality in 1861 and a maximum in 1864. These coincidences are not accidental. Pulmonary consumption and bronchitis are the principal diseases causing the high mortality. The increase of deaths from phthisis in 1864 is very remarkable. In seasons of great severity deaths from phthisis are greatly increased. The year 1864, and in a less degree the following, were years of exceptional severity. The unusual severity of the last three years and its relation to the increased mortality are clearly shown by the reports of the Registrar-General. Pulmonary consumption is a disease which prevails to a remarkable extent among our convicts, so as to account for 44 to 48 per cent. of the deaths. The increase of deaths in prisons in 1864, and the high mortality of the two following years, are due in great part to phthisis, aggravated by the exceptional severity of the season in those years.

In the discussion which followed,

Dr. Peacock complimented Dr. Guy on his paper. He thought we could not draw an estimate of the efficiency of a Hospital from its death-rate, as so many different causes were in operation. Some Physicians had a higher rate of mortality than others, dependent upon the nature of the cases admitted. Some Hospitals took in patients only who were in advanced stages of disease, as Brompton, and had consequently a high death-rate; while Victoria-park Hospital selected only cases admitting of relief, and had a low death-rate. Large institutions with a small surrounding population—as county Hospitals—have a low death-rate; slight cases are admitted. Small institutions in the midst of a large population took in only severe cases, and had a high death-rate. Errors of calculation occurred by reckoning the number of beds instead of the number of patients.

Dr. Balfour said: The amount of cubic space allotted to each bed, and the means of ventilation, had great influence. Mortality from erysipelas thirty years ago was very large; but when alterations and improvements had been made the mortality was diminished—as, for example, at St. George's. Acute cases, which were soon well or dead, would give a different death-rate from chronic cases. Typhus and typhoid presented a large mortality. Dr. Balfour observed the same increase of mortality in 1864 in the army as in Hospitals—generally from fever, small-pox, and dysentery.

Colonel Sykes: Comparisons of treatment in Hospitals cannot be made from death-rate, as patients were admitted in various conditions. The weather had great influence. The pressure of the atmosphere, and the variations of the thermometer, etc., influence the sick. The deaths in the army at Hong-kong were attributed to the climate of that place, but, he believed, erroneously. Figures are not statistics taken alone, but must be considered with reference to surrounding circumstances. For example, at Sierra Leone the deaths in one year were 126 per 1000, but in another year they fell below the average death-rate of this country. Some Medical men like to send their patients away to die.

Dr. Balfour said the Medical men were not to blame at Hong-kong, but the military authorities. The troops were badly lodged, and fever broke out.

Mr. Glover thought the figures adduced by Dr. Guy insufficient, and constituting but a narrow basis for conclusions. Mr. Glover asked if the mortality in 1864 was equally high with the general public.

Dr. Guy said it was high, but not in the same degree.

S. Brown, Esq. (Vice-President), asked: Is there any possibility of recording the conditions in which patients were admitted?

Dr. Salter said: It made a great difference whether the patients were admitted by Medical officers or by a weekly board. In some Hospitals the board admitted weekly. Medical officers selected the cases for their severity. Dr. Salter thought bronchitis more influenced by inclemency of weather than phthisis. The admission of patients with bronchitis is more likely to lead to cure than the admission of patients with phthisis.

Dr. Druitt said: In Dr. Guy's paper underlies an exculpation of Hospitals. Many persons were of opinion that the collection of the sick in a Hospital was of itself an evil. Dr. Guy's analysis showed the various causes of mortality, and that the patients do not die of the Hospital. They are, in fact, useful and beneficent institutions. He thought that many Surgical cases would do better if treated alone than in Hospitals, as Hospital gangrene and erysipelas were serious drawbacks. Of course such affections as bronchitis were benefited by being in a Hospital.

Dr. Guy explained that when he said that the sanitary arrangements of London Hospitals did not influence the death-rate, he meant that in all London Hospitals so much attention was paid to those points, that a reference to them could not explain the difference of mortality in different institutions. Of course, such attention was highly necessary. No amount of cubic space would absolutely prevent the occurrence of Hospital gangrene or erysipelas. It may be that fever cases and Surgical cases would be better treated in tents, and completely isolated. The data of his tables were not narrow; they included calculations over a period of five years. The record of conditions referred to by Mr. Brown was impossible.

A vote of thanks was unanimously accorded to Dr. Guy for his paper.

NEW BOOKS, WITH SHORT CRITIQUES.

Acupressure. By William Pirrie, C.M., M.D., etc, Professor of Surgery in the University of Aberdeen; and William Keith, M.R.C.S.E., M.D., Senior Surgeon, Royal Infirmary, and Teacher of Clinical Surgery, Aberdeen. Illustrated. London: Churchill. Pp. 198.

*** It is no small praise for Scotland that two Surgeons in a remote school should have been the first thus practically to demonstrate the value of acupressure, suggested by Sir J. Y. Simpson as a hæmostatic adapted to ordinary cases. Up to the date of the publication of the above work acupressure might have been looked upon as a potential rather than as an actual power at the command of the Surgeon. It is so no longer; and, although the honour of introducing it remains with Sir J. Simpson, yet Doctors Pirrie and Keith have the credit of first fully and completely showing its practicability and value.

Quain's Anatomy. Edited by Sharpey, Allen Thomson, and Cleland. Seventh Edition. Two vols. London: Walton. Pp. 146.

*** This well-known work has assumed another guise. Thoroughly

BIRTHS.

BROADBENT.—On April 10, at 23, Upper Seymour-street, Portman-square, the wife of W. H. Broadbent, M.D., of a son.

HARRISON.—On April 10, at the Court-yard, Albany, Piccadilly, the wife of J. Harrison, F.R.C.S.E., of a daughter.

SIBLEY.—On April 12, at 12, New Burlington-street, the wife of S. W. Sibley, F.R.C.S.E., of a daughter.

WILLIAMS.—On April 14, at Kensington, the wife of Dr. L. Williams, of a son.

MARRIAGES.

EAMES—CARR.—On April 9, at St. Stephen's, Westbourne-park, H. Eames, M.B. Dublin, to Jane Catherine, youngest daughter of the late D. Carr, Esq., Hawke House, Sanbury. No cards.

GRIFFITH—STARBUCK.—On April 11, at Steynton, Pembrokeshire, G. Griffith, M.R.C.S.E., Surgeon in charge of troops, Milford Haven, to Mary, eldest daughter of A. B. Starbuck, Esq., Milford Haven. No cards.

LIGERTWOOD—BEATON.—On April 13, at the Scots Church, Halkin-street, Belgrave-square, J. Ligertwood, M.A., M.D., Newbury, Berks, to Eliza, daughter of the late A. Beaton, Esq., Auchencrieve Methlic, Aberdeenshire.

TRIMMER—NASON.—On November 9, at Nuneaton, Warwickshire, F. Trimmer, M.R.C.S.E., Okehampton, Devon, to Frances Elizabeth, youngest daughter of E. Nason, M.R.C.S.E., Nuneaton.

DEATHS.

ASSLIN, T., M.D., late of Colsterworth, Lincolnshire, on April 11, aged 39.

BARNETT, A., M.B.Lond., M.R.C.S.E., L.S.A., at Sandhurst, Australia, on February 14, aged 54.

MALLOCH, W. S., L.R.C.S.Edin., at Kirriemuir, N.B., on April 11, aged 41.

SIMPSON, A., M.D. (formerly Surgeon at Chaltor, Madras), at 8, South-crescent, Bedford-square, on April 10.

THOMPSON, M., late Surgeon-Major, Bombay Army, at Cheltenham, on April 7, aged 60.

VACANCIES.

CLAYTON HOSPITAL AND WAKEFIELD GENERAL DISPENSARY.—House-Surgeon.

WINDSOR ROYAL DISPENSARY.—House-Surgeon.

THE EDINBURGH CHAIR OF ANATOMY.—The curators of the University of Edinburgh met yesterday, for the election of a Professor of Anatomy, in room of the late Mr. Goodsir. The Lord Provost presided. There were three candidates for the appointment—namely, William Turner, M.B., Demonstrator of Anatomy, long an assistant to, and latterly a substitute for, Mr. Goodsir; John Struthers, M.D., at present Professor of Anatomy in the University of Aberdeen; and James Bell Pettigrew, M.D., first assistant in the Museum of the Royal College of Surgeons of England. The Lord Provost, in commencing proceedings, said that he had never had a more difficult duty to perform than to decide as regards at least two of the candidates. Dr. Pettigrew's qualifications were undoubtedly of a high order; he was a young man of great promise, and might look forward to a distinguished career in his Profession as an anatomist; but obviously he could not, on the present occasion, be placed in competition with the two others. For Dr. Struthers his Lordship could not but entertain a high esteem, both in respect of his talents and private character, and his testimonials from those who knew him best spoke greatly in his favour. On the other hand, there seemed to be preponderating reasons for electing Mr. Turner. That gentleman had conducted the anatomical class in Edinburgh for a period of thirteen years. He enjoyed the suffrages and affections of the students, the other Medical Professors in the College looked hopefully towards him as a coadjutor, and if the testimonial from Dr. Sharpey, of London, was to be credited, Mr. Turner was probably unrivalled as a teacher of anatomy, as well as for general scientific acquirements. On these various accounts, he (the Lord Provost) had, after much consideration and perplexity, made up his mind to propose Mr. Turner for the vacant chair. Mr. Turner was then elected Professor of Medicine and Anatomy in the University of Edinburgh, and the secretary to the curators, Mr. R. B. Johnston, was instructed to draw up his commission accordingly.—*Edinburgh Courant*, April 12.

PRIZE ESSAYS.—The annual award of prizes for essays on given subjects offered by the Council of the Royal College of Surgeons of England has just been made. It will be recollected that two subjects were offered for the Jacksonian Prizes of twenty guineas—viz., "Ovariotomy: Pathology and Diagnosis of Cases suitable for this Operation, with the best Method of performing it, and the Results of recorded Cases," and "Fractures into Joints; their Modes of Union, with the Treatment and Result. The dissertation to be illustrated by cases, preparations, and drawings." For the former subject Professor John Clay, M.R.C.S., L.M., and L.S.A., of Queen's College, Birmingham, was the fortunate competitor. This gentleman is already deservedly well known as a writer on ovarian diseases, and also as the translator and annotator of Kiwisch on the same subject. He is also the senior Obstetric Professor in Queen's College. For the latter prize subject it is stated there were no competitors. It is hoped there will be candidates for the Jacksonian Prizes offered for the present year on the following important subjects—viz., "The Injuries and Diseases of the Jaws, including those of the Antrum, with the Treatment by Operation or otherwise; the dissertation to be illustrated by preparations and drawings," and "The various Deformities resulting from Severe Burns on the Surface of the body, the Structural Changes occasioned by these Injuries, the best Modes of preventing Deformities, and the Treatment, Operative or otherwise, adapted to correct them; the dissertation to be illustrated by cases, drawings, photographs, and casts." The essays for the above, and also the Collegiate Triennial Anatomical Prize of fifty guineas, must be sent in on or before Christmas-day next. The following is the subject for the latter prize—viz., "The Anatomical Structure of those parts of the Eyeball which are contained within the Sclerotic and Cornea; with illustrations drawn from each of the five great divisions of the Vertebrata." Although the Collegiate Prize has been established since 1822, it has only been carried off six times—viz., in 1822 and 1825 by Joseph Swan, Esq., now a member of the Council; in 1840 by the late Dr. Thomas Williams; in 1843 by Holmes Coote, Esq.; in 1846 by the late Henry Gray, Esq.; and in 1858 by Dr. George Harley.

TRICHINOUS DISEASE IN AMERICA.—The Springfield (Massachusetts) *Republican* reports that six persons in a family residing in that town have been attacked with trichiniasis from eating uncooked ham. One case proved fatal. A post-mortem examination of the muscles disclosed the presence of thousands of trichinæ.

DISCREPANCY IN MEDICAL EVIDENCE.—STEPHENSON *v.* THE NORTH-EASTERN RAILWAY COMPANY.—The plaintiff, a timber merchant at Sunderland, sought in this action to recover compensation for injuries sustained in a collision with a mineral train at Sedgefield on December 8 last. The defendants paid £100 into court. The plaintiff's case was that since the accident, which at first appeared not to be of an alarming character, he had suffered from numbness and cramp, and had been unable to attend to his business for more than three hours a day. The case was remarkable for the conflict of Medical testimony. On the one side Mr. Francis and Mr. Welford, of Sunderland; Mr. Teale, of Leeds; and Professor Syme, of Edinburgh, were called, and described the injuries from which, in their opinion, the plaintiff was suffering. These consisted principally of a concussion of the spine, causing loss of power in the hands and arms, numbness, and inability to turn his head or the upper part of his body. In their opinion these injuries were not simulated, and the plaintiff was still suffering from the effects of the accident. On the other hand, Mr. Septimus Rayne, Dr. Murray, Dr. Humble, and Dr. Charlton, of Newcastle, and Mr. Nunneley, of Leeds, were called for the Company, and all gave it as their opinion that the plaintiff was, and had been for some time, quite well, and was only "shamming." In support of this view letters were produced written by plaintiff, from which it appeared that, notwithstanding the numbness of his fingers, he could write as well as ever. Upon his examination he winced when his spine was being examined, but subsequently allowed the same part to be pressed, while his attention was directed to something else, without the least sign of pain, and he was also subjected to the heat test without his knowledge, and he did not appear to be aware of it. It was also proved that he had walked some distance immediately after, and also two days after, the accident. The jury found for the defendants.

ANOTHER ATTEMPT BY A LOCAL BOARD TO SHIRK THE EXPENSES OF THE LATE CHOLERA EPIDEMIC.—At the last monthly meeting of the Musselburgh Town Council the Clerk read a communication which he had received from the Medical Practitioners of the town in reply to the objections raised by the Police Commissioners, as the local authority of the burgh, to pay the fees charged for attendance on certain patients during the prevalence of the recent epidemic, on the ground that these patients or their relatives were in a position to defray the expense without the assistance of the Board. The Medical gentlemen respectfully submitted that they were

not aware upon what information the local authority founded their allegation, it being at variance with their knowledge of the circumstances of each individual on the list. They therefore trusted the Board would reconsider their resolution on the subject. The Provost thought that the Board should not higgle over the matter, but pay the accounts at once. Several of the persons who the Board thought were able to pay he knew to be "as poor as Job." Mr. Thomson thought they had not a leg to stand upon in refusing to pay the Surgeons' accounts. So strongly was he impressed on this point, that he moved that the local authority should be instructed to settle the accounts immediately. Mr. Chalmers seconded the motion. Mr. Campbell objected. The Provost: Gentlemen, for the honour of the town you should be unanimous. Mr. Campbell: I for one will oppose it out and out. Mr. Scarlett was of opinion that many of those who ranked as paupers were quite able to pay, and moved that the matter should be delayed for another month, in order that inquiries might be made into the circumstances of the individuals for whom they were asked to pay. Mr. Campbell seconded the motion. Mr. Thomson said the expense on the public would be comparatively trifling, whereas it would fall very heavily upon the individuals charged. Mr. Campbell: That's all very well. We are here to act for the public, and we must do our duty to our constituents. The Provost: You should trust to the honour and honesty of the Medical gentlemen. Mr. Campbell: Oh, oh! I don't think so. On a vote being taken, Mr. Scarlett's amendment for delay was carried by a majority of 6 to 3, the Provost declining to vote.

Dr. Livingstone on Food and Work.—The following extract from a letter by Dr. Livingstone, relating to his last, and probably fatal, journey, is of interest as bearing upon the mutual relations of food and work:—"Trade paths have already been made, but we had both to heighten and widen them for camels and buffaloes. The people at the seacoast had declared that no aid could be got from the natives. When we were seven miles off we were agreeably surprised to find that, for reasonable wages, we could employ any number of carriers and woodcutters we desired. As they were accustomed to clearing away the gigantic climbers for their garden ground, they whittled away with the tomahawks with remarkable speed and skill. Two days' continuous hard labour was as much as they could stand. It is questionable whether any people (except, possibly, the Chinese) which are not meat eaters can endure continuous labour of a kind that brings so many muscles into violent action as this work did. French navvies could not compete with the English until they were fed exactly like the latter. The Maconde have only fowls, a few goats, and the chance of an occasional gorge of the wild hog of the country."

OBITUARY.

DR. KIRKPATRICK,

LATE HEAD INSPECTOR OF AGRICULTURAL NATIONAL SCHOOLS IN IRELAND,

died on March 20 at Torquay, in Devonshire. He was a native of Larne, where for many years he practised as a Doctor of Medicine, and was universally respected and esteemed. Being an early friend of national education, and also an active member of the committee of the Larne National Schools, he was led, upwards of twenty years ago, to conceive the idea of engrafting on the course of literary instruction usually given at ordinary schools a moderate knowledge of the theory and practice of agriculture. This scheme he worked out most successfully in the school at Larne, with the management of which he was then connected. At his suggestion, a few acres of land were leased by the committee as a model farm, on which the work was done by the pupils of the school, and where they practically exemplified the principles of agriculture which they had been previously taught within doors; but, at the same time, the strictest care was taken that the proper literary business of the school should not be in the slightest degree interfered with by the agricultural instruction. Having thus tested and proved his plan on a small scale, Dr. Kirkpatrick next took a few of his pupils (for they were indeed his pupils) to a great agricultural meeting, which was held about that time in Scotland. There they were examined by competent persons, both on literary and agricultural subjects, and in both departments acquitted themselves so admirably as to demonstrate to the satisfaction of every one who was present the feasibility of carrying on simultaneously in an ordinary school these two branches of education, without doing injury to either. The subject soon attracted the notice of the Irish Board of National Education, who determined to give the new system a trial on a much larger scale than had yet been attempted. For this purpose the commissioners made a considerable addition to their own model farm at Glasnevin, and also encouraged the organisation of an agricultural department in connexion with several of their schools in various parts of the country. At the head of the list of these schools was, of course, put the "Larne Model Agricultural National School," which was the first school of the kind that had been tried in Ireland; and, moreover, its zealous founder, Dr. Kirkpatrick, was shortly after appointed at a liberal salary to conduct the entire department of agricultural education in connexion with the National Board. This appointment necessitated his removal from Larne to Glasnevin, where Dr. Kirkpatrick resided for many years. The late Prince Albert, during the Queen's stay in Ireland, honoured the Model Farm with frequent visits, and afterwards distinguished Dr. Kirkpatrick with his personal friendship and regard. Of this he subsequently gave a flattering proof by presenting him with a handsome service of plate, in recognition of his claims upon public gratitude as the founder of the system of combined literary and agricultural education. At this time, also, the Model Farm, with the Prince's gracious permission, assumed its present designation—"The Albert Training Institution." After a lengthened service in this sphere of duty, Dr. Kirkpatrick was, about three years ago, obliged, by failing health, to resign the situation which he had so long held in connexion with the National Board. The commissioners received his resignation with much regret, and marked their sense of his zeal and assiduity by awarding to him the largest retiring pension which the rules of the public service permitted Hoping to derive benefit from a residence in a milder climate, Dr. Kirkpatrick at once removed to Torquay, in Devonshire. But his health was never restored. His life in Torquay—which extended over nearly three years—was that of an invalid; and at length, after a good deal of physical suffering towards its close, it was there finally terminated on March 20. In private life Dr. Kirkpatrick was deservedly much esteemed. His moral character was without a stain; his integrity was unimpeachable; his attachments were warm; his friendship was sincere. His greatest delight was in helping on deserving young men.—*Northern Whig.*

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

A Village Surgeon.—The name of the individual referred to has been for some time expunged from the register.

Larynx.—£1 15s.

Interment in Churches.—Consult "Baker on the Laws relating to Public Health." If the church be situate in a parish not under any Local Government Act, the giving permission to bury in a vault rests with the incumbent; but at any time, if the parish should come under the Local Government Act, or if the church and churchyard be complained of as overcrowded, no interment can take place without the special sanction of the Home Secretary. A late Dean was not allowed to be buried in his own cathedral.

Law of Interment.—A correspondent, in answer to an inquiry last week, suggests that application should be made at the office of the Medical Department of the Privy Council, Richmond-terrace, Whitehall; and cautions him that if permission be granted, it may subsequently, on the complaint of parishioners, be revoked, and the vault ordered to be permanently closed, as in our metropolitan churches.

The Fellows of the Medical Society of London have no wish to be hard on one of their late officers, although they think he exercises sound discretion in sending in his resignation. As for attempts to get that letter withdrawn, we are informed that they emanated from a small party in the Council, and are not sanctioned by the Society, which, in fact, could hardly commit itself to a course of action antagonistic to that taken by the Obstetrical Society.

Blood as Diet.—With reference to the suggestion of Dr. Wray, published in this journal last week, a correspondent informs us that some years ago he saw in one of the workrooms of the College of Surgeons several large glass jars containing biscuits, cakes, and sweets, in which the blood of several animals had been largely incorporated. Our correspondent adds that a French gentleman, who introduced the articles, sent them to the College from the Great Exhibition in Hyde-park.

Biography.—William Cowper, the discoverer of the glands bearing his name, died in 1709; and William Cowper, M.D., in 1767.

Caligraphist, Sheffield.—We find that "Timothe Brighte, Doctor of Physike," invented shorthand writing in 1558.

L.R.C.P.Lond.—Lord Lumley and Dr. Richard Caldwell founded the lectures bearing the name of the former, and Dr. Gulston those bearing his name, for which purpose he bequeathed £200 to the College of Physicians.

A Fellow.—In July next, when Mr. Partridge will preside. The vice-presidents are Messrs. Hilton and Quain.

Old Mortality is recommended to peruse the early volumes of the *Gentleman's Magazine.* In vol. i. p. 524, he will see the following epigram on a Physician called out of church :—

"Whilst holy pray'rs to heaven were made,
One soon was heard, and answered too :
Save us from sudden death, was said,
And straight from church Sir John withdrew."

L.S.A., Liverpool.—The prescription sent is thoroughly German. Pliny, in a very sly way, insinuates that the display of so many ingredients was "*pour faire valoir le métier,*" or "*ad ostentationem artis ;*" but Lord Bacon was, perhaps, nearer the truth when he said that the "multiplicity of remedies was the *child of ignorance.*"

John Ranley.—Cheselden had considerable taste in matters of art; the plan of Fulham Bridge was drawn by him. He was a very charitable man, and when the Foundling Hospital was first proposed he sent a benefaction with two lines from Pope—

"'Tis what the happy to the unhappy owe;
For what man gives, the gods by him bestow."

Bibliopole.—There is a small copy of Sydenham's works with manuscript notes in the College of Physicians. It belonged to Sir John Pringle, who always carried it with him in his carriage. Sir John presented it to Dr. Moore a short time before his death, saying it contained the essence of all he knew of Medicine.

Feigning Death to Defraud an Insurance Company.—The New York correspondent of the *Times* sends home the following :—

"An extraordinary conspiracy against insurance companies has been brought to light. A man named Richard Rainforth insured his life last year in three offices for the gross sum of $14,000. On February 22 he died, as was alleged, at Chicago, of typhoid fever, and a will was found devising his property (which consisted of the amount of insurance) to certain persons named as executors. A brother of Rainforth came to Chicago to make inquiries into all this, and from what he heard he arrived at the belief that the deceased had met with some foul play. The detectives were set to work, and they succeeded in unravelling the following series of incidents :—Rainforth and the executors named in his will were all concerned in a scheme to defraud life insurance companies. The first part of the plan was that Rainforth should insure his life and die. A few months after the policies were completed Rainforth pretended to be taken sick, and was put to bed. A Medical man who attended him, and subsequently signed the certificate of death, was an accomplice in the plot. In the afternoon of the day of the supposed death another Medical man was called in for a consultation, and it is stated that he examined the patient, and gave it as his opinion that he could not survive thirty-six hours. A barber was sent for to shave off a moustache and beard which the sick man wore, for, as he said, 'he did not fear death, but he desired to die clean.' At half-past 5 o'clock, several persons being in the room, Kendall, one of the party, cried out, 'Poor fellow, he is gone!' At that hour he died—that is to say, he disappeared. The Medical man laid out the corpse. At 7 o'clock Rainforth was no more, and a body was brought in from the Hospital and laid upon the bed. It has since been discovered that Rainforth is in frequent correspondence with his executors, and with a young woman whom he was courting; but he has not yet been arrested, and the insurance companies have probably lost their money. In a car this afternoon I heard a man say to another that Rainforth and his colleagues were 'real smart men,' and no one can deny it."

Bromine in Hospital Gangrene.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In a back number of the *Medical Times and Gazette* you, or one of your correspondents, mention that bromine has been found much more useful in the treatment of Hospital gangrene than nitric acid; will you be so good as to let me know how it is used? May bromine not also be more useful than nitric acid in the treatment of such diseases as cancrum oris, noma, and other semi-malignant diseases?

I am, &c. T. D.

The Death-rate from Small-pox.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will any of your correspondents oblige me by answering in your next impression the following questions?—

1. What was the percentage of deaths in England from small-pox before the institution of vaccination?
2. What is the percentage now?

April 16. I am, &c. INQUIRER.

Query as to Cholera.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—There is a case of cholera on board ship, to which Professor v. Pettenkofer attaches much importance apparently, as he has quoted it more than once. He says the *Carnatic* was lying in Madras Roads; that the officer commanding some troops to be embarked in her, hearing there was cholera in Madras, marched his men through that place and had them put on board without a halt; that the ship weighed, and there was cholera on board; that it was confined to the seamen; and that the soldiers (not having brought the infection from shore with them), although they attended on the sailors, and were at times covered with their dejections, did not suffer. In the account of the *Carnatic* given in the 1820 edition of Jameson's report, nothing is said of soldiers being marched through and embarked at Madras, or of the soldiers attending on the sailors, or of difference of condition of the two classes of men. Perhaps some of your readers may be able to point out the source of the story? Von Pettenkofer's details are so specific that he must have read them somewhere.

I am, &c. J. MACPHERSON, M.D.

35, Curzon-street, W., April 10.

Acarus Scabiei.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—May I beg of you a short space for a word to "X. Y. Z.?" I thank him very much for his remarks on the habits of the Acarus scabiei. I fear he is not a practical man, or he would not have occupied so much of your time and paper without replying to the gist of my question—the disinfecting the clothes of persons who have had the itch. He says neither the male nor female acarus can convey the disease by means of the clothes. Will he kindly tell me whether his organised dust or ova have that power? If not, it appears to me the washing of linen and clothes of persons who have been suffering from the itch is perfectly unnecessary. I shall be glad if "X. Y. Z." will give an explicit reply on this point.

I am, &c. C. L.

Organic and Inorganic Chemistry.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The letter of Dr. Blake, April 13, revives an interesting discussion which Dr. Blake ably took part in. As an outside observer, very little versed in chemical science, perhaps it may be allowed me to venture a few remarks. Although it must be acknowledged that chemistry has made great advancement and discovery in both divisions under *savants* of the present age, yet I think it will be granted that the most talented and experienced professor has never entered the sanctum or secret treasure deposits of either department. This is easily proved. The chemist of the present time cannot make gold more than the alchemist of the past. Can he make a bone, a muscle, a nerve, an acorn, or an ovum? We know the latter are made under a life process, and endowed with something equivalent to intelligence to direct the one how to become an oak and the other an animal. These productions and all things having life apparently are traceable to the fiat of the Creator, and seem destined to elude any demonstrative chemical research. The animal and vegetable productions, too, whatever their structure and composition, when unconnected with life, then become liable to chemical law and pass into new forms. Whether life itself may be compared to an intelligent and working chemist in his laboratory selecting his materials and making this and that article is a question. I conceive Dr. Blake's views go to that point.

Nailsworth, April 16. I am, &c. T. S.

Blood as Food.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I am obliged to you for inserting my communication on the blood in your journal. I hope you will allow me, in your next number, to make a few remarks.

Since then, I have had three kinds of soup made, two as common soup, and one to mix with any mess of food, potatoes, and meat, which would be of great use to the poor. The soup was made by Mr. May, a respectable confectioner, of Lower Tulse-hill. I named the soup *soupe au sang de bœuf,* and *jus au sang de bœuf.* It has been tasted by a highly respectable and orthodox clergyman, who requested some of it to be sent to his house. It was also tasted by several Medical friends and others, who all expressed themselves perfectly pleased with it. I hope none of your readers will think that I wish to make use of blood without its being properly cooked. I am perfectly convinced that a certain quantity of blood mixed with the food at various public institutions, if once tried, would be greatly used. Prejudice would give way in time.

I have ascertained, since my last communication, that more ox blood is used in making black puddings than pig's blood. If, during the famine, pure blood had been made into black puddings, they would have offered great nourishment to the poor, who have never objected to them.

Being somewhat of a sailor myself, having seen the scurvy, I think the proper prepared blood would be more useful in that disease than the lime-juice.

I beg to send an extract from the book entitled "Schools and Schoolmasters," by Hugh Miller, page 104, which shows that my proposal is nothing extraordinary; but I was unaware of the facts until my worthy friend the clergyman pointed it out to me :—

"On more than one occasion, I shared in a not unpalatable sort of blood pudding, enriched with butter, and well seasoned with pepper and salt, the main ingredient of which was derived through a judicious use of the lancet from the geld cattle of the farm. The practice was an ancient and by no means unphilosophic one. In summer and autumn there is plenty of grass in the highlands, but of old, at least, there used to be very little grain in it before the beginning of October; and the cattle could in consequence supply themselves with a competent supply of blood from the grass, when their master could not eat grass."

I am, &c. SEPTIMUS WRAY, M.D., M.R.C.P.

A Case of Croup treated by Topical Application of Solution of Nitrate of Silver.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I shall feel obliged by your inserting the following report of a case of croup in your journal, provided you deem it worthy of publication.

I was called, late in the evening of March 22, to visit a child, aged 4 years, who had been visited previously by a Medical man, who considered the case so totally hopeless that nothing was prescribed. When leaving, he is reported to have said, "Call at my place in six hours to say when baby died." At the expiration of the period mentioned, the father of the child called and found him from home; as the little sufferer was still living, he requested that I should see it. I found my patient almost moribund; pulse 160, small and thready; respiration loud, harsh, and 45 in the minute; loud bronchial râles all over the posterior part of both lungs, eyes staring and pupils dilated, face dusky, the entire body suffused with a cold perspiration, incessant thirst; the bowels opened freely by a dose of senna infusion.

I prescribed ipecac. gr. x., tart. ant. gr. j., ft. pulv. mitte ij., one to be taken every hour. Vomiting speedily supervened, followed by great prostration; so much so, that I regretted prescribing them. The symptoms became aggravated; death certain. I sopped a piece of sponge, securely fastened to a rod of whalebone, in a solution of nit. argent. (40 grs. to the ounce), and, after drawing forward the tongue and tilting up the epiglottis, easily passed it down the rima glottidis, and moved it about three or four times. Violent vomiting ensued, and with it large quantities of a membranous substance streaked with blood came away. The child appeared easier, and soon

after fell into a sound sleep, interrupted occasionally by efforts at vomiting. I applied two small blisters, one on each side of the thyroid cartilage, and allowed it to remain quiet. In about three hours the child suddenly awoke, and called loudly for water, of which it took a hearty draught, and fell over again. At 7 o'clock on the morning of the 23rd, I found my little patient apparently improved; pulse 120, small and thready; face less dusky, respiration easier, bowels freely purged. The blisters were dressed with ung. hyd. fort., and a portion of the same ointment the size of a bean rubbed in on the arm-pits and groins night and morning. I also ordered one grain of calomel every two hours. At 2 p.m., the face assumed a livid colour, and the respiration very laboured. I passed the sponge as before, after being well sopped in the caustic solution, and large quantities of muco-pus came away. No vomiting, as I believe the child was unable. I ordered beef-tea and wine. At 5 p.m., easier, but exceedingly weak; continue the calomel, beef-tea, and wine. At 9 p.m., much easier and sleeping, but teased with a dry harsh cough, which is aggravated by the least annoyance; continue as before. About midnight a sudden change for the worse; all the appearances of collapse supervened, and I left thinking a few minutes would end matters. In the course of an hour I was summoned again, and found life still there, but that was all. By-and-by reaction began to appear, and by 7 o'clock a.m., on the 24th, it was perfectly established. At 10 a.m., the child took beef-tea and wine freely; cough teasing, and the expectoration difficult to get up. Calomel was stopped in consequence of frequent loose stools, and the following substituted:—Infusi senegæ ʒiv., ammon. spir. arom. ʒij., syrupi simplicis ʒj., a teaspoonful every third hour. At 5 p.m., hanging in the balance; bronchial râles all over the chest, respiration easier.

25th.—Passed a quieter night than any yet; appears better; a less dusky hue about the face; extremities warm; passed large quantities of urine during the night; bowels open; getting up mouthfuls of tough phlegm. Continue beef-tea and senega mixture; stop mercury both externally and internally. At 12 a.m. much improved, and eats soft solids; the posterior portion of both lungs rubbed with a stimulating liniment.

26th.—Pulse 110; respiration 30; bronchial râles less, and expectoration much easier. Continue the medicine as before.

27th.—Slept well all night; bowels purged; cough annoying when awake, and aggravated on the least disturbance; takes food readily. To continue the senega mixture as before.

28th and 29th.—Pulse 98, full; respiration almost free of obstruction, and bronchial râles entirely gone, except at the base of left lung. Repeat the stimulating liniment, and continue the senega mixture with beef-tea.

30th.—Almost convalescent; no difficulty in respiration; eats greedily anything he gets. Discontinue the senega, and substitute tinct. ferri ʒj., aquæ puræ ʒj., syrupi simplicis ʒj., a teaspoonful three times daily.

31st.—Was foolishly exposed to a cold draught by the mother, yet suffered no bad effects.

April 2.—Took my leave to-day of my little patient, who was amusing himself, having suffered nothing from the exposure the day before.

This is the first case of croup in which I have fully tried Mr. Horace Green's method, and I have some reason to think my patient owes his life to it. About six years ago I opened the trachea of a child labouring under the same symptoms, but only with temporary relief. Two years after another case of croup presented itself, much resembling the one I have given you the notes of. I opened the trachea, and death took place four hours afterwards. I need hardly say how difficult it is to obtain the sanction of parents to this method of treatment, but I have no hesitation in saying that when it is used freely and vigorously in the early stage of croup death will be the exception and not the rule.

Belfast, April 3. I am, &c. O. P. O'HARE, M.D.

COMMUNICATIONS have been received from—

Dr. ARNOTT; Mr. BENSON; Dr. MORRIS; Dr. BATEMAN; C. L.; INQUIRER; Dr. MITRA; Mr. ROBERTSON; Mr. BYWATER; T. S.; Mr. POLLOCK; Dr. DOWNIE; LARYNX; Dr. BEIGEL; Mr. J. N. RADCLIFFE; Dr. B. W. RICHARDSON; Dr. HUGHLINGS JACKSON; Mr. E. BELLAMY; Mr. J. CHATTO; Dr. CHOLMELEY; Dr. BURROWS.

BOOKS RECEIVED—

Sussex County Lunatic Asylum Report—Report of the Wilts County Lunatic Asylum—Beraud's Atlas of Surgical and Topographical Anatomy, Part II—Staffordshire Asylum Report.

NEWSPAPERS RECEIVED—

The City Press—Laboratory, No. 2—Scotsman—Norfolk News—Medical Press and Circular.

VITAL STATISTICS OF LONDON.

Week ending Saturday, April 13, 1867.

BIRTHS.

Births of Boys, 1048; Girls, 1057; Total, 2105.
Average of 10 corresponding weeks, 1857-66, 1961·1.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	750	622	1372
Average of the ten years 1857-66	693·7	652·4	1346·1
Average corrected to increased population..	..	..	1481
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,388	3	4	6	2	7	10	3	..
North ..	618,210	11	3	7	3	15	17	3	..
entral	378,698	6	1	2	1	7	6	1	..
East ..	571,158	16	1	4	1	10	13	5	..
South ..	773,175	9	4	6	..	11	8	6	..
..	2,803,989	45	13	25	7	50	54	18	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·652 in.
Mean temperature	46·7
Highest point of thermometer	58·9
Lowest point of thermometer	34·5
Mean dew-point temperature	40·1
General direction of wind	W.S.W.
Whole amount of rain in the week	0·46

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, April 13, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending April 13.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending April 13.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	2105	1421	1372	58·9	34·5	46·7	0·46	46
Bristol (City) .	165572	35·3	119	74	‡57	56·8	33·3	46·8	0·66	67
Birmingham (Boro')	343948	43·9	255	167	144	57·0	36·0	47·3	0·66	67
Liverpool (Borough)	492439	96·4	365	285	263	57·2	38·5	47·7	0·42	42
Manchester (City) .	362823	80·9	290	205	‡204	57·0	32·5	46·7	1·38	139
Salford (Borough) .	115013	22·2	90	58	64	55·6	34·0	46·0	1·20	121
Sheffield (Borough).	225199	9·9	174	119	95	58·7	36·6	45·4	1·31	132
Leeds (Borough) .	232428	10·8	143	118	103	57·5	33·0	46·3	0·48	48
Hull (Borough) .	100740	30·0	81	49	34	..	..	..	..	..
Nwcstl-on-Tyne, do.	124960	23·4	80	66	60	54·0	37·0	44·8	0·26	26
Edinburgh (City) .	176081	39·8	118	85	101	53·7	36·0	44·8	0·70	71
Glasgow (City) .	440979	87·1	401	257	284	52·8	34·8	44·7	2·16	218
Dublin (City and some suburbs) .	319210	32·8	162	‡157	215	57·7	32·5	47·9	0·40	40
Total of 13 large Towns . . .	6187764	34·8	4383	3061	2996	58·9	32·5	46·3	0·84	85
					Week ending April 6.	Week ending April 6.				
Vienna (City) .	560000 (1863)	..	..	..	361	..	..	§43·7	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·652 in. The barometrical reading increased from 29·20 in. on Monday, April 8, to 30·05 in. on Friday, April 12.

The general direction of the wind was W.S.W.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 48·6°.

APPOINTMENTS FOR THE WEEK.

April 20. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

METROPOLITAN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH, 7½ p.m. Meeting.

22. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

23. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ETHNOLOGICAL SOCIETY OF LONDON, 8 p.m. Meeting.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Dr. George Johnson, "On the Pathology and Treatment of Cholera." Drs. M'Cloy and Robertson, "On the Treatment of Cholera."

24. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 2 p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.

HUNTERIAN SOCIETY, 8 p.m. Mr. Hinton, "On the Present Means of Diagnosis in Aural Surgery." Dr. Hughlings Jackson, "On Cases of Apoplexy."

25. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

26. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.

QUEKETT MICROSCOPICAL CLUB (University College), 8 p.m. M. J. Higgins, "On Otolithes of Fishes." Ernest Hart, President, "On the Minute Structure of the Iris." Dr. Halifax, "On Sections of Insects."

ORIGINAL LECTURES.

LECTURES ON CLINICAL MEDICINE.

Delivered at La Pitié,
By PROFESSOR BÉHIER.

Lecture I.

After paying the customary tribute of praise to his predecessors in the Chair of Clinical Medicine—Drs. Piorry (resigned) and N. Guillot (deceased)—the Professor proceeded in the following terms :—

Gentlemen,—When, last year, the public was informed that several indispensable changes were about to take place among the Professors of our Faculty, it was confidently asserted by certain persons that the Paris School of Medicine was altogether decayed, and had, in fact, almost entirely ceased to exist. But, as regards the causes of this decline, widely different opinions were brought forward. According to some critics, the general tendencies of the Faculty were at the root of the evil—our School being entirely devoted to Materialism. Our opponents, of course, consider themselves as the representatives of the most orthodox Spiritualism.

This accusation, gentlemen, leaves me altogether unmoved. I feel, in this respect, like the man who, being asked whether he was a Jansenist or a Molinist, quietly replied, "No ; I am a carpenter." When I am asked "whether I am a materialist, a spiritualist, or an animist," I am satisfied to reply that I am a pathologist. In fact, these metaphysical denominations are entirely foreign to the science which we cultivate: the ideas which they represent, the questions which they suggest, lie beyond its pale. With theology and psychology we have no right to deal.

"As soon as the faculties of man," says one of our most eminent writers, (a) "begin to unfold themselves—as soon as he begins to extend the sphere of his inquiries, and to contemplate the outer world as well as his own individual being—certain facts . . . . are found to prove the absolute distinction of soul and body, by showing the absolute difference of their essential properties. While the body, in its organisation and life, is subject to fixed and immutable laws, which lie beyond the reach of the human will, the soul is essentially *free*, and is capable of resolving to act, and of acting, from motives entirely independent of the laws which rule the body. Fate governs the human being in his corporal existence. Freedom is his privilege in moral life. . . . . By what means is the union of soul and body accomplished, and how do they reciprocally control each other? Therein resides the *mystery*, to speak the language of religion; the *problem*, to speak that of philosophy."

With *mysteries* and *problems* we have nothing to do; religion and philosophy we do not pretend to teach. The properties of the body, which are distinct in themselves, are the only legitimate objects of our study; and as we are not commissioned to inquire whether in man they predominate over the properties of the soul or lie under their influence, *Materialism* and *Spiritualism*, as far as Medicine is concerned, are words without a meaning, and ought, therefore, to be expunged from our vocabulary.

Another and a still greater inconvenience arises from allowing these expressions to intrude into our scientific debates. Having chiefly been employed in controversy on religious subjects, they can hardly be uttered without leading us to mix up matters of faith with questions of science. Let this, gentlemen, never be your practice. Every man's conscience is, and ought to be, free. I profess the deepest reverence for the religious opinions of others; I cannot, therefore, allow *mine* to be criticised. In these matters, toleration is the foundation-stone of liberty. Science, on the contrary, has been created by discussion, and cannot prosper without it.

We have, therefore, nothing to do with the questions which one party at least among our opponents wishes to raise. We are entirely incompetent in this respect, and have only to deal with these matters as far as our personal conduct is concerned. "The Faculty is decaying from want of a general doctrine, which is nowhere to be found in its lectures. The Faculty has no method, no philosophical principles." Such, when divested of all circumlocutions, are the charges which another set of critics has brought against our School.

(a) M. Guizot.

Against this class of opponents we might set those whose strictures we have just been discussing; for if the doctrines of our Faculty are tinged with materialism and anti-religious intolerance, if these doctrines have deprived our school of the authority which it might otherwise have legitimately asserted, how can the Faculty be charged with having no principles at all? But the assertions of this fraction of our adversaries have been more than once contradicted by themselves in the course of this discussion. It is true that these critics boast proudly of their logic; but they exhibit a sad deficiency in their process of reasoning when, after taxing us with a total absence of philosophical principles, they blame us for being a physico-chemical school. We are therefore charged, in the same breath, with a total absence of doctrine and with a most deplorable doctrine, with absolute want of method and with an absurd and vicious method, and with anti-traditional tendencies. Like one of Beaumarchais' characters, we might exclaim, "Who is the dupe here?" It would be easy to bring other contradictions to your notice in the arguments of our adversaries, but let us rather examine the ground on which they take their stand.

The Faculty has no doctrine, no principles, no method, say they. But can any general doctrine be laid down in the present state of science, and during the period of transformation through which we are just now passing? Ought we to enforce a strict Medical creed, as indispensable to all true believers? Ought we to shut you up within the limits of pure vitalism, of transcendental animism, or of uncompromising organicism? Heaven forbid! Let us look back to a bygone period, and consider the loss of time which Galenism formerly inflicted upon science; and let us inquire whether, a few years ago, the reign of Broussais and his doctrines was really beneficial to the progress of Medical knowledge.

And let me here observe, gentlemen, that he who embraces an absolute doctrine is in general so completely led away by his views, that, in spite of the highest intellect, he may be induced to defend the most absurd opinions. Guy Patin, for instance, who was undoubtedly one of the cleverest men of his time, expended all his wit in a ridiculous endeavour to uphold the immutable notions of the Paris Faculty in his day. No, gentlemen; to bring down all science to the level of a despotic theory may be convenient for the sake of unity, no doubt, but the germs of progress are crushed in the effort.

The Paris Faculty, gentlemen, holds no other doctrine than that of free investigation; and, although it does not pretend to bring forward a synthetical synopsis of all the parts of science (which no one would dare to attempt at the present moment), the Faculty is convinced that the time of old-fashioned theories is past. This is true even in the case of organicism, such as it was interpreted not long ago. Theories, as our venerable master, Professor Andral, very properly observes, hold only a transitory sway; they must disappear when the progress of science has shown them to be insufficient. New and more perfect methods of investigation, bolder and more successful researches, have enriched natural philosophy. Physics, chemistry, and natural history have realised immense improvements, and, by assisting each other, have acquired fuller, more positive, and more substantial views. Experiments conducted by eminent and laborious minds have widely extended the field of physiology. After beholding this general progress, Medicine could not stand apart from the other branches of human knowledge. Our art has endeavoured to derive profit from the improvement of other sciences, and, adopting them as companions and associates in the great task, has employed *their* methods in the investigation of disease. Medicine incessantly appeals to physiology, physics, and chemistry, and constantly leans upon them in her onward progress. Such, gentlemen, is the tendency which our Faculty assists, favours, and approves, and our assent to these views is daily growing more complete, for therein lies our only expectation of making some progress in the studies which it is our duty to promote. But, although we both accept and invite these new allies, we have nothing to fear from them. We know how far they are to be trusted, and we feel justified in placing our implicit confidence in natural philosophers when we hear one of them—my excellent friend, Professor Gavarret—express himself on this point in the most moderate terms. Allow me to quote here his own words :—

"We hold it to be a self-evident truth that it would be absurd to seek the complete explanation of all the complicated functions of the animal economy in the laws of physics and chemistry: for it must not be forgotten that biology is an

independent science, and possesses its own special methods of investigating the characteristic phenomena of life—methods, the importance and utility of which must be openly acknowledged. Organised matter enjoys special properties, and gives rise to the manifestation of special forces."

Medicine has, therefore, sought to gain allies among the other sciences, knowing their value, their power, and the vast advantages to be derived from their assistance. Has Medicine been wrong in appealing to these new friends? Has their assistance been profitable or injurious to the healing art? Let us begin with physiology. Take, as an instance, the affections of the spinal cord. When I commenced my Medical studies, and even at a much later period, it was held fully sufficient to speak of *acute* or *chronic myelitis*, of *disease of the spinal cord*. When this had been mentioned there remained little else to say.

Bell, Magendie, Müller, Panizza, Longet, Brown-Séquard, have proved that the anterior roots are devoted to motion, the posterior to sensation; and have thus begun to afford us the means of localising, with some degree of accuracy, the morbid alterations of the spinal marrow.

Schiff, Van Deen, Ludwig, Volkmann have advanced a step further, and have shown that the central or grey substance of the anterior cord enjoys the property of transmitting *motion* independently of the white fibres, which, when separated from the central substance, lose their power of transmission. Is not this a most important result as regards the precise signification of the morbid changes which occur in the locomotive functions when the medulla spinalis is diseased? As to the impressions of *sense*, they are conducted both by the central substance and by the white fibres of the posterior cords; Bellingeri, Calmeil, Stilling, Van Deen have amply proved this.

Let me call your attention to a second example. We have at this very moment in our wards a female patient, who labours under that peculiar disease of the spinal cord which is now known under the name of *locomotor* ataxy (*Tabes dorsalis*). This person exhibits a singular modification of the general sensibility. In the lower extremities the sense of *touch* is entirely preserved, while all feeling of pain is altogether abolished. You may pinch her and prick her without her perceiving anything. If, on the contrary, the hand passes gently over these apparently insensible parts, its contact is readily felt. The experiments of Professor Schiff have taught us how this singular combination of symptoms is to be interpreted, for he has demonstrated that the grey substance of the posterior cords transmits the sensation of *pain*, while the white fibres are devoted to the transmission of tactile impressions. It is highly interesting to know this, for by possessing these data we are enabled to assert that in our patient the central substance is the principal seat of the disorder, and that the white fibres are almost entirely sound—a state of things which has been observed by Dr. Luys and Professor Freidreich.

What shall we say of the law discovered by Schroeder van der Kolk in 1847, and which establishes that whenever a mixed nerve furnishes motor fibres to a group of muscles, its sensitive fibres are distributed to the corresponding portion of the skin? Is not this a fact of great importance as regards the application of electricity to the cure of muscular paralysis?

Is not the discovery of reflex action a most important step, as regards the explanation of morbid sympathies and of certain cases of revulsion? This discovery, of which Prochaska and Legallois gave us a rough draft several years ago, has of late been fully developed, and has enabled us to explain a vast number of pathological phenomena, the real signification of which is now perfectly understood. Take, for instance, convulsions. Our knowledge of reflex phenomena now compels us to set aside the class of so-called *essential* convulsions. Epilepsy itself, since the labours of Brown-Séquard, can no longer be viewed as an essential disease. Vomiting in cerebral disorders, *vertigo a stomacho læso*, and many other morbid symptoms, hitherto little understood, though carefully observed, are now easily interpreted in the right sense.

Tabes dorsalis has also become perfectly clear since we are acquainted with this property of the nervous system; for the very act of *walking* is also a reflex action, in which the will only interferes when the process begins and when it stops.

And, lastly, gentlemen, the knowledge of reflex action has taught us to consider no longer as an extraordinary and inexplicable fact that paraplegia which arises from morbid alterations of the kidney, and to which our attention was first drawn by Rayer.

It would be an easy matter to multiply these instances, by which you can judge how vivid is the light which physiology throws on many interesting questions in Medicine. But I cannot dwell much longer on this subject. Let me only adduce one more—I allude to Professor Claude Bernard's admirable researches on the sympathetic nerve, and the revolution which they have brought about in one of the most important points in pathology.

Inflammation, as you well know, was formerly considered as an exaggeration of the vital properties of our tissues, an increased activity of the diseased organs. But the labours of Cl. Bernard have clearly proved that, far from being the result of exaggerated organic activity, inflammatory symptoms are derived from paralysis of the vasomotor nerves, those nerves being opposed to those of the cerebro-spinal system, as the Professor's experiments on the sublingual glands have fully demonstrated. Inflammation is, therefore, the consequence of a depressing, paralysing process, and not of a stimulating one.

As to fever, Dr. Marey has shown that it lies also under the influence of vasomotor paralysis, a state of things which, by diminishing the pressure in the arterial system, accelerates the circulation, and exaggerates organic combustion and other vital actions. Are not such results immense? and is Medicine wrong in leaning as it does on physiology, and borrowing from that sister science the information which no logical process of reasoning could ever supply?

As to physics and chemistry, they have both rendered great service to anatomy and physiology. They lie, in a great measure, at the root of the vast development which of late these two branches of biology have attained. Histology, for instance, rests entirely on the application of certain instruments, which physical science has placed at our disposal, to the study of anatomy. Now, as I have just endeavoured to convince you, anatomy and physiology are the most solid foundations of pathology: to assist these branches of science is to promote the progress of Medicine. To the science of physics we are again indebted for those admirable methods of investigation which we call percussion and auscultation; their value in diagnosis is fully known to you. To physics we are also indebted for our specula, for the laryngoscope, and for the ophthalmoscope, which my learned friend, Professor Gosselin, lately alluded to as one of the most important conquests of modern science.

The invention of the sphygmograph is due to the combination of physical science with mechanical ingenuity. You have often been able to appreciate in our wards the utility of that instrument. You remember, no doubt, one of our patients, in whose case the symptoms at first exhibited were of a doubtful character? Was he merely under the influence of a bilious attack or on the verge of typhoid fever? The pulse, when examined in the usual way, seemed to belong to that particular form which has been described as *bis feriens*, but of this we were not quite certain. The sphygmograph having registered its pulsations, they were found to exhibit the unmistakable curve of dicrotism—a fact which at once confirmed us in our opinion, and enabled us to predict typhoid fever. No doubt the progress of the disease would have soon enabled us to judge its character; but you will agree that it was far preferable to ascertain at once the real nature of the case.

The thermometer, another present made by physics to Medicine, is now in daily use among clinical observers, and substitutes positive data for the irregular appreciation of temperature by the hand, an instrument which varies in the impressions it conveys, according to the conditions in which the Physician himself is placed. You have lately seen in our wards two patients affected with pneumonia. In both the heat of the skin was intense, and it was difficult to perceive the changes which occurred in the course of the day by merely applying the hand to the surface of the body. Now the thermometer, used twice a day, has enabled us to trace the oscillations of temperature during the course of the disease. In one of these patients, the downward tendency of the curve which represents the external temperature has enabled us to predict a favourable termination within a limited space of time. In the other, on the contrary, the temperature remaining high, and rising considerably in the evening (although the difference was not easily perceived by the hand), while the local symptoms were rapidly subsiding, led us to suspect that tubercles were formed in the upper part of the lung—a suppo-

sition which we have unfortunately ascertained to be correct. I do not mean to say that in febrile diseases the thermometer alone is to be employed in appreciating the excess of temperature, but I wish to prove by this example that this instrument enables us to seize slight differences, which, although full of precious information as regards both diagnosis and prognosis, can hardly be perceived by the sense of touch.

Such, therefore, are the presents which we owe to the science of physics. Methods of exploration teeming with practical applications; instruments which enable us to examine deeply seated organs lying hidden, as it were, in the recesses of our frame; other instruments which by their precision serve to correct the inaccuracy of our senses: surely you will acknowledge these to be precious gifts!

Nor is this all. By going deeper into the study of life than was ever done before, physical science has discovered facts and laid bare hidden connexions which it is our duty to turn to account in our clinical studies, and in the solution of the problems which we have to discuss. We are now aware that in the animal economy there do not exist, as we formerly believed, a variety of different forces, but only modifications of one single agent, the various manifestations of which depend upon the form and structure of the organs in which they appear; moreover, these different modifications of the same power are equivalent among themselves, and can readily be converted into each other. We have at length understood that the peculiar organisation of living tissues explains the peculiar character of those modifications of the one universal agent which appear in them. We are fully aware of the futility of all attempts to prove the identity of *vital* and *physical* forces, and we are now convinced that between these forces the connexion which we have to discover is one of *equivalence* and not of *identity*.(b) In this direction a great step has been gained by recent researches on one of the most characteristic powers of the living frame—I allude to the contractility of muscular fibre.

We are now aware, in fact, that *muscular contraction* is the result of oxidation, taking place within the muscle itself, and that this process engenders either *heat* or *motion* in certain definite proportions which correspond exactly to the chemical combination which is the starting-point of the whole process.

If we apply these data in pathology to the various kinds of convulsions which we are called upon to observe, we find that if in *tonic* convulsions there is an evident increase of the temperature, it is because in such cases a simple muscular tension, without any corresponding mechanical result, has taken place; while in *clonic* convulsions, on the contrary, no heat is evolved, because the effects of oxidation are expended in producing motion.

Again, in fever, whatever its cause may be, physical science informs us that the increase of temperature is the result of increased combustion, and that the accelerated breathing which is generally found to coincide with fever is intended to promote the elimination of the products of this combustion by evolving a larger amount of carbonic acid gas than usual. So indispensable is this process, that when it fails, or is imperfectly carried on, the whole system is poisoned—a fact which must be carefully weighed, when we endeavour, in such cases, to interpret the symptoms observed.

And, lastly, the science of chemistry, which the friends of tradition have still more bitterly criticised, has changed, and still continues to change, the aspect of some of the most important questions of pathology. During the first thirty years of the present century, at the time when I commenced the study of Medicine, it was difficult to distinguish febrile affections from inflammatory disorders. But the splendid researches of Professors Andral and Gavarret on the alterations of the blood then made their appearance, and the clear and scientifically demonstrated exposition of the differences which the composition of the blood exhibits in these two classes of diseases has made it for ever impossible to confound them. At a more recent period, to speak only of things connected with the urinary excretion, chemistry has taught us to appreciate the importance of albuminuria and diabetes; chemistry has shown us the importance of that function of elimination which devolves upon the kidney, and the danger of the conditions which arise when certain substances, which result from the transformation of our tissues, and ought to be expelled through the kidneys, are retained in the blood. Much remains no doubt to be discovered on this point, especially as regards the precise composition of these substances, which, I am convinced, act as poisons on the system; but chemistry, at least, has informed us of the origin of these substances. To appreciate the usefulness of these data in the investigation of typhoid symptoms alone, you need only read Dr. Murchison's excellent book "On the Continued Fevers of Great Britain." Most of you, gentlemen, have already heard me express my views on this subject in my Lectures on Internal Pathology.

Such important results assuredly deserve to be taken into consideration. The Paris School has understood that all these discoveries amply demonstrate the utility of the auxiliary sciences in Medicine, although during this latter period we had too much neglected them. The Faculty approves this new scientific movement, and holds it to be a sound and healthy one; the Faculty believes that real progress lies in substituting experimental and positive data for the results of mere logical deductions, although these have been viewed as "the efforts of the noblest faculty of man." We are not afraid of being conquered by our physico-chemical allies, knowing as we do that if they attempted to overstep their proper limits they would find no ground to rest their feet upon; but we are convinced that their assistance is indispensable; and the fables which have been told about the terror and grief of the Paris School, the dangers to which it is exposed, and the oppression under which it groans, are about as true as the reports concerning the occult influences which acted upon our late elections. We might compare them to the visions of a well-known knight-errant, if we did not feel able to trace them to bitter and implacable adversaries.

It has been asserted that tradition and authority were being sacrificed to the influence of the physical sciences, and that their interference in biology had extinguished the light which former generations had handed down to us. These, gentlemen, are mere empty words. To annul or to forget the useful and incontrovertible notions which tradition has handed down to us is in no man's power. These, as Dr. Chalmers says, are scientific ideas, which, after having been controlled by the free examination of human eyes and the free labour of human hands, have entered the sanctuary of Truth, from which no power can remove them. Let those who fear it be comforted; no one thinks of attempting this. We respect in tradition all that deserves to be respected, and nothing more.

As to authority in scientific matters, Bacon said long ago, "*Non valet auctoritas nisi detur ejus ratio.*" I am fully of his opinion—*sine ratione nulla auctoritas*—and, like him, I am convinced that the true ancients are the moderns, who combine with the knowledge of antiquity the acquisitions of recent times.

What, therefore, do we find in the Faculty of Paris to justify these bitter, persisting, implacable, and, I may add, unfair attacks?

The fact is this, gentlemen: The misfortunes of life—age, disease, and death—have simultaneously deprived us of six of our colleagues. No doubt the lustre of the Faculty has been dimmed by these untoward events; but can all that has been thence inferred be held to be true? Some time will unfortunately be required before the brilliancy of our School can be entirely restored; for although we, the members of the younger generation, are full of zeal and ready to labour in the scientific field, our names are not yet invested with sufficient renown to fill up the void which our venerable masters have left behind them. But take patience, gentlemen; do not despair of the future. If constant labour and thorough devotion to the interests of science can accomplish it, that part of our task shall not be left unfulfilled; and let us hope, gentlemen, that some day our names will deserve to be coupled with those of our illustrious predecessors.

There is another point on which I desire to explain myself. Some persons seem to oppose the science of Medicine to the art of healing. They loudly exclaim that we want Practitioners, not men of learning. They even propose to introduce this distinction into the laws which regulate our Profession. Without discussing all these points, I wish to say that practice separated from science would soon collapse into stereotyped and old-fashioned routine. We do unfortunately meet occasionally with Practitioners of this description, who, after taking their degree, give up all communication with books and periodicals, and wrap themselves up in the observance of old-established customs, which allow their intellect to go quietly to sleep.

Science and art, gentlemen, cannot advance without mutually supporting each other; and here we find the means of

(b) Professor Béhier here alludes to the dynamic theory, and to the researches of Mayer, Joule, Béclard, etc.

appreciating the double influence of Clinical Medicine. It has, firstly, a scientific part to play. Clinics are at once the starting-point and the final terminus of science. From facts, clinically ascertained and analysed, the interpretations and theories of science are derived; but these notions are not accepted and naturalised in science till they have been controlled and sanctioned by clinical investigations. The chain is unbroken, as you see; and this process does not exclude that meditation which a friendly voice so lately recommended. Meditation, in fact, is never absent here. Few cases are published without being followed by considerations which are intended to fix their signification and measure their importance. Let no one be alarmed on this point. With the experience of the past to guide us, we shall certainly not fail here.

As to the other part which Clinical Medicine has to support—as to the practical and professional part—we are more specially interested with its care. It is our duty to teach you to recognise diseases, and to cure them, by showing you the rules which direct our Hospital practice, and by turning to your profit the efforts which we make for the recovery of our patients. We are well aware that it is our duty to make Practitioners of you, but we should not consider that duty as being fully performed if we did not make you Practitioners fully armed with scientific knowledge, and, above all, Practitioners accustomed to scientific investigations, and imbued with scientific tendencies. Such, in our opinion, is the best way to enable you to struggle against the unforeseen and unexpected difficulties of practice. To familiarise you with new ideas and new methods—to make them agreeable to you by proving their efficacy—is, in our opinion, a more effective means of elevating and extending your instruction than to make you spend your time (which our critics are so anxious to save, and do not wish to see uselessly employed) in studying Medical philosophy, history, and literature. Months, nay, years, would be required to master these portions of science; and would they remedy those evils which our opponents complain of? I doubt their efficacy, and advise you to remain sceptical on this point, like myself.

We were lately informed that the clinical section of the Faculty was terrified at this intrusion of physics and chemistry into the territory of Medicine. I did not occupy at that time a clinical chair, and the only remaining Professor who held one was our venerable master, Professor Bouillaud, whose colleagues had been struck down around him. I do not believe that the Professor ever evinced any terror on this subject; and, now that I enjoy the honour of sitting by his side and holding the same appointment, I am by no means afraid (as you have seen) of the introduction of those sciences into our own pursuits. Far from opposing them, I am prepared to receive them with open arms. They will not attempt to supersede clinical observations; I do not think that they ever cherished such projects, and I am certain that they never could realise them.

These same critics, who stand forward as the friends of Clinical Medicine, exclaim: "Our clinical Professors, are they vitalists? To say the truth, they scarcely know themselves. Let clinical observers arm themselves with firmness, resolution, and courage."

I must, no doubt, take my share of this exhortation Allow me to observe that at my age, and after the laborious life I have led, it would be lamentable not to know what my own opinions are, and whether I have any. Our critics, no doubt, know everything: they have the innate gift of science, and their productions are infinitely superior to ours. Let this be so. But they need not be so dreadfully alarmed at our own state. We know full well whether we are, and how far we are, vitalists. None of us has ever believed that in examining a sick man he was studying an automaton. No one has ever supposed that the heart was a wooden box with leather hinges. We certainly do believe in life, and strange people we should be if we did not; but instead of exerting ourselves in studying the essence of life, instead of sitting, pen in hand, before a warm fire, and reasoning on this subject, by heaping suppositions on each other, we seek our knowledge everywhere, observing man or making experiments upon animals, in order to seize, as well as we possibly can, the regular or irregular manifestations of life; and, knowing these results, we endeavour, as far as possible, to understand their cause. We do not exclusively appeal to the combinations which our mind draws from its own stores under the pretence that intelligence is the noblest attribute of man, and that to use one's own senses is to be a *sensualist*—little better, in fact, than a *materialist*. No: our modesty will not allow this. We know that our mind is subject to error, like that of our opponents. We therefore strive to control and correct the errors of our mind by the testimony of our senses. We combine them in order to make them correct each other. We use all possible means of investigation, and we employ the methods adopted in natural philosophy because we consider them as more satisfactory, and the results to which they lead as most certain. We use all the instruments which correct the infirmities and imperfections of the human organisation. But we are fully aware that we apply these methods and instruments to the study of *special properties*, which are the expressions of *special forces*, which produce *special phenomena*—viz., the characteristic manifestations of life. Such is the process we employ to arrive at the truth. And the truth we seek to possess is the knowledge of "those fixed and immutable laws to which the human body is subject in its organisation and life, and which lie beyond the reach of the human will."

We therefore know what we believe and what we purpose to do. We are not so ignorant of our own opinions as our critics affect to suppose; and if the methods we adopt in our investigations are different from theirs, we firmly believe these methods of ours to be the best.

You therefore see that these spiteful attacks are essentially unjust; they rest upon facts which are often entirely suppositious, and they often contradict each other. They have not, therefore, troubled much my peace of mind, nor that of my friends. Why, then, have I thought fit to notice them? Gentlemen, I have had two reasons for this. I have thought it my duty to put you on your guard against these evil influences. If I have properly understood the mission which I have to fulfil, it obliges me to say all that I consider as conducive to your good. You will often hear me speak of Professional duties, and inform you of the rules which must guide your conduct in dealing with your patients and their relatives. I was therefore obliged to show you that it was wrong to attack the Faculty, which at present directs your studies, at the very moment when that Faculty makes an effort to place itself in the van of science, and selects, to fill its vacant chairs, men in whose capacities it trusts, and who represent the scientific tendency which it approves. I felt myself obliged to tell you that we know our duty, and are fully decided to perform it. On the other hand, gentlemen, I wished to make known my Medical principles, and show you the path along which I shall endeavour to lead you. To appeal to all possible methods of investigation, whatever their origin may be, in order to arrive at the best and safest knowledge of morbid changes, and decide upon the best treatment; to adopt physiology as my principal guide; to accept as scientific truths those facts alone which the united testimony of the senses and of reason confirms—such, gentlemen, is my rule of conduct, such is my profession of faith. I trust that, by discussing these bitter and implacable attacks, I have sufficiently justified my own views.

In concluding, allow me to observe that in the press we have met with other critics, who have been preserved by a proper sense of justice from this systematic hostility. I am happy to acknowledge it, for I am certainly not one of those who are opposed to the intervention of the press in similar questions. I both love and honour the press, as one of the greatest and most powerful manifestations of human thought. I know and am ready to acknowledge that, like others, I may require its warnings, and can profit by the information it conveys. I am grateful for both, and I am happy to declare that many a time the Medical press has succeeded in changing my opinions; but, although I deeply respect the press when it respects itself, allow me to say that I do not fear it when it makes an improper use of its powerful weapons.

PROJECTED MUSEUM AT THE HÔPITAL ST. LOUIS.—M. Husson, the active Director of Public Assistance, has in view the establishment of a pathological museum of the remarkable cases occurring at the St. Louis. The idea arose from M. Devergie having made a donation to the Hospital of the collection of water-colour drawings of remarkable cases which he has made during the period he has been attached to the institution. To these he has added Hebra's magnificent plates, the whole being now placed under glass, and made accessible to the students. The other Physicians have contributed casts of interesting cases, and the Administration has undertaken to have models made of all cases deemed by the Medical officers of sufficient importance.—*Union Médicale*, No. 48.

ORIGINAL COMMUNICATIONS.

A SCIENTIFIC INQUIRY INTO SOME OF THE CAUSES ALLEGED TO PRODUCE ASIATIC CHOLERA.

By the Rev. SAMUEL HAUGHTON, M.D., F.R.S.,
Fellow of Trinity College, Dublin, and of the College of Physicians, Ireland.

(Continued from page 330.)

The Contact Theory of Cholera.

In the preceding parts of this Inquiry I have examined the alleged astronomical, meteorological, and terrestrial causes said to be capable of producing Asiatic cholera, and have also shown, historically, that previous outbursts of cholera in this country have been traced to distinct importations of the disease from the East.

Cholera travels from Asia into Europe, along the lines of human traffic, and improves its rate of locomotion as the facilities of human intercourse improve. It does not drop upon us from the sky above us, nor does it attack us from unknown causes in the earth beneath our feet, but is introduced *ab extra*, and inflicts its ravages upon the portions of our population prepared for its propagation by bad food, water, and air. Neither blue mist nor telluric influence travels in railway trains, or takes tickets in steamboat companies, but patients afflicted with Asiatic cholera do both, and so spread the deadly disease from country to country, and from man to man.

The contact theory of cholera requires two conditions, and two only, to be fulfilled—1. The introduction of the cholera germ, or *materies morbi*, from without; 2. The receptivity of the victim attacked by the cholera germ.

According to the contact theory, no case of Asiatic cholera can occur—at least, in Europe—without both these conditions being fulfilled, and the arguments against it are all based on one or other of the two following fallacies, which ought not to deceive even a tyro in the art of inductive logic:—*a*. Cases occur in which persons are in contact with cholera who do not take the disease; *b*. Cases occur in which genuine cholera appears among those who (according to the narrators) have not been exposed to contact with the disease at all.

The first class of cases is common to cholera, with other admittedly contagious diseases, but is worthy of no consideration, because only one of the hypotheses required by the contact theory is present; the *materies morbi* is present, but not the *capacitas morbi* on the part of the person exposed to it.

The second class of cases serves to place on record the ignorance of the narrators as to the channel or channels through which the *materies morbi* has gained access to those placed under their care, but is of little value from a theoretical point of view, except so far as it shows the want of sagacity of those whose duty it was to protect their patients (generally prisoners in a gaol) from the danger of infection by the cholera poison.

It is, perhaps, worthy of remark that this latter class of cases never occurs except during periods when the *materies morbi* exists, admittedly, outside the bounds of the institution made the subject of remark.

I shall now illustrate the contact theory of cholera by observations made by persons fully competent to judge of the facts of any inductive science, commencing with a remarkable case communicated to me by the Rev. Humphrey Lloyd, Provost of Trinity College, whose skill in physical research will not be disputed.

1. Dr. Lloyd wrote the following letter to me on Christmas-day, 1866:—

"Kilcroney, Bray, Christmas Evening.

"My dear Haughton,—Two brothers, named R——, occupied a snug house, with a patch of ground, in this neighbourhood, the property of Lord Herbert. The house is charmingly situated, on the summit of the high ridge which once formed the bank of the Bray river (some thousand years ago), with Lord Herbert's wood stretching beneath to the bottom of the valley. It is supplied with water from a delicious spring, is remote from every human habitation, and is, in all respects, salubrious. Its only other inhabitants were the maiden sister of the two brothers, their niece (a child), and a servant girl.

"The week before last the sister entrusted one of the brothers with £2 to purchase Christmas stores, but which he invested 'in drink.' In the condition resulting from this he was employed by the Bray Commissioners to clear out the filthy adjuncts of some poor houses in Bray, where cholera had been. In the evening of the same day he sickened and took to his bed. His sister, having heard of the loss of his money, refused to see him, but sent the servant girl to his room with a cup of tea. The next day the girl was attacked by cholera, and died the day after, December 14, I believe. The original patient died a day or two later, and after him his sister and his niece—all within one week, and all of the same disease; and now there remains but one tenant of the once snug home, the other brother!

"I send you the particulars of this case, because they seem to establish, in the completest manner, the 'contact theory' of the propagation of this disease.

"There was contagion, and there was nothing else, at least in three of the sufferers, to account for its progress.

"Believe me faithfully yours,

"Rev. Dr. Haughton." "H. Lloyd.

2. The next case was communicated to me by Dr. Leet, and proves the direct communicability of cholera from the sick to their attendants:—

"Private George Bristowe, 1st battalion 21st Fusiliers, a Hospital orderly in the cholera ward, Royal Infirmary, Dublin, went to bed on November 6, 1866, well. At 7 next morning an orderly, on entering his room to call him, found him very ill, and sent for me.

"Bristowe then stated that about 5 a.m. he was attacked with violent vomiting and purging, which was so incessant that he could not get out of bed to call for help; that he had no spasms of any kind, and now suffered from a feeling that he was going to die. The bed and floor were covered with vomited and dejected matters; the face dusky; the features pinched; eyes red and congested, black lines round the orbits; breath cold; tongue dry; temperature under it, 92° Fahr.; pulse thready; skin cold; hands livid and shrivelled; intellect clear; voice, a whisper.

"*Vespere.*—The algide state continued to increase, but no return of vomiting or purging, and he died at 10 p.m., November 7, of Asiatic cholera. Duration of disease, 17 hours.

"C. H. Leet, Staff Assistant-Surgeon.

"P.S.—This man had not been outside the Infirmary for weeks, and took cholera from the patients under his charge."

3. The next instances, and last that I shall give, illustrative of the "contact theory" are contained in the following letter from Dr. Charles C. King, Poor-law Medical Inspector of the Cork district:—

"21, Grand Parade, Cork, December 5, 1866.

"My dear Haughton,—A number of cases have been reported to me which are strongly in favour of the infectious nature of the present epidemic. This morning I received a report of a second fatal case, the only two which had occurred in Bantry. One man was attacked on the 1st inst., and remained for two hours before removal to Hospital in the same house that the second man took lodgings in, and within thirty-six hours he also was taken ill, and died in a cabin by the roadside about ten hours afterwards.

"A short time ago, a man returned to the neighbourhood of Kilrush, where cholera had not been, from Limerick, where cholera was. He was taken ill in Limerick, and hurried home to his own house, in a rural district, where he died. His mother, who attended him, died two days afterwards of the same disease.

"It is remarkable that these cases, occurring in pairs, have been the only cases in the Bantry and Kilrush(a) districts respectively; and are, I think, conclusive against the epidemic theory so far as they go.

"As far as I have observed, the usual latest period of the disease (I mean the period from exposure to seizure) is from thirty-six to forty-eight hours.

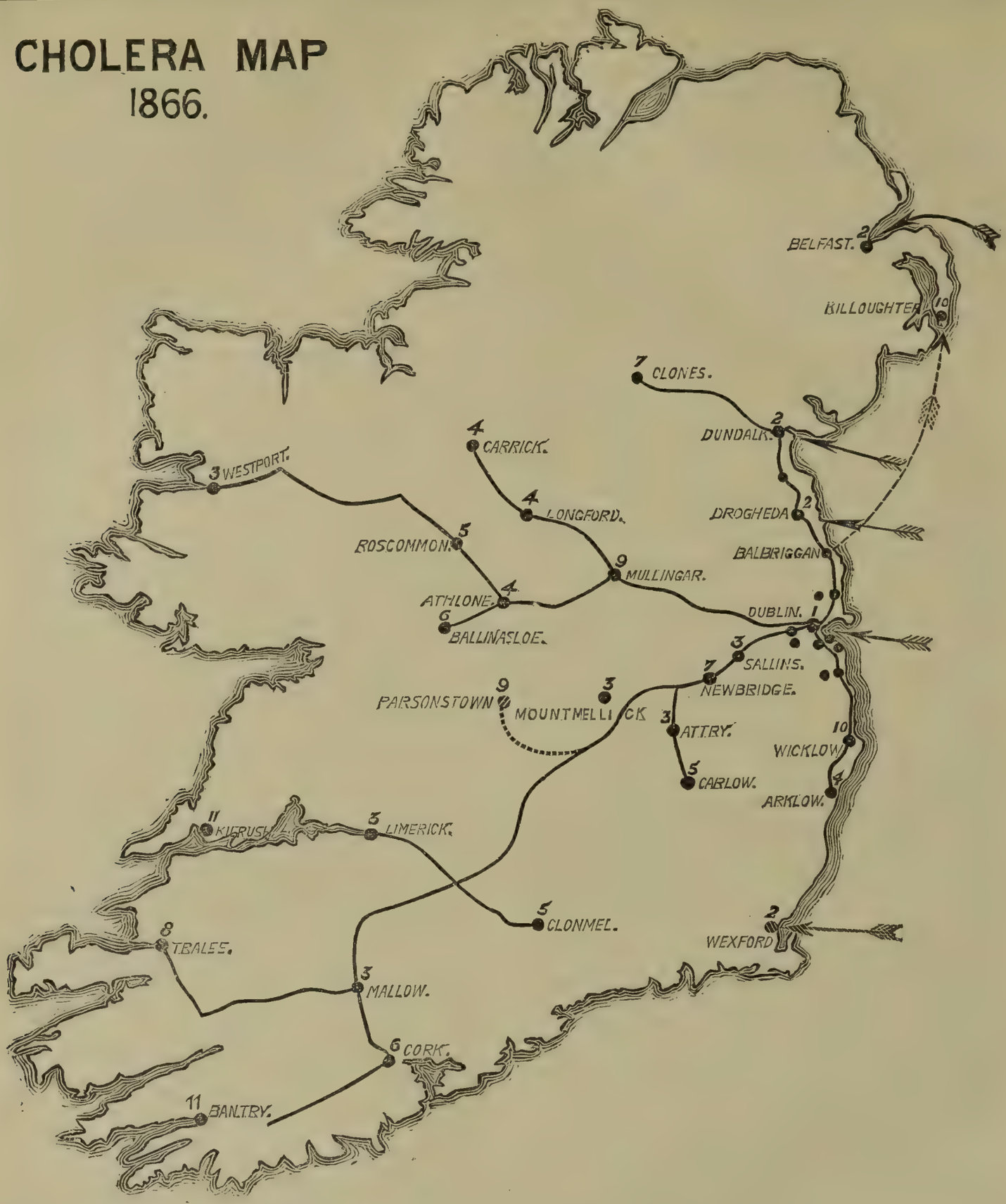
"Very sincerely yours, "Charles Croker King.

"Rev. Samuel Haughton."

I now proceed to apply the contact theory of cholera to the case of Ireland in 1866, and I believe that this case must be regarded by all unprejudiced inquirers as conclusive on the question.

The accompanying map shows the progress of cholera in Ireland in 1866; the towns successively attacked by the disease being numbered with Roman numerals in the order in which they suffered, and the origin of the disease being traced, in each case, to its importation by an individual sufferer.

(a) Bantry and Kilrush are small towns placed in the wildest and most remote districts of the west of Cork and of Clare respectively.



I. *Dublin.*—This city received its first case of cholera, as I have already stated (p. 164), in the person of a young woman named Magee, who imported the disease from Liverpool into No. 22, City Quay, from which point it spread all over Dublin and the suburban towns, destroying in six months 1193 persons. N.B. The total number of deaths in Liverpool from cholera was 1760.

II. The towns of the *second* grade are *Belfast*, *Dundalk*, *Drogheda*, and *Wexford*. Of these towns, the first three imported their cholera directly, by sea, from Liverpool, and the fourth town, Wexford, received its cholera, by sea, from Cardiff, in South Wales.

III. The towns of the *third* grade are *Mountmellick*, *Athy*, *Mallow*, *Westport*, *Sallins*, and *Limerick*.

In all these cases there was distinct evidence of the importation of cholera, either from Dublin or directly from Liverpool.

Mountmellick.—September 22, 1866.

Sallins.—September 26, a railway porter.

Limerick.—Before September 26.

Cholera was introduced into the neighbourhood of *Athy*, and into *Mallow*, directly from Liverpool; and its entrance into *Westport* was traced by those residing in the neighbourhood to importation from Liverpool.

IV. The towns of the *fourth* grade are *Arklow*, *Carrick-on-Shannon*, *Longford*, and *Athlone*.

V. The towns of the *fifth* grade are *Carlow*, *Roscommon*, and *Clonmel*. I traced the introduction of cholera into Carlow to a case imported from Dublin.

VI. The towns of the *sixth* grade are *Cork* and *Ballinasloe*. Cork was threatened, early in the season of pestilence, by the arrival of the *Helvetia* off the harbour, crowded with German emigrants, among whom cholera had broken out. The *Helvetia*

was ordered back to Liverpool, and imported the disease into that town, from which place it was subsequently introduced into Cork. Ballinasloe received its cholera from Drogheda.

VII. The towns of the *seventh* grade are *Clones* and *Newbridge*. Cholera was introduced into Clones from Dundalk, and into Newbridge from Dublin.

VIII. *Tralee*.

IX. *Mullingar* and *Parsonstown*. Parsonstown received its cholera by importation direct from Sheffield, in England; and this town and Wexford are the only places in Ireland that received cholera from any other centre than Liverpool, directly or indirectly.

X. *Wicklow* and *Killoughter*. The cholera was introduced into Killoughter, as shown on the map, by a herring boat from Balbriggan, and not from Belfast as might be supposed.

XI. *Kilrush* and *Bantry*. The cases of these two towns are described in the letter of Dr. C. C. King already given.

From the foregoing analysis, it appears that of the twenty-nine chief towns named—

Four towns received cholera by steamboat from *Liverpool*;

Twenty-three obtained cholera from *Liverpool*, either directly or viâ *Dublin*, *Drogheda*, and *Dundalk*;

One obtained cholera from *Cardiff*;

One obtained cholera from *Sheffield*;

and further, that in every case cholera showed a preference for travelling by railway trains, instead of trusting to epidemic influences.

SMALL-POX AND ITS PREVENTION IN JAMAICA.

By DAVID MILLER, M.D.

Having seen in this journal of December 22 a letter from Dr. Moriarty, of Limerick, giving his experiences of the climate and diseases of the Gold Coast of Africa, I think it right to give a short account of my own reminiscences of small-pox and vaccination in Jamaica, where I practised thirteen years, he having found the former extremely fatal, and the latter, as it would seem, almost impracticable to carry on with success.

In times previous to 1851, small-pox was little known, as might be seen from the smooth faces of the great majority of the population, those who showed marks of it being mostly either British-born, Portuguese immigrants from Madeira, or imported Africans. It appeared, from inquiries I made among East Indian coolies, that they had for the most part been inoculated in their own country, and traces of small-pox were certainly not common among them. In an evil hour a cargo of liberated Africans was sent in the *Brandon* to Jamaica to be employed as labourers. They arrived some time about May, 1851. Part were landed on the south side, and the remainder at Dry Harbour, in Trelawney parish, on the north. It would appear that the vigilance of the Medical Officer of Health must have been at fault, as soon after the negroes were transferred to sugar estates in the interior the disease appeared among them, beginning at Hyde estate. I do not know what attempts, if any, were made to arrest the progress of the infection at first, but, at all events, within little more than a year it had spread throughout the whole island, and became a destructive epidemic. The Medical men in Trelawney lived mostly in the town of Falmouth, and could not get much into the country to vaccinate, and the two practising in the country found it impossible either to get suitable remuneration or to keep up a supply of good lymph for any length of time. The people generally were willing enough to get themselves and children vaccinated, but they did not, or rather would not, understand the need of coming back at a specified time to meet the vaccinator.

By the end of 1851 various boards of health had got Government authority to give the different Medical men in their parishes some prospect of a pecuniary reward, so that they would not need to apply to the peasantry at all for payment. This removed one difficulty, but another remained—that of keeping up the lymph supply. I resorted to various plans. A pledge of 6d. or 3d. was sometimes exacted to insure the return of the vaccinated, or make it more likely; a higher sum was found a hindrance. At other times a string of glass beads, a silver finger-ring, or a pocket knife was kept, and restored the following week. At other times I paid boys and girls who had been vaccinated to go with a supply to some village where operations were to be commenced. I got a young man who had been vaccinated to act as servant on the eight day, and on one occasion a white lady who had been vaccinated gave the use of her arm for about thirty of her black and brown neighbours. In this way I got on famously at times, and could get over some hundreds in a day. After some months the supply of lymph failed altogether, from the people's selfishness and carelessness combined, as well as from the inability of Practitioners to follow after cases. Finding small-pox still increasing, I resorted to inoculation in about 700 cases with very good results to the inoculated, as might be expected, but very bad ones to those who would not submit to the operation. In a village where a half or two-thirds were inoculated only those well vaccinated already could escape. I used the variolous lymph while still transparent, and found one scratch or puncture enough for inoculation. I presume that if more is used, the amount of fever following would be proportionately greater. On referring to Dr. Edward Jenner's work on cow-pox, I find that he is of a similar opinion. Three of my inoculated cases proved fatal, but in one of them the persons had already the eruptive fever at the time I operated, and in the others I think it fair to presume that small-pox was already in the process of incubation, as it was already all around. The people generally did not object to inoculation, as it had been regularly practised thirty-five or forty years before, previously to the introduction of vaccination. Many rather preferred it, in spite of three or four days' feverishness caused by it, especially as it was found that many had taken small-pox in spite of previous vaccination. In this respect they resemble the poorer class of Irish people whom I meet with in Glasgow. I find that a great many of the old among these are partial to inoculation, and, I think, not without reason. Now and then I meet with natives of Ireland who had been inoculated as late as twenty and twenty-five years ago. As for myself, I have never heard of small-pox after inoculation, though, as every one knows, it is too common after the cow-pock in a modified form. After this, the Governor of Jamaica prohibited inoculation by issuing a proclamation against it. However, shortly after, I procured from a friend about half a grain of a vaccine scab, which he had got from Dr. Fiddes, of Kingston; and with this, multiplied into as much lymph as would serve a dozen or more, I set to work in another parish, at distances of from thirty to forty-five miles from home, and so successfully that in two months I got through 3500 vaccinations among all classes of the community. I found a warrant which I thought sufficient in Dr. Copland's article on small-pox in his Dictionary, section 105, and take this opportunity of respectfully thanking him for the well-balanced opinion there given.

I am sure that the natives of the Gold Coast and those of Jamaica must have almost precisely the same sort of constitution. Both are negroes; only the latter are comparatively more cleanly and civilised, and of course there is a proportion of white and brown also. If vaccination is really a failure in such places as the Gold Coast, inoculation is an admirable substitute; only the inoculated need to have their liberty restricted for a time to prevent them infecting the unprotected. If possible, a whole village or settlement should be inoculated as nearly as possible at the same time, as, otherwise, no unprotected person can escape. To succeed well with vaccination, among ourselves very great care has to be taken, both in the selection of lymph and in operating; and these difficulties must always be much more among half-civilised people, especially where cutaneous eruptions are so common as Dr. Moriarty speaks of, and thus the supply of good lymph fails. I was informed by Dr. Dalrymple, of Duncans, Trelawney, some years ago, that much of the vaccination in Jamaica used to be ill performed, and therefore in 1851-52 many were attacked who would otherwise have escaped.

I saw many specimens of spurious pocks myself in 1852 from bad lymph. They were of all degrees of irregularity. In one a vesicle had formed in four days, containing a gamboge-coloured fluid. This was on a lady either white or nearly so. Could this afford any protection?

In many of the worst cases of small-pox I saw, maggots had formed in exposed parts of the body similar in appearance to those seen in the dissecting-rooms. This used to be seen in common ulcers at other times left exposed or negligently dressed. I see them in sheep in this country burrowing under the skin. Dr. M'Cartney, of Falmouth, Jamaica, informed me he had seen them in the eyes of a patient in Hospital before death, and further that such maggots are different from the worms of corruption.

Eight months before the outbreak of small-pox, cholera had begun to decimate the island, and as small-pox was leaving an epidemic of measles followed, which had before been long unknown. Next came hooping-cough, after an absence of nine years. The negroes said they preferred cholera to small-pox, being soon at an end, although the first must have been considerably the more fatal disease.

Before I conclude, I may remark that the inoculated pock is more depressed than cow-pock, and the following areola darker in colour. If any Medical Practitioner wants positive evidence that he is proof against small-pox, let him try inoculation on his own arm. If sufficiently vaccinated, it will be a failure; if partially only, the pock will only take effect in proportion, and probably the constitutional disturbance will be *nil* where the protection is already sufficient.

The Compulsory Vaccination Acts very properly impose a fine for inoculation in Britain, but I presume this does not prevent a student or a practitioner from trying it on himself.

Glasgow.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

GUY'S HOSPITAL.

New Operating Theatre—Medullary Cancer of Humerus; Amputation at Shoulder-joint; Recovery; Return of Disease in the Lungs—Medullary Cancer of the Frontal Bone and Cerebrum—Separation of Exostosis from Femur by an Accident; Reunion; Excision—Fractured Ribs; Pneumonia; Empyema; Acute Nephritis; Recovery—Fractured Base of Skull; Ruptured Carotid Artery; Death from Hæmorrhage—Compression for Popliteal Aneurism—Pressure on Abdominal Aorta.

The building material with which the colonnade and quadrangles of Guy's Hospital have during the winter been encumbered is now almost all cleared away, and the alterations are so rapidly approaching completion that we can describe fully the nature of the change that has been effected. To one entering the building from St. Thomas-street, the first innovation visible is the roof of the new operating theatre, which, occupying as it does the middle of the central block of front buildings, where it rises some feet higher than the adjoining roofs, is necessarily a conspicuous object. Being composed of glass and iron in such a manner as to allow the light to pass, it seems hardly in keeping with the rest of the sombre smoke-stained stone-faced building; but if it has been found necessary to sacrifice somewhat external appearance to utility, we deem that to be a small matter in view of the real improvements effected internally. The staircase leading to the wards for males has been rebuilt in stone and iron from the ground upwards, and on ascending it to the second floor we arrive at a spacious corridor paved with stone, the floor of which is continuous with that of the operating theatre. Of the old theatre, it is sufficient to remark that it was small, especially cramped in the space allotted to the operator, to his assistants, and the members of the Surgical staff, and that the daylight admitted had apparently been curtailed to suit the prejudices of the days when each gleam of sunshine in a house was taxed. Both these defects are now matters of the past. The roof, indeed, which is entirely of glass, supported by thin iron ribs, admits such a flood of light that we expect the day will hardly ever be so dark and foggy as to necessitate the lighting of the single sun-burner in the centre of the ceiling, by which illumination at night is provided for. In the old theatre it was no uncommon thing to see hand lamps in use on the ordinary dull days of a London winter. The standing room for students, if not much increased in extent, is yet so much more favourably situate for the seeing of operations that the change is on this account alone a great boon. One large circular radiating stove, on Gurney's principle, placed near the dressers' quarters, provides against cold, whilst a small fireplace in the vicinity of the space allotted to sisters and nurses insures a plentiful supply of warm water. The walls are of a neutral bluish-grey tint, the monotony of which is relieved by the cornice being decorated with a pleasing neat tracery in light modest colours. Altogether, we congratulate the Hospital and School authorities at Guy's on such an acquisition. The conception of the undertaking, no less than the manner in which it has been carried out, reflects the highest credit on all concerned.

On Tuesday, the 2nd inst., the theatre was formally opened, when Mr. Hilton removed the greater portion of a necrosed os calcis; Mr. Birkett ligatured the femoral artery for popliteal aneurism; Mr. Bryant excised a V-shaped piece of bone from a firmly anchylosed knee-joint; and Mr. Durham amputated at the middle of the humerus in a case where excision of the elbow had been performed some two months previously. Subsequently there have been an excision of the hip-joint for disease, incision into the sac of a ruptured aneurism arising from the femoral artery, with ligature of each end of the bleeding vessel, a lithotomy, and two trephinings, besides other minor operations.

In the Surgical wards, to which in this report we shall confine our remarks, we have availed ourselves of the notes recorded on the ward-papers concerning several cases of disease and injury of the bones which have lately been under treatment.

E. B., aged 5, a clear-skinned, red-haired girl, came under Mr. Cock's care on October 3, 1866. Her mother stated that, about the middle of last July, the patient, while at play in the street, fell, and struck herself on the outer side of the left humerus, near the upper part of the shaft. Prior to this, nothing wrong was ever noticed in the limb; and, till then, she always enjoyed the best of health. She complained a little of pain during the next fortnight, and could not raise the arm to her head. The pain then became very severe, and the arm just below the shoulder began to swell. For nine weeks these symptoms continued, when the girl became an in-patient of Mr. Cock's. The whole of the limb from shoulder to elbow was much swollen, especially just below the head of the humerus. Temperature of arm increased. Subcutaneous veins large, and distinctly seen; no pulsation to be distinguished at any spot. There was apparently no effusion into the shoulder-joint, and the clavicle and scapula seemed quite healthy. Motion of forearm and hand unaffected. She could swing the upper arm backwards and forwards at the shoulder-joint, and could raise the shoulder by means of the trapezius muscle, but was unable to use the arm in any direction where the assistance of the deltoid was required. Pulsation in left radial artery quite natural.

November 5.—Circumference of healthy right arm just below folds of axilla, 7 inches; of diseased left arm at corresponding level, 10½ inches.

19th.—Circumference of left arm had increased to 11½ inches. The tumour was very dense, and tender on pressure. Skin not adherent. Glands in left axilla and side of neck not affected. The pain had for some days been very slight.

Mr. Cock amputated the limb at the shoulder-joint. He found the deltoid muscle implicated in the disease, and, therefore, made the external flap of skin and cellular tissue only. The internal flap contained a portion of the triceps muscle. Very little blood was lost during the operation. The joint was found healthy. The amputated limb, presented by Mr. Cock to the Museum of the College of Surgeons, was found to display a remarkably good specimen of bone and muscle invaded by medullary cancer. On December 20 the flaps appeared quite healthy, and had united throughout the whole of their length; there were no glands enlarged in the neck or at any other spot. She went out apparently quite well.

In the middle of January, 1867, cough came on; she complained of pain in her left side, and the stump became tender and painful. These symptoms increasing, the patient was readmitted, under Dr. Wilks, on February 3, 1867.

On Admission the impulse of the heart was felt at the epigastrium, and the cardiac sounds, conducted through the stethoscope, were heard as though close to the ear. The left side of the chest was dull throughout on percussion. In front, tubular breathing was heard just below the clavicle; behind, tubular breathing was heard most distinctly near the spine. On the right side the chest was very resonant, and the breathing puerile. She had a little cough, but no expectoration; no dyspnœa. The stump at the left shoulder contained a hard lump in the portion formed by the internal flap, which was very tender on pressure.

February 21.—Cough had increased, but there was no expectoration. The left upper ribs did not seem to move on inspiration, but the lower ribs were distinctly raised, and the intercostal spaces appeared to be drawn in. The tumour in the stump was increasing, and its surface was becoming discoloured and mapped out with veins. Pulse 144; respirations 40.

March 11.—Inspiration required some effort. Scarcely any respiratory sound could be heard over left side of chest.

13th.—Much worse; jugular veins and veins of face distended; breathing accomplished with the greatest difficulty; no pain. Died at 6 p.m.

At the autopsy, the left lung, except a small part at the apex, was found converted into a solid mass of medullary cancer. On the costal pleura were only two nodules of cancer, showing that the growth had not reached the lung by direct extension from the exterior of the chest. Fringing the margins of the lobes of the right lung, especially towards its base, were numerous cancerous nodules, varying from the size of a pin's head to that of a walnut. The other organs were healthy. The growth in the stump had involved the muscles around the neck of the scapula, as well as the head of the bone itself.

For the foregoing report we are indebted to Messrs. Frederick Durham and R. C. Lucas, the ward clerks. Dr. Moxon conducted the autopsy.

E. S. H., aged $2\frac{1}{2}$, a stout, healthy-looking boy, who had never till his present illness been out of health, was admitted into Mr. Hilton's ward on December 6, 1866. In the month of May previously he had struck his forehead against the mantelpiece, but the accident at the time was considered of the most trivial character. Shortly afterwards, a blue mark (bruise?) appeared at the centre of the forehead, which remained for a few months. The veins on the right half of the forehead then began to enlarge, first at the above-mentioned "blue spot," then above the outer canthus. The veins were still increasing in size, when, on November 24, a small "lump" was first noticed, very tender, and situate at the right frontal protuberance. The tumour then began rapidly to increase in size.

On Admission, December 6, it was as large as half a walnut, firm, painless. The surface of the bone could be continuously traced on to the front surface of the tumour; moreover, the tumour was immovably connected with the bone. The inference was, therefore, that the tumour was beneath the periosteum. The veins of the skin were much enlarged, and increased so much when the child cried as to give the tumour quite a dark purple appearance. There was no pulsation of the tumour itself, but a large artery was running on its outer side. There was no trace of cerebral symptoms. The boy ran about the ward. About four weeks before admission he had suffered from measles, and, upon recovery from the exanthem, he had been noticed to drag the right leg a little in walking. From that same time, too, his fæces and urine had escaped involuntarily, though he had been a very clean boy prior to his suffering from the measles. The dragging of the leg, and incontinence of urine and fæces, continued on his admission, and afterwards until his death; and the above explanation of these symptoms was held by the parents. On December 10 Mr. Durham passed an exploring needle into the tumour; nothing but a drop or two of blood escaped. Mr. Hilton thought it a case of medullary cancer, and could advise no operation. From this time the growth of the tumour in all directions was most rapid. On January 13 the lateral diameter, as measured by calipers, was $4\frac{1}{2}$ inches, the vertical diameter 5 inches, and the distance from margin of base to apex $5\frac{1}{2}$ inches. The diameter from the occipital protuberance to apex of tumour, measured by calipers, was $11\frac{1}{2}$ inches. On January 23 the diameters, taken as before, were, laterally, 5 inches; vertically, 6 inches; antero-posteriorly (head included), $11\frac{3}{4}$ inches.

He died on January 27. Before death, the skin had ulcerated at three or four spots, from which hæmorrhage occasionally occurred, with a continuous discharge of bloody serum. On December 31, he began to be listless and sleepy; his speech was distinct, and pupils acted well to light.

January 13.—Tumour softening as well as enlarging. Child was usually sleeping or moaning, but was quiet. Comprehended what was said to him, and replied to simple queries. Used both hands. Had not been taken out of bed for a few days, so it was not known if he could stand. Ate and drank well. Pulse 142. Respiration 23.

17th.—Hæmorrhage, to the extent of a pint, occurred from the tumour. He was subsequently blanched.

23rd.—During three days his appetite had quite gone; if anything was put into his mouth, he made no attempts to swallow it. Slept very much. Occasionally made faint attempts to call out, but was too weak to make much noise. Had during the week become quite blind in the left eye, and pupil showed no reaction with light. Respiration 40. Pulse exceedingly feeble; 200, as nearly as its extreme rapidity would permit of its being counted. Right hand affected with continual tremors.

25th.—Seemed quite insensible, though he attempted to cry out when his feet were touched. Lay quite motionless; his legs firmly clenched. Pulse 166, small, but sharp and distinct; quite different in its character from what it was the other day. No further change occurred in the symptoms until his death on January 27.

After some difficulty, permission was obtained for the inspection of the head only. The periosteum, which was found passing from the surrounding healthy bone to the surface of the growth itself, having been divided all round, the tumour was with ease peeled off by the fingers from the subjacent bone, which for the greater part was healthy. At its centre the tumour was soft and sloughing, and broke away at once from the bone, leaving the latter (for the space of about a square inch) with a ragged surface, covered by adherent shreds in a sloughy state. This diseased piece of bone was removed, and the membranes beneath it (also sloughing) came away with it, so that the brain was exposed. The dura mater encircling this spot was more adherent to the bone than elsewhere; otherwise it was natural. Brain bulky and heavy, and soft throughout; but the anterior and upper portions of the anterior lobes were especially the seats of disease. In front of the right lateral ventricle the cerebrum was red and diffluent. Less of the anterior portion of the left hemisphere was so affected. Beneath the microscope, the tumour was found composed almost entirely of cancer nuclei, with a few cancer cells, circular and caudate. A section from quite the front of the right hemisphere of the brain was composed of exactly the same constituents, and of those only; but a portion of the same lobe, taken further back on the confines of the healthy part, showed the cancerous nuclei more sparsely scattered in the brain tissue, and accompanied by compound granule cells.

Certain points of resemblance in these two cases at once suggest themselves—viz., the extreme youth of the patients; the well-ascertained fact that the growth of each tumour followed a blow on the affected part; the marked increase of subcutaneous veins over the growing cancer; the rapidity with which each tumour, when once developed, increased in size; lastly, the short interval (exactly eight months in each instance) that intervened between the date of the blow and the death of the patient.

The following is probably an unique case:—J. P., aged 25, became an in-patient, under Mr. Poland, on December 20, 1836. When he was about 10 years of age, a small exostosis made its appearance on the upper and inner part of the condyle of the left femur, just outside the joint. Five years subsequently, it was removed at one of the large metropolitan Hospitals. A year then elapsed, after which it reappeared at the same spot. On December 19, 1866, he fell, and instantly experienced great pain at the tumour, so that he "thought he had broken it." The pain grew worse, swelling began, and he came to Guy's next day. On admission, there was incipient inflammation of the left knee-joint, whilst, just above the internal condyle, was a hard nodulated tumour, seemingly about two inches long, an inch and a half broad, and one inch deep. It was very tender when rudely touched, and was movable on the shaft of the bone, but no sensation of crepitus could be elicited. Twelve leeches were at once applied over the knee, afterwards an ice-bag; and on December 23 all the signs of inflammation in the joint had ceased. On January 15 the exostosis had reunited with the femur, and the patient left Guy's. He was, however, readmitted in nine days' time, having, in the interim, found that he could not walk without pain at the tumour. The adjoining knee-joint seemed quite healthy. In Mr. Poland's absence, Mr. Durham removed the exostosis, which was found just external to the joint, and was as large as a pigeon's egg. It was united to the inner condyle by the shortest possible osseous pedicle, which had the diameter of a fourpenny-piece. Inflammatory symptoms in the joint supervened, but were promptly subdued by the application of an ice-bag and a back-splint. On March 13, being well, he was discharged.

A boy, aged 11 years, was on January 30 knocked down in the street, and his fourth, fifth, and sixth right ribs fractured, at the distance of about an inch and a half external to their costal cartilages. Being brought to the Hospital, he was discovered to have extensive hæmoptysis and emphysema of his whole trunk. The hæmoptysis continued until February 7, when it became merged in the viscid plum-coloured sputa of

pneumonia. An interesting question then suggested itself, which it was thought this case would solve—Does pneumonia dependent on a local cause (as it here seemed to be) run the same course in regard to time as pneumonia arising from constitutional causes? In this boy's case it did, for, between the sixth and seventh day, the pulse and temperature both fell, though the decline of the latter was most characteristic. The pulse, respirations, and temperature, for a fortnight, were as follows:—

			Pulse.	Resp.	Temp.	
Jan. 30,	2.15 p.m.	1¼ hour after the accident.	110	46	94·8	(collapse).
,, ,,	8.30 p.m.	. .	108	41	98·3	(reaction).
,, 31,	11.50 a.m.	. .	102	44	99·9	
Feb. 1,	11.10 a.m.	. .	110	44	100·2	
,, 2,	10.40 a.m.	. .	106	46	99·8	
,, 3,	10.40 a.m.	. .	106	40	99·2	
,, 4,	11.15 a.m.	. .	108	40	99·0	
,, 5,	11.30 a.m.	. .	120	44	101·5	Pneumonia.
,, 6,	12.15 p.m.	. .	134	51	103·0	Pneumonia.
,, 7,	12.30 p.m.	. .	140	41	102·7	Pneumonia.
,, 8,	12.15 p.m.	. .	152	42	103·3	Pneumonia.
,, 9,	11·0 a.m.	. .	144	34	103·1	Pneumonia.
,, 10,	12.15 p.m.	. .	152	54	103·6	Pneumonia.
,, 11,	11.50 a.m.	. .	126	42	99·0	
,, 12,	11.50 a.m.	. .	120	43	100·7	

Subsequently the boy suffered from empyema, and seemed rapidly declining, and Mr. Hilton made an incision into the pleura over the site of the fracture, whereupon a quantity of fetid pus escaped. On this same day (Feb. 16) it was noticed that his urine was bloody, and a specimen beneath the microscope exhibited an abundance of epithelial renal casts and of free blood-corpuscles. During the attack of pneumonia the urine had been found perfectly free from albumen, and containing scarcely any chlorides; and it is now again quite healthy, exhibiting no trace of albumen. This patient is (April 12) convalescent. The wound of the chest-wall is nearly healed, and he will shortly be discharged. The circumference of the right half of his chest is 13½ inches, that of the left half being 14⅜; pulse 86; respirations 30 per minute. The right lung expands so as to fill that half of the chest, for the auscultatory signs of respiration are heard with the like degree of intensity on both sides, and percussion elicits equal resonance over each lung. The temperature during the illness was found a much better index to the boy's condition than either the pulse or respirations per minute. On the nineteen days commencing at February 13, during which the pleura was discharging profusely, the pulse varied between 120 and 152, its average being 138·4; the respirations ranged between 42 and 56, averaging 48·5; the temperature (excepting one day, when it stood at 98·8) did not exceed 102·3, nor sink below 100·2, averaging 101·15; so that, when estimated by the extreme frequency of the pulse and respirations, the patient's chance of recovery seemed very slight, whilst the thermometer always justified the most sanguine expectations. It seems right to conclude that the damaged state of the chest-wall acted as a disturbing cause on the lungs and heart within; that the pulse and respirations were affected by this local cause, as well as by the feverishness of the patient, whilst the thermometer merely registered the general pyrexia.

A case of fracture of the base of the skull was lately admitted, in which there was laceration of the carotid artery (or arteries), and apparently death from hæmorrhage. A fine healthy man, aged 27, was brought in at 12.30 p.m. A quarter of an hour previously he had been standing on the ground assisting to unload a van of puncheons of porter, when one of them fell and knocked him down, so that the back of his head came against the stone pavement. He was immediately rendered unconscious, and blood issued from his ears, nose, and mouth.

On admission, he could just be roused by shouting in his ear. Pulse 120, small; respiration 36. Pupils small, but active. When the left ear was uppermost, blood welled up rapidly from the meatus, being pumped up more freely at each contraction of the heart and during expiration; whilst during inspiration the level of the blood in the meatus actually sank. The very same phenomena were subsequently noticed with the blood flowing from the right ear. At 1 o'clock—and therefore in less than fifty minutes from the occurrence of the accident—the patient passed a motion beneath him in the bed, and at the same time a quantity of fluid blood escaped with the fæces. It was therefore thought that he had sustained some severe laceration of his intestines. Death occurred at 2.45 p.m. An inspection of the body, which was everywhere blanched, conducted by Dr. Moxon forty-eight hours after death, revealed the fact that a fracture crossed the basilar process, and the anterior fragment of bone was depressed. The petrous bones were much crushed; and a fissure extended into the pharynx, in which was much blood. Owing to the extreme damage of the bone, it was not found practicable after the removal of the base to assert positively which artery was (or if both were) lacerated. Probably, from the fact of blood having come from both ears, one might conclude that both arteries were injured. The brain was almost bloodless. The alimentary canal from the mouth downwards contained a large quantity of blood, especially the colon. There the blood was darker, but it was not melænic. There was no injury of any portion of the alimentary canal, the blood having passed down the œsophagus from the fractured base. Blood, if in large quantity, can therefore travel the distance from the œsophagus to the rectum in less than fifty minutes.

Since the beginning of the year three aneurisms of the popliteal artery have been in the Hospital. One, in a woman, aged 26, who was five months advanced in pregnancy, was treated for thirty-eight days by compression with the tourniquet at first, and then with weights. Digital pressure was next tried for twenty-seven hours, when the aneurism ceased to pulsate. In the second case, that of a discharged soldier, aged 34, the tourniquet effected a cure at the end of ten days. The third patient (also a discharged soldier) came in last November. His femoral artery was compressed during 127 days with the tourniquet; but he probably eased the pressure at night when not watched. The pulsation in the sac was greatly diminished, but not quite arrested. Digital compression was then had recourse to during fifty-five hours, several students volunteering (as with the first of these three patients) to apply the pressure during one hour each. No benefit resulted; consequently Mr. Birkett tied the femoral artery. That same evening pulsation returned in the aneurism, and the next morning it was almost as bad as before the operation. It has since, however, become reduced to the gentlest thrill. The long-continued pressure had probably allowed the collateral circulation to become fully established.

Compression of the abdominal aorta has lately in two cases been tried with the effect of arresting hæmorrhage, the patients in each instance being under the influence of chloroform.

Acupressure is receiving an extended trial at the hands of Mr. Cooper Forster, and the injection of cancer with acetic acid is being persevered with by the Surgeons generally; but the results are not yet mature for publication.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0

Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

Terms of Subscription for India, £1 15s. per annum.

The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.

Post-office Orders and Drafts on Army or Navy Agents, should be made in favour of Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d. | A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d. | A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, APRIL 27, 1867.

CHOLERA DEBATE AT THE MEDICO-CHIRURGICAL SOCIETY.

The volunteers of England had a grand field-day and sham fight on Easter Monday, and a like *festa* did the Profession muster for, and, apparently, expect to have, at the meeting of the Medico-Chirurgical Society on Easter Tuesday. But with a very different result, for though there was a very large muster of forces, there was very little fighting, and what there

was was not of very high quality. The Society's room was crowded, nearly to asphyxia point, and many of the celebrities of the Profession were present, such as Sir W. Fergusson, Sir J. Y. Simpson, Drs. Billing, Copland, Farre, and others, with a crowd of visitors; the attraction being papers on cholera by Dr. George Johnson, and by Drs. Wilson M'Cloy and Robert Robertson, of Liverpool; but any one who attended in the expectation of hearing a brilliant, or learned, or instructive, or even a prolonged discussion on cholera was certainly disappointed, for the discussion was neither brilliant, learned, nor very instructive, and the whole was over by about half-past ten.

Abstracts only of the papers were read, that of Dr. George Johnson's having been furnished by himself—a disadvantage as far as regards discussion, but an unavoidable one, the essays themselves being too long and full to admit of their being read to the Society. Drs. M'Cloy and Robertson were unfortunately unavoidably absent, and the remarks of the speakers were almost entirely confined to Dr. G. Johnson's paper. This, the reading of which came first in the proceedings of the evening, was a full, clear, and forcible statement of the author's well-known views of the pathology and treatment of the disease; it did not appear to us to state anything in the way of theory, argument, illustration, or statement, in addition to what is contained in his recent publications on the subject, and these are too well known to require any description here.

The paper of Drs. M'Cloy and Robertson was a *résumé* and tabulation of their extensive experience and observation of cholera in Liverpool during the epidemic of 1865-6. They are in favour of treatment by castor-oil, careful diet, and nursing. They found that the lowest mortality occurred in cases treated by castor-oil, alone or with small doses of turpentine. Alcoholic stimulants, opiates, and astringents they consider mischievous; but is not turpentine an astringent? Emetics they found very useful. Nitrogenous food is to be avoided in the stages of collapse and of reaction.

The discussion was opened by Mr. French. He lauded the late Dr. Snow, and held that the discovery of the theory of the communication and spread of cholera by impure water placed that gentleman on a level with Dr. Jenner as a benefactor of mankind. He considered that the question whether the blood does or does not circulate through the lungs in cholera was made too much of; if the blood is poisoned it had better not circulate, and it is poisoned—the amount of diarrhœa being in direct proportion to the dose of poison. Age is of great importance, cholera killing no one at the ages of 15, 16, or 17 years. The *vis medicatrix naturæ* conquered during that short period of life, but the disease was likely to get the victory at all other ages. His experience of cholera epidemics had taught him that as a positive fact. But the audience became rather impatient, and Mr. French sat down.

Dr. A. W. Barclay was surprised, and yet more grieved than surprised, to find how very little Dr. Johnson had profited by his criticisms on Dr. Johnson's illogical method of handling his subject, and on his erroneous statements. It was impossible for him to accept Dr. Johnson's descriptions of the condition of the lungs and heart found after death during the collapse of cholera, and of the fluid state of the blood; they were entirely opposed to fact, and utterly untenable; instead of collapsed and anæmic lungs with distended large vessels and right heart, one really found marked congestion of the lungs with blood in the right heart, but no distension of it, and the blood was thick, not fluid, its thickened condition, and not any contraction of the small pulmonary arteries, impeding its circulation. He also considered Dr. Johnson's theory of the phenomena of cholera being due to the presence of a blood-poison incorrect, and his illustrations of it unhappy.

Dr. Copland observed, with regard to Dr. Johnson's remarks on the striking and essential differences between cholera 1832 he had proposed "*asphyxia cholerica*" as a most fitting and apposite name for the disease. He did not see that there was any proof that elimination by the bowels is Nature's mode of curing cholera, and he considered that, while the papers read were very valuable and contained much that is true, but not new, what there is new in them was by no means proved.

Dr. Burdon Sanderson confined himself to the consideration of two or three points only in Dr. Johnson's paper. He could not at all agree with Dr. Johnson that there was not weakness of the heart's action, and that such a condition would not, if present, explain the phenomena of collapse. On the contrary, that state would account for the pallor, the coldness and lividity of the surface, the pulselessness, and so on, while Dr. Johnson's theory of contraction of the pulmonary arteries would not account for those symptoms. In pulmonary embolism you have stoppage of the circulation through the pulmonary arteries, but pulmonary embolism, as shown by Virchow and others, does not produce the phenomena of cholera collapse. If complete, it produces pallor, and then intense and rapid asphyxia; if partial, it is followed by protrusion of the eyeballs, by throbbing of the carotids, and so on, but not by anything like cholera collapse. Again, Dr. Johnson's description of the state of the lungs and heart in asphyxia was taken from Dr. John Reid's observations and experiments, while every one knew that these have been shown to be quite false. The distinctions and differences pointed out by Dr. Johnson between the state of the lungs in the collapse of cholera and in asphyxia rested, therefore, on a false foundation, and his conclusions were vitiated.

Mr. Sibley could not agree with Dr. Johnson's estimate of the relation between the amount of the discharges in cholera and the degree of collapse. The very large experience at the Middlesex Hospital during the epidemic of 1854 had shown that the degree of collapse was in direct proportion to the amount of discharge from the bowels and stomach, while Dr. Johnson held that these are in inverse proportion. His own observation had taught him certainly that when the discharges were profuse the collapse was profound, and that the danger of collapse increases directly with the amount of the evacuations.

Dr. Waring, of the Indian Medical Service, remarked that in India treatment of diarrhœa cholerica by astringents and opiates was found to be of great importance and highly successful; by those means the diarrhœa was stopped, collapse prevented, and the patient saved.

Two or three other gentlemen spoke shortly, but, as we shall publish a full report of the discussion, we do not reproduce their observations here.

The President then called on Dr. George Johnson, whose reply was neat, good, and good-humoured. He also felt regret at not having profited more from his friend Dr. Barclay's criticisms. He had tried to do so, but had failed; he was sorry for it. As to his descriptions of the post-mortem state of the lungs and heart in cholera, they were drawn chiefly from Dr. Parkes, the most accurate and minute of observers. It was quite true, he admitted, that after death during collapse you might find the lungs congested, the lungs and the right heart full of blood; but it was also true, and more true, that after death during collapse you found the lungs anæmic and shrunken, and the right heart and large vessels distended. If the examination is made very soon after death, this latter state will be found; defer it for some hours, and the former condition will be found—it is a post-mortem change. As to his friend's objections to what he had said about blood poisons, he really thought it was a dispute about words, and he must decline going into it there. In reply to Dr. Sanderson, he must again say that weakness of the heart's action could not explain the symptoms present in cholera collapse—weakness or failure of the heart's action caused syncope, but in cholera collapse the patient's intellect remained clear, and

Then the comparison between the phenomena of collapse and of pulmonary embolism was not a fair one, for in addition to the stoppage of the circulation through the pulmonary arteries there was also, in the former state, the effects of the drain by the cholera discharges to be taken into consideration. You must not consider the state of the patient as arising from one cause only—you must take into account the whole of the abnormal phenomena. He thought it a very bold thing to say that Dr. John Reid's descriptions of asphyxia are false. Considering the philosophical caution and scientific accuracy of that observer, he was not at all prepared to admit, and thought it far from being yet proved, that his statements were incorrect. The relation between the degree of collapse and the amount of discharges was a complex one, and could not be shortly stated. The previous health and strength of the patient, his age, and other points, had to be taken into account. It was certain that profound collapse might come on after very little or no discharges externally. The age of the patient had great effect on the result of the attack in other diseases besides cholera. As to saving the patient by restraining the diarrhœa by astringents, the supporters of this system of treatment stated that, if they succeeded in preventing collapse, they saved the patient; but they did not say how often they failed to prevent collapse. In conclusion, he was not bigoted to the theory that the phenomena of cholera collapse are due to contraction of the small pulmonary arteries; to any other theory that could be brought forward he was ready to give the most candid and careful consideration, and he should be delighted if any better theory than his own could be found; but, at present, he thought his own the most satisfactory one yet adduced. The failure of the opiate and astringent treatment had forced him to a most careful, anxious, and prolonged consideration of the whole subject, and the results of that consideration and examination he had now laid fully before the Profession.

This account gives our impression of the discussion. If we have wronged any of the speakers, we regret it, and our full report will do them justice; but we certainly think we cannot be wrong in saying that the discussion was not equal to the occasion, or worthy of the first Medical Society of England. Not a single doubt or difficulty about the disease or its treatment was cleared up; not one new light thrown on the subject; not a step made towards a better understanding of it. And only two hours were given to the discussion and the reading of the papers! Why, three evenings were lately devoted to it across the Irish Channel; and just think how long a time would have been given to it on the other side of the Straits of Dover!

THE WEEK.

THE HEALTH OF H.R.H. THE PRINCESS OF WALES.

The Princess of Wales is reported to be slowly recovering, but with the prospect of a somewhat prolonged captivity still before her.

THE NEW FELLOWS OF THE ROYAL SOCIETY.

Our readers will be glad to learn that our Profession is well represented amongst the new Fellows of the Royal Society. Mr. Hulke and Dr. Sanderson, of the Middlesex Hospital, and Dr. B. W. Richardson, are amongst those who have received this blue riband of science. It is particularly creditable to the Middlesex Hospital to possess such a large and increasing number of really scientific men amongst its staff. Amongst the other new Fellows are Hanbury, the pharmaceutist; Duppa, the chemist; Baird and Gunther, the naturalists; Stainton, the entomologist; Tomlinson, the Professor of Physical Science at King's College; Lowe, the astronomer; and Napier, the engineer.

THE MEDICAL SOCIETY OF LONDON AND MR. I. B. BROWN.

We gladly insert the following letter from the Hon. Secretaries of the Medical Society of London. We trust that their simple statement of occurrences, concerning which some misapprehension has existed in the Profession, will suffice to allay all rumours of any difference of opinion amongst the Fellows of the Society as to the course of action demanded by Mr. Brown's resignation. The Council seem to have been simply moved with a wish to act in the matter on the part of the Society independently and with due consideration:—

"*To the Editor of the Medical Times and Gazette.*

"Sir,—We are directed by the Council of the Medical Society of London to state that at a meeting of the Council held on the 24th instant, the resignation of Mr. I. B. Brown of the Fellowship of the Society laid before the Council on April 5 was uanimously accepted.

"We are further directed to state, in order to remove certain misrepresentations, that the deferring of the acceptance of this resignation from the previous Council arose from the facts that some of the Councillors felt they had not at the moment a sufficient knowledge of the reasons and circumstances which had led to the resignation, and that on a question of such importance it was essential to have a unanimous expression of opinion on the part of the Council.

"We are, Sir, your obedient servants,

"Abbotts Smith, } Hon.
"Walter J. Coulson, } Secs.

"Medical Society of London, April 24."

THE FATE OF DR. LIVINGSTONE.

It seems that we may still indulge a hope that the circumstantial account given by the Johanna men of Dr. Livingstone's death is only a specimen of the African power of invention. Sir Roderick Murchison has received a letter from Dr. Kirk, of Zanzibar, dated February 8 (eleven days later than the previous dates), in which the writer quotes from a despatch sent by the Governor of Quiloa to the Sultan, to the effect that—

"Traders had arrived at that port (Quiloa) from the far interior, beyond Lake Nyassa, and that at the end of November last (*i.e.*, two months after the time of the reported catastrophe), when they were at Maksura (within ten miles of the supposed place of the massacre), nothing was known of any mishap having befallen Livingstone. They said, on the contrary, that the traveller had continued onward towards the Avisa or Babisa country, after having met with a hospitable reception on the western shore of the north end of Lake Nyassa. Dr. Kirk adds, however, that as Maksura is short of the place of attack described by the Johanna men, he almost fears to communicate this intelligence, lest it should buoy up hopes which may too soon be broken."

We trust that the proposal of the Royal Geographical Society to send out immediately an expedition to clear up the mystery will be carried into effect, and that Government will undertake the expense and responsibility.

RESPITE OF ANDERSON.

We are glad to observe that the case of Karl Anderson, the Swedish sailor, who was condemned for the murder of a shipmate of whom he had a monomaniacal dread, has attracted the attention of Mr. Walpole, and that the tolerably clear evidence of the weakness of the man's intellect which was offered at the trial has induced him to respite the convict during her Majesty's pleasure. We believe that in this case the decision of the Home Secretary will not only pass unchallenged, but that it will command universal approbation. It is not merely that Anderson was under the spell of a dominant idea—this might probably be urged in extenuation of the guilt of a large class of criminals—but that the semi-idiotic state of the man's mental organisation rendered it improbable that he was capable of forming any just notion of the enormity of his crime. To exact the last penalty from a man whose mental capacity did not rise to a discrimination between right and wrong would be nothing but a judicial murder, and we

are glad that, however public opinion may have refused to ratify the decisions of the Home-office in some recent cases, there will be no question as to the justice of interference in the present instance.

"THE CLERGY VISITING THE SURGICAL HOME FOR WOMEN" AND MR. BAKER BROWN.

We received the following letter last week too late for publication:—

(Copy.)

"Notting-hill, London, W., April 15, 1867.

"Sir,—We have received the proceedings of the Obstetrical Society of London on the 3rd inst., as published in the *Lancet* and *Medical Times*, resulting in your removal from the Society by 194 votes to 41.

"We regret the character of Mr. Haden's attack on you; part of which was only uttered to be withdrawn by himself, and part was disposed of by the President in ruling that the Society had not met to consider a specified operation, but the manner in which you had performed it.

"Still more do we regret that Mr. Barnes, the supporter of Mr. Haden, should have avowed to you that 'my friend cannot be yours,' and that the President should have directed the ballot to proceed 'for the convenience,' as the Secretary explained, 'of those who have made up their minds one way or the other,' before you could begin your reply, but after Messrs. Haden and Barnes had been heard.

"But more deeply do we regret that the charges of operating for improper reasons—*i.e.*, for cure of cases legally inadmissible at the Home—and in an improper manner—*i.e.*, unknown to the natural protectors of the patient—should have been partly admitted by yourself and partly established by the evidence; and that when Mr. Pym had your authority for writing to the papers on February 4 last, to say that you had given up an operation which had been brought in question, pending Professional inquiry, you nevertheless repeated it in a modified form on February 21, in the presence of Mr. Locking.

"We would remind you that you told us at a public annual meeting at the London Home, that with regard to hysterical mania many cases had been brought in, and almost without exception cured; and we think that the same information should not have been withheld from the Commissioners of Lunacy when they sought for it. Such candour, even had it involved a sacrifice, would have better sustained the high character the London Home has acquired from the testimony of numbers who have been treated successfully for various disorders within its walls, and who have given us abundant evidence of the care and kindness which they have met from you.

"Our interest in the patients will continue undiminished, but we feel it right to state openly the impressions we derive from the action of a Society which we respect as a powerful exponent of Medical feeling and opinion.

"We remain, Sir,

"Your obedient faithful Servants,

"THE CLERGY VISITING THE HOME.

"To I. B. Brown, Esq., London Home."

"We regret" the style of these reverend gentlemen's letter, inasmuch as it seems to us to shirk the main point at issue, and to fail in those characters of straightforwardness and ingenuousness which ought to stamp an unasked opinion such as this on a matter gravely affecting the character of a Profession to which the safety and honour of women are committed.

Even if we grant that Mr. Haden's and Dr. Barnes's attacks were a little too sharp, we may remind these reverend gentlemen that this does not make the defendant's case one whit the better. Moreover, as they ought to know, the Obstetrical Society met to express its judgment on "printed matters" which had been made public weeks and months before; and that it was on these "printed matters" that the Fellows were called to ballot, and that nothing that was or could be said could alter the character of the *literæ scriptæ*. Either they were such as deserved their author's removal from the Society, or they were not; and if they were, nothing short of a full and prompt retractation could have averted the issue.

As for the replies given to the Commissioners of Lunacy by Mr. Brown, denying the treatment of cases of mania at the "Home," they are to be "deeply regretted" by his friends; but they are a very small matter by comparison. The chief point at issue was—Can the Medical Profession, as represented by the Obstetrical Society, sanction a theory and practice utterly degrading to the female sex, like that of clitoridectomy?

We must remind these reverend gentlemen that they are looked upon as accomplices and co-defendants in this case. Without their "co-operation in the good work," the London Surgical Home could never have acquired its repute; nor could the talented but most misguided author of clitoridectomy ever have incurred the public disgrace which has fallen upon him, had the clerical visitors possessed the moral sense, the rectitude, the instinctive insight into what is pure and becoming, which would have detected the unreasonable and degrading character of clitoridectomy, and stopped the practice of issuing those ludicrously sanctimonious "Reports" of the "Home."

Let us now invite these reverend gentlemen to leave for a moment the self-imposed task of judging the proceedings of the Obstetrical Society, and to give us their own fair opinion on those "published matters," and especially on Mr. Baker Brown's book, on clitoridectomy, which led to the action of the Society. We would respectfully invite their attention also to the *Med. Times and Gaz.* of April 13, and to what we there say of the ethical character of clitoridectomy. We would invite them to read in Mr. Baker Brown's book (Chapter II.), and to learn from the proceedings in the operating theatre at the Home the kind of evidence on which the disgusting and immoral habit of "peripheral irritation" is assumed to exist in women. Read, reverend sirs, the chapter in which the author gives us his diagnosis; and tell us, ye guardians of faith and morals, do you feel inclined to commit the wives and daughters of your flocks to the questioning which would lead to the alleged detection of peripheral irritation? Shall their guilt be decided by an inspection of their genitals? Shall a nervous, hysterical, flighty, or romantic girl (perhaps a *Sister of Mercy!*) be beset with questions tending to elicit a self-condemnation? If, reverend sirs, you do agree with the theory and practice of clitoridectomy—an operation which has sprung up, and grown, and flourished within the walls of an institution of which you are the moral directors, and for the moral character of which (using the word *moral* in its widest sense) you are responsible—pray tell us so honestly; but if you do not, then hide your heads in shame at your miserable evasive letter, and know that the Medical Profession at least declines to accept it either as justification or apology.

VIVISECTION IN FRANCE.

The Court of Examiners of the Royal College of Veterinary Surgeons of Scotland have published a protest against the practice of operating on living animals, which they declare to be altogether unnecessary and useless. In this expression of opinion they only assert the universal decision of competent judges in this country. We think, however, that having attacked a malpractice which prevails in a neighbouring kingdom, they may reasonably now be expected to follow up their protest by a similar expression of opinion on certain offences against humanity and mercy which disgrace and demoralise large classes at home, and which have not even the excuse of a scientific purpose. The wanton and wholesale destruction of the aquatic birds on the northern coasts has lately been animadverted on in the public journals, and we recommend this to their consideration as a minor instance of our own shortcomings as guardians and protectors of the lower animals.

FROM ABROAD.—OVARIOTOMY IN FRANCE—OTORRHŒA IN CHILDREN AND SOLDIERS—DIGITALIS IN RHEUMATISM.

M. Boinet has just read a voluminous report on some cases of ovariotomy which had been submitted to the Paris Surgical

Society. Until the year 1856, he observes, the same opposition met the introduction of this operation into France as had barred the way formerly to lithotrity, excision of the jaws, removal of uterine polypi, iodine injections, etc. Since the communication by M. Worms of the results obtained in England and Germany, and M. Nélaton's visit to the former country, it has, however, gradually made its way so as now to be admitted as an acceptable operation, and one which has been practised by some French Surgeons. M. Boinet has taken great pains to ascertain the number of cases that have occurred in France, and has tabulated all those, whether published or unpublished, concerning which he could obtain reliable accounts. Three operations were performed between 1781 and 1783; but from 1783 to 1844 no cases are recorded, and it is only from 1861-62 that they have become at all frequent. In this way he has collected to March, 1867, accounts of 94 operations, 43 proving successful and 51 failing. To these he adds 24 others, which he cannot admit into his statistical table from the absence of particulars, but which furnished 5 successful and 19 unsuccessful results—making a total of 118 operations, 48 having been successful and 70 unsuccessful. He believes that there are other cases which have never been published because the Surgeons under whose care they have fallen prefer maintaining a prudent silence respecting them, several having refused to furnish him with any replies to the questions he has addressed to them. On analysing the 118 cases it is easily seen that, besides the accidents necessarily attaching to the operation, there are others which can only be imputed to the particular circumstances under which it has been practised. Even at the present day patients only consent to the operation at the last extremity, after all other therapeutical resources have been exhausted, and against the advice of Practitioners imbued with prejudices against ovariotomy. For every Surgeon who recommends it there are fifty Practitioners who condemn it, although they know the patients must otherwise succumb.

After sketching the history of ovariotomy abroad, M. Boinet observes that the results obtained by the French Surgeons have hitherto been much less successful than those of the English; but he does not endorse M. Velpeau's singular opinion that this difference is chiefly due to the greater hardihood of the English race. He prefers explaining it by the fact that the English Surgeons, more prudent and more experienced in this operation than the French, know better how to choose their subjects, and how better to fulfil the indications of the operation. They choose simple unilocular cysts, and operate in good time, without waiting until the patients are enfeebled and exhausted. They refuse to operate on old multilocular cysts, which have contracted too extensive, too solid, or too vascular adhesions; and when, by error of diagnosis, they fall in with such cysts, they stop and leave the operation unfinished—a practice far less dangerous than that of determining to continue and complete it at all risks. M. Boinet feels convinced that when ovariotomy shall have become frankly accepted in France, and practised under suitable conditions and according to well-established indications, the same success will be as attendant upon it as in England. He draws a proof of this from the increasing number of successful cases that have been met with in the practice of the same operators in England itself, in proportion as the experience acquired has led to greater perfection in operative procedures, and a better appreciation of indications and contra-indications.

M. Bonnafont read at the Academy of Medicine, recently, a memoir on Otorrhœa in Children, which he terminates with the following conclusions:—1. Otorrhœa is of greater consequence, as the local lesions which give rise to the discharge are united to a lymphatic constitution, or one vitiated by a strumous, herpetic, or syphilitic principle. 2. It is a great error to suppose that with respect to children time will produce a cure of the affection without damage to the organ of hearing. The proof of this is that in all the establishments for the deaf and dumb, which I have visited, whether in France or abroad, at least one-fifth of the cases are traceable to otorrhœas left to the sole efforts of nature, most of which might have been cured by a rational treatment. 3. Of all the various modes of treatment of the local lesions of the meatus and membrana tympani, insufflation of caustic or astringent powders deserves the preference. Injections of the same kind have the inconvenience of extending their action to the healthy parts which should not be interfered with, while solid caustics, which are very efficacious for touching a limited spot, are inapplicable in extensive ulceration. 4. In order that this indication should be fulfilled in an effectual manner, it is essential that the lesions should be well exhibited; and in order to render this examination easy for Practitioners I have contrived a very simple otoscope, which does not require any lamp and is very portable.

Baron Larrey observed that it was to be regretted that so competent an authority as M. Bonnafont had not turned his attention to the great frequency with which otorrhœa occurs in military Hospitals. This is so much the case that there must be some peculiar predispositions in the life of the soldier leading to the production of this affection. One of these causes is the same which induces another affection he is liable to—enlargement of the cervical glands—viz., the action of cold. It is while on duty as sentinels that the affection is usually observed, the cold current of air striking on the ear through the apertures in the sentry-boxes. For examining the ear M. Bonnafont's instrument is well adapted, but an examination may often have to be made when no otoscope is at hand. It can be very well accomplished by placing the meatus in the axis of the sun's rays and separating the walls of the meatus by means of an ordinary dressing-forceps.

M. Oulmont, a candidate in the Section of Therapeutics in the Academy of Medicine, read at the last meeting a paper "On the Therapeutical Applications of Digitalis." His object is to verify the experiments of Traube in Germany and of Hirtz in France. He has administered this substance in a great number of febrile affections, and especially *acute rheumatism*. In this last disease its action is manifested by characteristic phenomena. At the end of from thirty-six to forty-eight hours the pulse and temperature are lower, and towards the third day, and generally the fourth, nausea and vomiting ensue. By this time the pulse has diminished by twenty or thirty beats, and the temperature is 1° or 2° C. lower, the rheumatic symptoms gradually disappearing, and sometimes doing so with surprising rapidity. A cure may be effected in five or six days, but ordinarily in from twelve to fifteen days—that is, when the rheumatism is free from serious complications. In patients exhibiting diatheses, or in whom it has already occurred before, rapid cure is rare, the disease resisting, and the relapses, over which the digitalis exerts no action, being more or less frequent. M. Oulmont concludes that the digitalis exerts its influence on the "febrile elements," the disappearance of which may be accompanied by that of the disease; but that upon the "rheumatismal element" it exercises no effect. He has never met with cardiac complications among his patients, while old heart affections have been ameliorated. While delirium and other cerebral phenomena have not been infrequently present, these accidents have always promptly disappeared. The urinary secretion has not increased. The dose administered has been the same in all the cases—viz., a spoonful every hour of an infusion made of 1 gramme of powdered leaves to 120 grammes of sugared water.

Eight years ago fourteen rabbits were turned out in Mr. Austin's estate of Barwon-park. The number of their progeny shot last year on this estate was 14,253; and in spite of this destruction, and what goes on outside the estate, they have swarmed over the neighbouring country, and have been found at considerable distances around.—*Melbourne Argus.*

CYDER FOR INDIA.

(*From a Correspondent.*)

In 1863 the Report of the Royal Commission on the Sanitary State of the Army in India was published, and the evidence contained in it proved the following facts:—First, that the regulation beverage for the soldier in India is two drams of arrack or rum daily; secondly, that the men can substitute porter for their allowance of spirit, a quart of malt liquor being given for a dram of spirit; thirdly, that Government expends annually nearly £200,000 in supplying malt liquor from home in order to place it within the reach of the men; and, fourthly, nearly all the Medical evidence went to prove that porter is not adapted to the climate, and that the arrack and porter combined invalided and killed more men than any other cause—directly by acting immediately on the cerebro-spinal system, and indirectly by predisposing to and exciting the very diseases that, under ordinary circumstances, are mostly to be dreaded in India.

Four years have now elapsed, and nothing has been done to mitigate or remove the evil so abundantly proved to exist. In England the Medical Profession are reconsidering the subject of beverage; and surely, if here in our temperate climate the time has arrived for our antiquated notions about fat ales and heavy wines to be exploded, something ought to be done for our fellow-countrymen, who are now being daily poisoned by the regulation beverage of the Indian army.

The army ought to be a school for physical training, and perfect physical health and condition the great aim and object of the trainers; but how this has been carried out recent disclosures have lamentably proclaimed. Drink, even in the matter of water, is carefully looked to by the horse-trainer, and how jealously does the trainer of the pugilist watch what his pupil takes lest his stomach, the keystone of his physical health, should suffer, even temporarily, from an inconsiderate draught. The principles which regulate the diet and drink during training are the same from the bottom to the top of the scale—the same for the degraded and debased prize-fighter as for the noble young heroes of the University crews. Surely there must be some great hygienic principle involved in all this solicitude on the part of the trainer. His may be empirical knowledge; but we may depend upon his clutching his great fact, and defying any theorist in chemistry, or any other science, to wrest it from him.

It is with this fact that we have now to deal by endeavouring to solve the question why our soldiers in India suffer so much from certain diseases, and why also should Europeans living at home suffer from analogous ones, although in not so intense a form? The reply is simply that the regulation beverage in India—malt liquor and spirit—is the vilest and most pernicious combination that could be suggested, and is one which, under the most favourable circumstances of health and strength, is sure to irritate that organ which the good trainer always makes a rule of appeasing.

Sugar and alcohol are the two active elements to which, when associated, we must look as the source of many of the preventible deaths and diseases recorded in the report referred to.

We all know how not only the character but the diseases of a nation are influenced by the beverage of the people; a whole array of examples will at once present itself to our view on a very short reflection. When the luxurious Roman drank fruity wine to wash down high feeding, his gout was sung by the poets, and the Physicians recorded a long list of remedies for liver diseases. Now fruity wine is not drunk in the Eternal City, and gout has all but disappeared.

In the early history of the Epidemiological Society Mr. Tucker drew attention to the remarkable fact that the cyder drinkers of Somersetshire, during the epidemics of cholera in that county, were particularly immune from this disease. We can not only bear Mr. Tucker out in his statement, but, after twenty years' experience, add another fact of equal significance—viz., that the same people are free from gout also, and in this respect afford a strong contrast to their beer-drinking neighbours.

The constitutional effects of cyder upon the system, even when taken freely, as is nearly always the case amongst the agricultural inhabitants of the cyder districts, differ widely from those of beer and all other sweet fermented liquors. In the first place, taken during labour under the heat of the summer sun, it quenches thirst without producing that feeling which is expressed by the word "muzziness;" although, when taken in great excess, and extra work has been performed under its influence, it is apt, according to the testimony of many reapers and mowers, "to shake the nerve" more than malt liquor; but then, as they naïvely remarked, they could not have done half the work upon the heavier drink. Cyder does not interfere with the wind, the lungs acting without that feeling of oppression which is so often experienced just after a full draught of ale. The stomach and bowels are, as a rule, kept in a good state of tone by the moderate use of cyder, and even when excess has been indulged in for years do not seem to be affected by the oft-repeated cup. Whilst beer invariably induces an *alvus cita*, cyder has the contrary effect; in fact, the tone of the alimentary canal is evidenced by healthy appetite and freedom from those disorders which are characteristic not only of a relaxed condition of the mucous, but of the muscular structure of the intestines. Cyder affects the liver only as a dilûted alcoholic drink would do, carrying with it no useless sugar; it neither loads that gland with this hydrocarbon, nor does it when in the stomach produce a condition of that organ likely to entail extra duties upon it. In repose, cyder evidently acts upon the kidneys, but when the skin is excited by exercise then it heightens the action of the perspiratory glands, and the temperature of the body is rendered more uniform than when other fermented beverages have been resorted to for assuaging thirst. The capillaries of the surface of the skin are never so prominent in cyder drinkers as they are in the florid countenances of the beer drinkers. We see this very characteristically shown whilst travelling through the cyder districts of Somersetshire, Normandy, and Brittany; the skin of the face, if it has been much exposed to weather, has a parchmenty hue, and seems to have but a thin layer of fat between it and the structures it covers. Cyder does not seem to encourage the deposit of adipose tissue, for its votaries are seldom corpulent; and here, again, is another strong contrast afforded in its effects upon the system when compared with beer, which not only loads the viscera with this incumbrance, but often so induces its growth between the muscular fasciculi as to curtail their powers of activity and endurance, and after a time even to interfere with the rate of progression, often noticeable in the slow movements of confirmed beer drinkers, who are peculiarly liable to fatty accumulations around the heart as well as to a weak flabby condition of its muscular structure.

In fact, cyder and beer may be taken as examples of the two great classes into which all fermented liquors ought to be divided. Cyder, when pure and well matured, represents the dry wines, or those in which the natural sugar of the fruit has been nearly exhausted, or, at least, only remains in such small quantities as to prove practically harmless; whereas beer, which invariably contains a large amount of unconverted sugar, ranks with wines which are luscious and fruity, and which, however pleasant in small quantities to the palate, are highly obnoxious to the liver and stomach when indulged in to any extent. Fat ales, such as the Scotch, contain a large amount of sugar, and the speedy manner in which they produce dyspepsia is soon seen in the flushed cheeks and burning ears of many who, after eating a hearty dinner, are induced to drink a glass of such beer, so strong in alcohol and so rich in sugar.

The fermented juice of apples and grapes has an astringent effect on the system when the sugar has been exhausted; but whilst it remains in any quantity it not only appears to counteract this property, but soon to induce a relaxed condition of the alimentary canal. This is well exemplified in the two forms of cyder, for the new or sweet cyder will often act as a powerful aperient, whereas when matured it is often resorted to by beer drinkers to counteract the laxative effect of their favourite drink.

During epidemics of cholera and diarrhœa, the confirmed beer drinker is the person that creates the greatest anxiety in the mind of the Medical man, for he knows that not only will he drink more beer during such periods, but will, in accordance with the practice of beer drinkers in general, mix his liquors, and intensify the mischief of the already ingested malt liquor by adding to it ardent spirits, either pure or diluted, thinking that by so doing he settles his stomach and keeps off infection. Now, if such things are to be feared in our own temperate climate, how much more are they to be dreaded under the hot sun of India, where the beer that is supplied to our soldiers is of the most inferior quality, and is only exceeded in this respect by the pernicious arrack or other ardent spirits doled out in drams from the canteens, which must be considered, after reading the Commissioners' report, as so many poison shops, where the very vitality of our soldiery is sapped.

Now, if we were to substitute for beer and arrack, pure, wholesome, and well-matured cyder, we should be able to dispense with spirit altogether—a great desideratum—and the men would have a refreshing drink admirably adapted for the climate, and eminently calculated, as it is in our country, to strengthen and give tone to the stomach and bowels, a condition so necessary to resist successfully the invasion of such diseases as more than decimate our fellow-countrymen in India.

Cyder again, being a dry wine, does not over-stimulate the liver by burdening it with unnecessary sugar—an evil which, we cannot help thinking, is always intensified in the presence of alcohol. Again, cyder neither deranges nor suspends the function of digestion, which that malign combination of arrack and beer is well known to do.

If cyder cannot be well imported into India, there can be no reason why the apple tree should not be cultivated there, where can be found, say in the Himalaya, not only the soil that it thrives in here in England, in Brittany and Normandy, but a climate, a few thousand feet above the plain, in many respects identical with our own; added to which, how many a willing hand would there be found among our soldiers, whose knowledge of planting, nursing, and grafting the young trees has been gained in the happy years of their youth in their native orchards, ready to assist in the genial work, and ready to teach others the craft they have learnt in their mother country.

This is a subject of the gravest importance, and requires the deep consideration not only of the Profession at large, but especially of the Government of India, since so much health and life is at stake incalculably valuable to all, and which, even if estimated by the lowest scale—the money scale—would represent a sum that would astonish many who are unacquainted with the money value of the life of every soldier who is educated and nurtured for serving in that distant land.

Acclimatisation in Australia.—The acclimatisation of salmon has been successful in Tasmania. Ova, it will be remembered, were shipped in ice from London, deposited in hatching-ponds, in connexion with the Plenty, a tributary of the Tasmanian River, Derwent, turned out into the river, and so onwards to the sea; and the last mail brings news that they have, in due course, returned up their native stream, as salmon should. Of salmon trout, also hatched from imported English ova, several generations are now doing well in the Tasmanian River.

REVIEWS.

A Practical and Theoretical Treatise on the Diseases of the Skin. By George Nayler, F.R.C.S., Assistant-Surgeon to the Hospital for Diseases of the Skin, Bridge-street, Blackfriars. London: John Churchill and Sons. 1866. Pp. 292, with woodcuts and seven plates.

So many new works on diseases of the skin have come into our hands in the last two or three years that the mere idea of "another new one" almost makes us shudder, and we really doubt whether, notwithstanding our knowledge of Mr. Nayler as a hard-working, experienced, and able Surgeon, we could have found courage to open his volume, had we not been attracted and encouraged by its goodly appearance. And that being the case it is only just, and implies no relative disrespect to its contents, if we notice the get-up of the book first. It is a very handsome volume—the handsomest of all the skin books lately produced—large octavo in size, beautifully printed on delicately toned thick paper, with goodly margins, and illustrated with plates which are more than good: they are all beautifully drawn, and some of them exquisitely coloured. The literary style of the work is perhaps of a more refined and delicate type than its sensuous endowments. Thus, that cannot be called a solid or strong style of writing in which the itching caused by a skin disease, and the consequent scratching, are expressed by such euphemistic phrases as these:—"The irritation to which it gives rise varies with the natural susceptibility of the individual; almost always felt at night, it is at times very severe, and the patient cannot be prevented from seeking to allay it by violent means." But the language, if not very terse or graphic, is, at any rate, elegant and polite, and Medical essays do not often perhaps attain the dignity of "polite literature."

Mr. Nayler does not, we are happy to observe, assert that any actual want of a good English work on diseases of the skin has led to his writing on the subject, but only that the diagnosis of these maladies is often very difficult, and the treatment they receive unsatisfactory and uncertain, which nobody can deny. And it is not difficult to conceive of a final cause for his work. Thus, as in teaching others you also teach yourself, so writing on a disease or a class of diseases—and Mr. Nayler's book is real, honest work, not mere compilation—is a capital way of testing and perfecting your own knowledge of the subject; or, again, not a bad reason may have been simply a natural desire of the author to prove to others the fact that he had for some years, and to good purpose, studied the subject on which he writes. Anyhow here is the work, and, whether it was greatly needed or not, it is a good work. We must congratulate Mr. Nayler on not having given us any new classification of skin diseases; he does not even insinuate that he "could an he would" do so, but simply and sensibly contents himself with using Willan's arrangement, with modifications; and for this he deserves the thanks of all students of the subject. We will confess, however, to a little surprise at his not classing the parasitic diseases together. His first chapter, twenty-one pages long, is on the "Anatomy and Physiology of the Skin;" and this chapter, however good it may be, is, we think, out of place. The anatomy and physiology of the skin are fully, minutely, and clearly given in the anatomical and physiological works of the day, and we cannot see any reason for weighting a practical treatise on diseases of the skin with pages of description of its structure and functions in health. After this "sin of commission," we must note what we think a serious sin of omission; Mr. Nayler gives no definition of the terms employed to denote the initial pathological changes of cutaneous disorders—viz., rash, papule, vesicle, pustule, etc., etc. This we cannot but think an oversight, not an intentional omission.

The eleven following chapters treat of diseases of the squamous, the papular, the vesicular, and the pustular classes and these are followed by chapters on diseases which are not classed at all, as lupus, alopecia, acne, sycosis, favus, scabies and pediculi, urticaria and erythema, elephantiasis and morbid growths of the skin.

The practice and treatment of Mr. Nayler may be said to be the practice and treatment followed at the Skin Hospital, Bridge-street, Blackfriars, which is much the same as saying the practice and treatment of Mr. Startin, and mercury seems to be rather frequently used, internally and externally. Many of the diseases are treated of very shortly, but the work professes only to give the author's own experience, and not to be

at all a complete treatise on the diseases of the skin. In the preface to the book, it is confessed that "no one can be more conscious of its shortcomings or its incompleteness than the author himself, and these deficiencies he trusts to time and further opportunity to rectify." It would not be fair, therefore, to deal with it as if it at all pretended to be a full or complete work, or to complain of its "shortcomings and deficiencies." As we have already said, it shows that its author has worked his subject up clinically, not from the books in his library, but by study of the living books of the Hospital and dispensary. And we think the student with some practical knowledge of the subject, and the Practitioner, will find it a useful and ready guide and counsellor.

We notice that Mr. Nayler does not agree with Mr. Balmanno Squire as to there being any relation of cause and effect between the presence of pediculi and the existence of prurigo. "No form of prurigo," he says, "is in any way dependent on pediculi, although their presence may greatly aggravate its symptoms." This is somewhat dogmatic in tone, and if Mr. Nayler really has begun to doubt its infallibility, he had better have toned it down somewhat, instead of saying in a foot-note that "he hesitates to adopt" the pedicular theory.

The last chapter of the book is headed "Remarks on Diseases of the Skin following Vaccination," but it is entirely devoted to the question whether syphilis has been transmitted through the medium of vaccination, and Mr. Nayler must forgive us if we say that the chapter is very disappointing; the evidence adduced to prove the affirmative reply seems to us very weak, and the subject is handled in a very imperfect and incomplete manner. Among its "shortcomings," we may point out one of supervision: it is said that Mr. Simon's objections (to the occurrence of the transmission of syphilis by vaccination) may be reduced to three, and after noticing two, it proceeds thus, "and third, the assertion that where syphilis has actually followed vaccination is simply an assumption unsupported by fact." We venture to submit that this is simply not English. We trust that in a second edition this chapter will be entirely rewritten, and made more worthy alike of the work and its author.

On Diseases of the Skin, including the Exanthemata. By Ferdinand Hebra, M.D. Vol. I. Translated and Edited by C. Hilton Fagge, M.D., M.R.C.P., Assistant-Physician to, and Lecturer on Experimental Philosophy, at Guy's Hospital; Physician to the Royal Infirmary for the Diseases of Children and Women. London: The New Sydenham Society. 1866.

Perhaps some of our readers may think that the above title contains much more of Dr. Hilton Fagge than of Professor Hebra; but that is our fault. We have omitted all the appointments of Hebra named on the title-page as superfluous here; everybody knows the world-renowned Vienna Professor of Dermatology, so we have saved space by giving his name pure and simple.

Of all the works produced by the New Sydenham Society this is one of the most valuable and most welcome. Professor Hebra has been so long known to us as the greatest Continental authority on diseases of the skin, and his teachings have been so constantly quoted, and in various ways reproduced, by our own lecturers and writers on dermatology, that it is a great satisfaction at last to have his own work in our hands in an English dress. And it is to be remarked that this book is not a mere translation of the German work; it is a new and revised edition, especially undertaken by the author for his English brethren. Dr. Hilton Fagge says that "every sheet of the translation has been read over by Professor Hebra, and every passage in which I felt any doubt as to the faithfulness of the translation, or as to the sense of the original, was underlined by me, and has been accepted by him, or corrected so as to convey the right meaning;" and Professor Hebra tells us that some of the chapters, which in the original German edition had been written by his colleagues, have been entirely rewritten by himself for this English edition. We cannot help observing that the high and generous appreciation with which Professor Hebra, in his most modest preface, speaks of the labours and writings of English dermatologists, contrasts rather remarkably with the tone adopted towards this same English school by some of our own modern producers of books on skin diseases. "It was England," he writes, "the country of Willan and Bateman, which took the largest share in what may be termed the reformation of dermatology;" and he speaks in most complimentary terms of the value and fame of the works of more modern English dermatologists, as Erasmus Wilson, Anthony Todd Thompson, and others.

It would be an entirely futile, and indeed an impertinent labour, to attempt in these pages any criticism of Hebra's work; still more so to praise it. The name of Hebra is sufficient to make every one interested in the study of skin diseases anxious to consult the book. We shall content ourselves, therefore, simply with noticing the contents of this first volume.

The first chapter is on "The General Pathology and Symptomatology of Cutaneous Diseases," and contains most useful, clear, and lucid definitions of the primary symptoms or eruptions, "*efflorescentiæ cutaneæ primariæ*"—viz., *macula, papula, nodus seu tuberculum, phyma, pomphus seu urtica, vesicula, bulla*, and *pustula;* and of the secondary symptoms, such as excoriation, ulcer, fissure, scale, crust, and lamellated crust. Chapter II. is on "The Diagnosis, Etiology, Treatment, and Classification of Cutaneous Diseases in General." Then follow chapters on "Hyperæmiæ Cutaneæ," "Anæmiæ Cutaneæ," "Anomaliæ Secretionis Glandularum Cutanearum," and "Exudationes Cutaneæ;" next follow the "Acute Contagious Exudative Dermatoses"—viz., morbilli, scarlatina, variola, and vaccinia; and then "Acute Non-contagious Exudative Dermatoses"—*erythema, roseola*, and *urticaria*. Chapters XIII. and XIV. treat of "The Dermatitides Proper," idiopathic and symptomatic; and the Fifteenth Chapter is devoted to "The Phlyctænoses," *herpes, miliaria*, and *pemphigus acutus*.

In his remarks on "treatment in general," the Professor observes that "we have unhappily as yet made but little progress towards the wished-for end—the cure of all cutaneous diseases;" and in order to make greater progress in this we require to ascertain "the course taken by the disease when left to itself, and the effects produced by a remedy when applied to the healthy skin." And he further considers that "our want of success depends also, in part, on our defective knowledge of the dermatoses, and on the small extent to which the pathological chemistry of cutaneous diseases has been cultivated. It appears to us that a very promising field for investigation is afforded by dermatology to those who are interested in this new branch of science." Here is a hint for our active and aspiring young dermatologists, and we may remark that Mr. Nayler has, as his work shows, made some incursions into this field. Professor Hebra relies largely on the use of topical remedies, and he points out how "it is quite a mistake to suppose that the action of remedies applied to the diseased or healthy skin is necessarily merely topical, and not general." Except in the case of caustics, "all remedies which are brought into prolonged contact with the skin are absorbed by it, and taken up into the fluids of the body." "Hence," he continues, "we have no fear, in applying topical remedies, of driving in cutaneous diseases. . . . Nor have we any dread of curing skin affections too quickly. On the contrary, it is the object of our warmest endeavours to find means of terminating these diseases as speedily as possible. Were we only in the possession of remedies which produced cures thus rapidly, we should have no anxiety with regard to the appearance from this cause of metastases, or of any other consecutive diseases."

In speaking of *vaccinia*, and of some of the alleged dangers of vaccination, Hebra says—"Experience has now shown that no other morbid conditions or dyscrasiæ can be thus introduced. Indeed, no one, when he has unintentionally become inoculated with the syphilitic poison, fancies that he may, at the same time, have acquired scrofula or gout; but it is just as probable that this should occur as that any other disease should be conveyed by vaccination besides the mild form of small-pox which it is the object of the operation to transmit;" and for full information on the matter he "refers the reader to the English Blue-book, of which the conclusions are based upon opinions and statistical data derived from all parts of Europe."

In concluding our welcome to this work, we will only add our hearty congratulations to Dr. Hilton Fagge on the admirable manner in which he has executed his part; but he cannot receive higher praise than is given by Hebra himself:—"With reference to Dr. Hilton Fagge's translation, I will only say that I have found reason to express the fullest confidence in his knowledge of the subject, as well as in the zeal with which he has executed the task set before him." We would only add "and ability" after the word "zeal," in this quotation.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

Paris, April 24.

Although the internal arrangements of the Great Exhibition have made considerable progress, there still remain some portions, especially in the Medical and Surgical department, which are unfinished. This is chiefly the case with the foreign part of the Exhibition, the English being almost the only exception to this rule. I shall therefore confine myself to a few general remarks, which may serve as an introduction to the detailed descriptions which I intend to commence next week.

Your readers are of course aware by this time that the Exhibition is divided with mathematical regularity into concentric elliptical zones, which, like the circle of Dante's *Inferno*, enclose each other, narrowing gradually as they approach the centre. Each of these divisions corresponds to a particular class of production, and the radii which intersect them trace the limits between different countries. Now, the outer and more extensive circles are devoted, of course, to machinery, chemical products, agriculture, etc. Our own department occupies a very small portion of one of the innermost and least extensive zones—that devoted to *the liberal arts*. We are placed in close proximity to painting, sculpture, and music; but it must be confessed that the fine arts have a great deal more to show than we have, and enjoy a much larger space to spread over than is allotted to Medicine and Surgery.

The first impression, in fact, which strikes the Medical observer is one of disappointment. *Quoi! ce n'est que cela!* Is this all the space that the art of healing fills in this world? It must, however, be borne in mind that Medicine has never been a *commercial* profession, and that in this great mirror of trade, as it now exists on the globe, we cannot expect to hold a prominent place.

The Medical part of the Exhibition is moreover cut up into small compartments, corresponding to the different countries from which they come—an arrangement which makes their appearance still more insignificant, as far as size is concerned. After entering the small but elegant square room, which contains the Surgical instruments of France; after visiting the hydropathic establishment, which stands opposite, and viewing the electrical machinery, anatomical plates and casts, and Medical books, which are scattered in its vicinity, you have to cross about half the extent of the "Liberal Arts" before you get to the British Medical Department—a section which, it must be confessed, is not very prominently brought before the public; it was, in fact, after poking into several corners that I lighted upon it in my first visit to the building. The American part, which comes next, cuts but a poor figure among the innumerable pianos, musical instruments, and works of art which surround it on every side. We had been hitherto accustomed to view the Americans as an unmusical, unartistical race; but it seems they have taken of late to what the Greek proverb styles φιλεῖν οὐ φίλα, and have compelled themselves to love the very things to which their soil and climate seem most ungenial.

In short, the Medical visitor will do well to keep his eyes open while going round the "liberal" zone. Nor is he to suppose that all which concerns Medicine is concentrated within the prescribed circle. Many interesting and important objects are scattered about the building, under various heads. Chemistry is at a wide distance from Surgery, yet many of its products bear directly upon the practice of our art. Military field apparatus is largely represented, but holds its special case; and a Prussian ambulance-tent, with all necessary appliances, is said to exist in the Park, although, as that delectable region is still in great part an immense ocean of mud, I have not yet visited the spot. Besides, we constantly light upon interesting specimens of well-known substances, which, although familiar as household words, as far as their therapeutical or poisonous properties are concerned, are little known in the natural state. While casting an accidental glance upon the South American Section, I discovered a large bag of woorara (or curare) in the form in which it is prepared by the Indians. Up to the present time I had never seen this terrible and mysterious poison in any but small quantities, and even thus as a sort of treasure in physiological laboratories, only to be exhibited to those fully initiated in the mysteries of the place.

But, however small a part of the Exhibition our Surgical and Medical appliances may fill, we shall soon find that there is enough to attract attention and much to repay it. I will, therefore, begin next week to give you a full description of its contents.

Before concluding my letter I must mention the fact that a few cases of cholera have made their appearance. They are, however, entirely confined to the Hospitals, and have not exhibited the disease in its more acute form.

Professor Jobert de Lamballe, who had been long suffering from disease of the brain, died this week. His name will long be remembered among the most illustrious in French Surgery.

BIRMINGHAM.

April, 1867.

On the 13th inst. Mr. Bartleet was elected Surgeon to the General Hospital, in the room of Mr. Bolton, who resigned after having held the appointment for ten years. On the announcement of the vacancy there were no fewer than four candidates, and there was every prospect of a severe contest; but, as the day of election drew near, three of the competitors retired in favour of Mr. Bartleet. All the candidates were well qualified to perform the responsible duties of the office. Mr. Bartleet and Mr. Bracey, who were evidently the favourites, presented testimonials of the highest character. Both these gentlemen had distinguished themselves as students, and both had studied Operative Surgery at the Hospitals of Paris. It mattered not whether the choice had fallen upon Mr. Bracey or Mr. Bartleet—the governors would have been equally fortunate in obtaining the services of either for their institution. The past career of Mr. Bartleet has been brilliant, and it augurs well for the future. To contest such an election as this one is a matter of great moment, for it involves the outlay of a large sum of money, as much as from four to five hundred pounds. It is not every aspirant to Surgical fame who has this amount at his command, and without it his efforts to get such an appointment will be absolutely futile. As a consequence of this monetary evil, many skilful and energetic young Surgeons have to hide their "lights" in the lower sphere of private practice.

The way in which Hospital elections are managed is radically wrong, and is capable of much improvement. Manifestly it is not just or sound that a money qualification should be the *sine quâ non* of success, yet such is not unfrequently the case. The machinery of a Hospital election comprises, amongst other things, the following accessories:—Agents, committees, extensive advertising, widely circulated testimonials in the essay shape, and the devoutly-to-be-wished-for consummation of either an elaborate dinner, or a not inelaborate supper, to slake the thirst of him who has striven after the prize, and of those who have helped him to get it. Why, an affair like this smacks of a political election, and it is almost as costly. To mention these paraphernalia of Medical electioneering tactics is sufficient to pronounce them at once as opposed to the dignity of a noble Profession. Now for the remedy. Every one has, or is supposed to have, an opinion; so, with your permission, Mr. Editor, I will give you mine—accept it for just as much as it is worth. I would have the election to rest with a select few, appointed by the whole of the Governors. These delegates should examine the testimonials, and select from them the best men. Their decision to be final. Canvassing should not be permitted, and the day of election not made known until a short time before it actually takes place. Amongst the select few I would have the Medical element conspicuous—for who knows better the value of Medical qualifications than Medical men themselves? I merely throw out these few suggestions lest I should incur the reproach of having pointed out an abuse without, at the same time, prescribing a remedy for it—a reproach not for an instant to be tolerated by your correspondent.

The sanitary condition of Birmingham is, on the whole, good. Bronchitis, catarrh, and diarrhœa are, as might be expected, from the cold weather and cutting winds, the prevailing complaints, with here and there a case of scarlatina. The annual death-rate is as follows:—To 1000 persons living, during the ten years from 1851-60, 24·9, and during the week ending April 8, 1867, 25·5. This information I glean from the returns published in the *Daily Post* of April 11.

Another election is about to take place at the Children's Hospital, and there are four candidates in the field.

My attention has just been directed to a paragraph in one of our daily papers which informs me that the authorities of this Hospital are about to devise a system of election by which much of the unfairness and costliness of the process will be avoided. This is a step in the right direction, and much to be commended. The movement has been made, I believe, by one of its chief Medical officers, Dr. Heslop, who has also the honour of having been the promoter—I may even say the founder—of this young and flourishing institution.

At a meeting of the Midland Medical Society held April 10, Mr. Gamgee read a paper on "Medical Evidence in Actions for Damages after Railway Injuries." He made some general remarks upon the whole subject, and he regretted that self-interest was usually the paramount motive in all such proceedings, and that the confliction of evidence, and the weight of advocacy or of money on one side or other, rendered it very difficult for juries to do real justice in all such cases. He spoke of three orders of railway accidents :—

1st. When the person was killed outright, and the only question to be settled was one of damage. 2nd. When the injury was so severe and evident that that there could not be any difference of opinion. 3rd. When the shock was apparently so slight as to give little cause for anxiety, while yet very severe and even fatal consequences might ultimately follow. He dwelt upon several instances illustrative of the latter kind of injury, deducing therefrom the argument that the shock from railway accidents was different in kind, not merely in degree, from that of other forms of violence, and he regretted the general obstinacy of railway officers in repudiating and resisting all claims, and hoped that a better spirit might hereafter animate all parties, so that they could confer together for the purpose of promoting the cause of truth and justice only.

Dr. Nelson agreed with the main points in Mr. Gamgee's paper, and said that all who were present must acquiesce in the introductory remarks, and that there was equally little room for any comment upon the utterly fatal and obviously serious accidents ; but the whole question hinged upon the third form of trivial apparent injury, with the possibility of ultimate fearful results. Dr. Nelson differed with Mr. Gamgee as to any distinction in kind between railway and other similar accidents, and held the opinion that it was a pure question of mathematics and mechanics, the severity of the shock depending on the three conditions of velocity, weight, and hardness or softness of material, to which he would also add that peculiar vibratory motion which attended the working of the locomotive, and which might be likened to the angry shake of a lion or big dog, or by the arm of a powerful or energetic man. Looking to the highly delicate structure of the nervous system in man, sudden and violent forces of this kind might show little at the time, and yet prove subsequently fatal. While alive to this fact, however, he could not shut his eyes to the numerous instances in which sad pictures of injury had been adduced, which yet rapidly recovered after the monetary *placebo* had been administered. Entertaining such views, he was inclined to be favourable to the appointment of impartial and well-qualified court assessors, who might award compensation according to the ultimate result, instead of, as at present, waiting for the tardy verdict of a jury, quite irrevocable, and often subsequently shown to be an erroneous one.

Dr. Fletcher considered the question a most important one. He viewed the shock, however, as only a difference of degree, and not of kind, and had seen results quite similar from injuries done by powerful machinery in Birmingham. He instanced this by the simile of two steamers coming into violent collision: though sometimes little damage was done to the body of the vessel, yet all the glass and other fragile materials might be smashed. So with the human frame: severe concussion might take place, and little might be seen, yet the nervous system should suffer seriously. From all he had seen, little good could accrue from consultation of Practitioners on opposite sides, and too little attention was paid by judge and jury to that procedure of symptoms which connected the first with the last feature of the cases. He considered that, independently of accident, the prolonged vibration of the railway train was, to a certain extent, injurious to those who travelled by it.

Mr. Bolton said the question was a very interesting one, and he could easily conceive that while little or nothing could be seen at the time, yet very serious damage might be done to the delicate nervous system. While, however, acknowledging this, he must also declare that there have been many instances in which Medical Practitioners have predicted death or permanent paralysis when such persons have completely recovered. He cited sundry cases of the kind, and showed that in some of them damages had been reduced in an extreme degree, and with perfect justice. What was wanted was, in his opinion, a fair, just, and impartial exercise of skill; but he dissented from Dr. Nelson's suggestion as to a court of assessors, as most persons desired some final settlement one way or other, instead of continued anxiety.

Mr. Furneaux Jordan conceived that the peculiarity attending a shock of the kind spoken of arose from the fact that the whole force of it was thrown inwards upon the nervous centres, instead of being expended upon any particular locality. If a concussion took place which shattered a leg or an arm, or any other part, the shock was in a manner arrested ; but when that was not the case, its violence fell upon the head and spine, and gave rise to the consequences alluded to.

Mr. Gamgee replied upon these sundry points, expressing his conviction that the railways, upon the whole, got the greatest advantage in all such trials, so that they would pay almost any amount rather than wait for results. In regard to assessors, he agreed with Dr. Nelson thus far, that he thought justice would be much advanced by the court calling to its aid Medical and other qualified referees who could act as advocates on one side or other, but still as independent and impartial adjudicators.

I am glad to be able to inform you of the pleasing fact that our distinguished townsman, Professor John Clay, has obtained the Jacksonian Prize. The subject of the essay was "On Ovariotomy: Pathology and Diagnosis of Cases suitable for this Operation, with the best Method of performing it, and the Results of Recorded Cases," a subject upon which he has already written a most able work, and one which has enhanced his reputation as a Surgeon of great practical experience.

GENERAL CORRESPONDENCE.

THE GREENWICH HOSPITAL QUESTION.

LETTER FROM DR. H. T. L. ROOKE.

[To the Editor of the Medical Times and Gazette.]

SIR,—My attention has been called to an article in your paper of last week—"The Rights and the Wrongs of the Greenwich Hospital Question." I should not have addressed you, had not the writer, in addition to expressing his own views, ascribed interested and unworthy motives to the authorities of the *Dreadnought*. I must, therefore, request you to allow me sufficient space in your journal to state the grounds on which the Committee of the Seaman's Hospital declared Queen Mary's Quarter unsuited to their wants, and thought Queen Anne's might be made serviceable to them.

The former building is completely hidden from the river by the latter. The Seaman's Hospital is partly dependent for its support upon voluntary subscriptions, and receiving yearly a large sum from the crews of foreign vessels, a building with a river frontage is considered essential. Queen Mary's Quarter is divided by brick partitions into cabins twelve feet by nine, and into small wards twenty-four feet by twelve. These are each lighted by a solitary window. The smaller spaces would accommodate two patients ; the larger about six. These brick walls are not removable.

I make this statement on the authority of the director of works, who accompanied some members of the Committee, the Secretary, and myself, on our visit of inspection. It was the first question I asked, and on this answer I grounded my report to the Committee, that Queen Mary's Quarter was not available, because the wards were subdivided by brick partitions, not removable without endangering the safety of the building. It would be impossible to ventilate a Hospital composed of a number of small wards, insufficiently lighted, and all opening on a central arched passage of no great height.

We do not pretend that Queen Anne's Quarter is all we could wish, or that it is possible to convert it into a Hospital possessing all the improvements of a new building, but to build a new Hospital a large sum of money is necessary. The Seaman's Hospital Society has not the wealth of St. Thomas's or Guy's. It is not many years since it had a hard struggle for existence. The Committee felt that they were not justified in expending the funds of the institution on a

new building, if they could obtain the loan of such part of Greenwich Hospital as was suitable to the patients and also conducive to the prosperity of the Hospital funds.

We believe Queen Anne's Quarter will do both, better than Queen Mary's. I need not notice your concluding paragraph further than to say that the advantages of introducing a resident chaplain, or the accommodation required for the Medical staff, did not in the slightest degree influence the decision of the Committee.

I am, &c.

April 23. H. T. L. Rooke.

*** Dr. Rooke seems to mistake our meaning when he talks of our imputation of motives to the officers of the *Dreadnought*. We cannot conceive that the prospect of fine apartments should not have some weight in inducing gentlemen to desire a particular quarter of Greenwich Hospital, all other things being equal, which is precisely what they are not. The moderate tone of Dr. Rooke's letter, however, as contrasted with the arrogant claims elsewhere advanced, certainly does him great credit, but we cannot depart from what we have said as to the relative value of the two quarters. No doubt the *Dreadnought* authorities desire a river frontage, but even should they obtain it we question whether the Admiralty would grant permission for erecting such placards as the side of the *Dreadnought* presents; nor do we think that such an elevation as that of Greenwich Hospital should be so treated. As to the relative merits of the two quarters, we have stated them before: in Queen Mary's Quartert hrough ventilation, free on every side, is attainable; in Queen Anne's such is *altogether unattainable*. But Dr. Rooke must be very greatly mistaken when he talks of the partitions in Queen Mary's Quarter being incapable of removal. They are not all of brick, as Dr. Rooke seems to think, but partly of lath and plaster, and all of these, as well as many of the brick ones, could easily be got rid of. Most of those which could not be removed are capable of conversion into arches. We as ardently desire that the sick seamen should be properly housed as any interested in them can, and we must express our opinion if either party in the dispute seek what we think would really be a disadvantage to those most concerned—the patients. The matter, however, is in the hands of Dr. Bristowe and Mr. Holmes, and there we are content to let it rest.—Ed. *Medical Times and Gazette*.

CHOLERA AT ST. KILDA, AND ON BOARD AN EAST INDIAMAN—ITS PROPAGATION AT SEA.

Letter from Dr. John Macpherson.

[To the Editor of the Medical Times and Gazette.]

Sir,—My attention has recently been called to a remarkable statement—not the less remarkable because it is old—which reappears in two of the most recent handbooks of Medicine, that the island of St. Kilda was visited by cholera, without any communication having been held with the neighbouring or nearest islands. I have endeavoured to ascertain the origin of this report, and the only source for it that I can discover is the following statement made by Dr. R. M'Gregor, of Glasgow, in a clinical lecture in the *Medical Gazette*, New Series, vol. ix. p. 145:—"That it is mainly propagated by other than the laws of contagion I am satisfied; and in support of this I may mention the case of the island of St. Kilda, one of the Hebrides, removed sixty miles from the nearest inhabited land, which was visited in 1832 by cholera."

On referring to Dr. J. E. Morgan's most interesting article on the diseases of St. Kilda (*Med.-Chir. Rev.* Jan. 1862), I find that the clergyman of the island showed him a register of deaths from July, 1830, to September, 1840;—in this list there is no mention of cholera. This would appear to be quite conclusive as to the non-occurrence of cholera in the island. However, for my further satisfaction I have referred to the proprietor of the island, who says he is convinced that cholera never reached its shores, and has sent me the following extract from a letter of his agent:—

"I have resided on the island of St. Kilda every summer since 1842, and, though in daily conversation with the inhabitants, and though I have talked over many incidents before 1832, I have never heard of cholera visiting the island, or, indeed, any other contagious disease, since the memorable year, more than 100 years ago, when the small-pox was taken to them by a Harris boat."

Writers on cholera need not, therefore, any longer trouble themselves to account for the appearance of cholera in St. Kilda. The circumstances under which cholera has reached various other islands—Guadaloupe affording one of the most curious and interesting cases of the kind—are sufficiently puzzling.

The following statement, with which I have been favoured by Surgeon A. Gibbon, late of H.M. Bengal Army, bears on a point of so much interest that I believe you will wish to lay it before your readers. I know of no other instance in which the cholera poison would seem to have attached itself so long to a vessel, and it is curious in various respects:—"I went out to Bombay as Surgeon of the *Lord Amherst* in 1831. We left London in June, and arrived at Bombay in the end of September. The cholera had been raging previously among the shipping in the harbour. Two large East India Company's ships—the *Berwickshire* and another—had lost half of their crews from the disease. The cholera broke out on board of the *Lord Amherst* a few days after our arrival. Seven men were taken ill one after another, and died in from six to eight hours each. The captain, fearing that he might lose most of his crew, applied to Government, and was granted the use of the barracks on Butcher's Island (a few miles up the harbour), which the crew occupied, while the ship was unladen by natives. One man was taken ill while we were proceeding in boats to Butcher's Island; he was sent to the General Hospital at Bombay, where he died. No fresh case of cholera occurred among the crew after our landing at Butcher's Island.

"The ship was laden with cotton, and sailed for the Cape of Good Hope and England in the month of December. About a week after leaving Bombay, one of the crew (who acted as butcher) was seized with cholera of the worst type, but he recovered. The rest of the crew were quite healthy. We arrived at the Cape of Good Hope in February, two months after leaving Bombay, and about seven weeks after the butcher had been taken ill. There was no cholera at the Cape, nor had we had any communication with other ships since leaving Bombay. But on the day on which we arrived in Table Bay, on receiving a supply of vegetables from the shore, the captain's servant, whom I had observed eating heartily of a cucumber, was suddenly taken ill with severe symptoms of spasmodic cholera, and, as he appeared sinking into collapse, I bled him from the arm, and he recovered. This was the first case of cholera in which I had bled.

"The occurrence of this case so long after leaving Bombay, would lead me to think that the contagion of cholera was still on board of the ship, and that the irritation of the alimentary canal, from eating plentifully of raw cucumber, excited the symptoms of cholera in the captain's servant."

The date of the outbreak of cholera among the crew or passengers of a ship after arrival at a port where cholera prevails, the period when after leaving such a port cholera breaks out on board ship, the time that a cholera outbreak lasts at sea, the date of an outbreak on shore after the arrival of a ship from an infected port, are matters the ascertaining of which is of the highest importance. Such facts have thrown, and will throw, much light on the period of incubation of the cholera germ, and on the conditions favourable to its development. On board ship it appears to thrive for a time, in the absence of contaminated drinking water, of drains and sewers, of *grundwasser*, also of privies; for the evacuations of the crew are always passed in the open air; and although there is a want of cleanliness about the box usually attached to the side of the ship with emigrants or coolies, there is no depôt for fæcal accumulations and fermentation, as in a cesspool.

On the other hand, there are almost always, defective ventilation, often too close packing, and deficient cleanliness between decks; not that such conditions are always present.

V. Pettenkofer's crucial question, which he put to me, and which he no doubt will propound again at the Cholera Conference about to be held at Weimar on the 28th and 29th, is this:—Is there any case on record, in which a ship on the high seas has had cholera produced in its crew by taking in men or articles of clothing from a ship which had come from an infected port? He believes, as far as I understand him, that cholera cannot be reproduced without the aid of *grundwasser* and a favourable condition of soil.

I am, &c.

John Macpherson, M.D.

35, Curzon-street, W., April 22.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, APRIL 16, 1867.

JOHN SIMON, Esq., President, in the Chair.

A COMMITTEE of eight Fellows was appointed to examine all specimens supposed to be of a malignant nature which should be brought before the Society.

Dr. PLAYFAIR then proceeded to lay before the Society a case of

SUDDEN DEATH APPARENTLY RESULTING FROM THROMBOSIS.

The patient, a nurse in the children's ward at King's College Hospital, had for a day or two complained of pain in the right knee, with slight accompanying indisposition. On the third day, while in bed, she complained of great weakness, and after a slight exertion the nurse was alarmed by her hurried breathing. She died before aid could be procured. The right side of the heart and the pulmonary artery were found to be filled with decolorised clots, which, however, existed nowhere else. Dr. Playfair had collected the details of twenty-five cases of sudden death from embolism after delivery. They separated themselves into two classes. In twelve there was embolism with phlegmasia dolens, death resulting about the seventeenth day after delivery; in thirteen there was no phlegmasia, and death ensued three or four days after delivery. In the former the leg appeared to be first affected; in the latter, the pulmonary artery. From certain cases he was led to believe that embolism might exist without invariably causing death, and cited the case of a young lady who at one period presented every indication of this condition, yet was now gradually recovering.

Mr. PICK thought the condition more common as a cause of death than was generally supposed, he having seen no less than five instances during the last six months. The causes were often obscure, sometimes connected with a slight rheumatism; in one case, where a gentleman was skating, cold may have had something to do with its production, but in another case of a servant girl, who fell down dead while carrying a tray, there was nothing to account for it.

Dr. BRISTOWE remarked that there was nothing in Dr. Playfair's specimen to lead him to believe that the clot was ante-mortem; they were common enough as post-mortem phenomena.

Dr. CAYLEY observed, that in a case of undoubted embolism, where the artery was completely plugged, extreme dyspnœa had been the most prominent symptom, and the patient had not died suddenly.

Dr. PLAYFAIR maintained that the adhesion of the clot to the walls of the ventricles, and the difficulty of otherwise accounting for the death of a healthy girl, were sufficient reasons for supposing the formation of the clot to be a vital phenomenon.

Mr. EASTES spoke of a case of sudden death at Guy's, where clots were found in the pulmonary artery, partly decolorised, partly adherent, which looked as if broken off another clot in the left femoral vein. The vein on the right side was also blocked up.

Dr. WILKS said it required great care to distinguish ante-mortem from post-mortem clots, for there could be no doubt that clots formed after death, as in the chest or in blood falling on the floor. Where the heart had suddenly ceased to act, and the patient appeared to faint, death may have resulted from simple heart disease.

Dr. DICKENSON maintained that death from embolism might be brought about either by dyspnœa or by syncope. When the clot formed slowly, great dyspnœa resulted. In one case the breath was noticed to be cold on the eve of death.

Mr. HENRY THOMPSON said that coagulation might certainly take place after death, as in 1848 he had examined the bodies of some sheep killed by lightning, and had found, contrary to Hunter's opinion, well-marked clots in their hearts.

Dr. BRISTOWE held that in the specimen referred to adhesion was only produced by the blood coagulating round the columnæ carneæ, an event of common occurrence.

The PRESIDENT, in referring the specimen to Drs. Wilks and Weber for examination, remarked that Mr. Gamgee had told him that the disease of sheep known as "braxy" depended on acute coagulation of the blood in the vessels of the animal. Something of the same kind was occasionally observed in rabbits.

Mr. HENRY THOMPSON then exhibited a specimen of

PROSTATIC HYPERTROPHY, WITH CALCULUS IN THE BLADDER,

forwarded by Dr. Rattray, Aberdeen. This had been removed from a gentleman aged 84, and the enlargement of the prostate was just fitted to act as a valve, being an outgrowth of the usual fibrous nature from the middle of the prostate gland.

Dr. DICK exhibited the

RICKETY BONES OF A DOG

in which, as a puppy, rickets had been artificially induced by early removal from its mother, and feeding it on bread and meat with only enough milk to keep it from starving altogether. This showed that rickets had nothing to do with either syphilis or scrofula. The dogs were Italian greyhounds.

Mr. W. ADAMS stated that Dr. Dick's theory was that, by the improper dieting of children, an excess of phosphoric acid was formed, which carried off with it an excess of lime, and thus softened the bones. He questioned if rickets was ever congenital.

Mr. SPENCER WATSON exhibited a

SUPERNUMERARY FINGER

which had been attached to the fifth finger of a child by integuments alone, no bone being present at the junction. After an injury it had ulcerated, and was consequently removed.

Mr. I. BROWN showed a

FIBRO-CYSTIC TUMOUR OF THE UTERUS

diagnosed during life, although they are usually taken for ovarian cysts; in this case it had also been believed to be of an ovarian nature, and there had been no menorrhagia. A round body—the anteverted uterus—had been found in front of it, but he chiefly relied on percussion and palpation, the ovarian tumour being softer and not so resilient as a fibro-cystic tumour.

Specimen referred to Dr. Bristowe and Mr. Bruce.

Dr. CAYLEY exhibited a specimen of

TUBERCLE FROM THE TESTICLE.

In the same individual the right kidney was sacculated, and contained a mass like putty, as did the ureter and testicle. Miliary tubercles were found in all organs, and were found to be composed of closely aggregated corpuscles with some cells.

Dr. F. ROBERTSON related a case of

ULCER OF THE STOMACH

ending in hæmatemesis and death. The patient, a young soldier, who was very intemperate, came into Hospital at Windsor complaining of vomiting and purging. Next morning he was better, but in the evening, after vomiting much blood, he died collapsed. He had been invalided from Canada for hypertrophy of the heart, but had greatly improved with regard to that disease, although the aortic valves remained slightly defective. The stomach was very large, and exhibited a small but deep ulcer, reaching almost to the peritoneum, and situated near the cardia.

Dr. RISDON BENNETT exhibited a specimen of

CANCER OF THE LUNGS AND OVARIES

removed from the body of a young woman under 20. Pregnancy was suspected at first, but no definite conclusion could be arrived at for a time. By-and-by bronchial irritation with fever supervened, and acute miliary tubercle was suspected, but the difficulty in breathing increased, though it was only a few days before her death that she expectorated any blood. She died of consolidation of the lungs. The abdominal tumour did not increase much after admission into the Hospital.

Mr. PICK showed an

ANEURISMAL TUMOUR REMOVED FROM THE HAM

of a plumber, who came under the care of Mr. Brodhurst. It was induced by his missing his footing on a ladder, and falling down a step. Its walls were very thin. Pressure did good at first; but bronchitis and bed-sores supervening, and an intra-thoracic aneurism having been detected, the artery was cut down on, and secured by a silver wire. It did well for a time, but secondary hæmorrhage came on, and the artery was again tied with wire; but again hæmorrhage supervened, and again it was tied, this time with silk. The patient was too far gone, however; he died soon after. One of the wires had nearly eaten its way through, and there was but little clot. All the vessels were atheromatous. Messrs. Pollock and Holmes had employed the silver wire with success in such cases, the great point in the operation being not to draw the wire too tight, less force being necessary than when silk is used.

Mr. EASTES mentioned that Dr. Rees had succeeded in

curing one case of popliteal aneurism by acetate of lead, but had not been so fortunate in others.

Dr. Wilks remarked that lead and gout seemed to give rise to similar subsequent diseases.

Dr. Willshire exhibited a specimen of urine from a child suffering from intermittent hæmaturia, the attacks apparently being brought on by cold.

Mr. Lawrence exhibited a rare specimen of black cataract, the nucleus being black, the cortex white. Also a tumour from the eyeball, and a specimen of ruptured sclerotic with separation of the retina.

Dr. Murchison exhibited some biliary calculi discharged through the abdominal wall near the umbilicus. A glairy fluid still exuded from the orifice by which they had passed.

Mr. Barwell showed a specimen of a very abnormal condition of the aorta and its branches; first came an innominate separating into two carotids, and then the two subclavians separately. There was no vertebral artery on the right side.

MEDICAL SOCIETY OF LONDON.

Monday, March 18.

Mr. Henry Smith, President.

Dr. Chapman read a paper entitled

THE TREATMENT OF EPILEPSY: PRINCIPLES AND PRACTICE.

After adverting to the physiological discoveries of Marshall Hall, Bernard, Brown-Séquard, and others, by aid of which the true pathology of convulsive affections has been to a great extent developed, and showing, as has been stated by Dr. Brown-Séquard, that "epilepsy seems to consist in an increased reflex excitability of the cerebro-spinal axis, and in a loss of the control that in normal conditions the will possesses over the reflex faculty," he observed that the only rational and scientific treatment of the disease must consist (1) in discovering and removing all causes of eccentric irritation, and (2) in exerting a sedative influence on the nervous centres primarily implicated, either by direct action on those parts, or indirectly on the principles of derivation. He pointed out how the pathology of epilepsy just mentioned is totally at variance with the theory of muscular contraction, and the pathological doctrines based upon it, put forward by Dr. Bland Radcliffe, who teaches that convulsive and spasmodic affections generally are consequences and symptoms of a deficiency of nervous energy in the nervous centres presiding over the muscular system, and that therefore the most successful treatment of those affections consists in strengthening the nervous system by every possible means. Dr. Chapman described the effects of applying heat and cold over the nervous centres by means of spine bags, and showed that those effects were diametrically opposite in character to what they ought to be, if Dr. Bland Radcliffe's hypothesis were correct. For example, if ice be applied along the spine, it is fairly presumable that, should it act upon the nervous centres at all, it would exert upon them a sedative influence. Now, assuming Dr. Radcliffe's theory to be true, such an influence, by lessening the domination of the nervous over the muscular system, would facilitate muscular contraction and predispose the muscles to assume a spasmodic or convulsive condition; whereas, as a matter of fact, ice applied along the spine, so far from producing any such result, actually arrests spasms or convulsions if already present. Dr. Chapman stated, moreover, that heat on the contrary, if applied along the spine, is actually conducive to spasmodic action, and mentioned several cases in which the involuntary muscles of the vascular system are made to contract by this method. Dr. Chapman expressed his concurrence in the opinion entertained by most Physicians having any considerable experience in the treatment of convulsive affections, that, of all drugs used for the purpose, bromide of potassium is by far the most efficacious. He cited evidence to prove that its action on the nervous system is that of a powerful sedative, and especially that, as demonstrated by Dr. Hammond, of New York, it diminishes the amount of blood in the brain. He argued, therefore, that inasmuch as Dr. Bland Radcliffe, when treating convulsive affections, places his chief reliance on bromide of potassium, he practically abandons his peculiar theory of muscular motion, and the whole pathological structure built upon it, and thus virtually recognises the truth of the opposite doctrine. After urging certain objections to the continued use of bromide of potassium in doses sufficiently large to exert a beneficial influence in cases of epilepsy, Dr. Chapman showed the peculiar advantages of acting especially on the nervous centres chiefly implicated in that disease, and stated that this could be done more effectually by use of the spinal ice-bag than by any other means. Perhaps the most interesting part of this paper was that in which he explained how the numerous affections frequently associated with epilepsy, and contributing to usher in the attacks, may be treated successfully by his peculiar method. He maintained that cerebral anæmia, cerebral plethora, pulmonary congestion, nausea, vomiting, habitual constipation, functional disorders of the uterus, as well as of the male genito-urinary organs, and coldness of the feet—that very frequent concomitant of epilepsy—may all be treated successfully by modifying the temperature of some part of the spinal region.

The debate which followed was of unusual length.

MEDICAL NEWS.

University of Aberdeen.—At the late Medical Graduation term, the following candidates, after the usual Examinations, received Degrees in Medicine and Surgery:—

The Degree of M.D.

Edwin Burrell, L.R.C.P. Lond., M.R.C.S. London; James Davidson Mackay Coghill, L.R.C.P. Edin., L.F.P.S. Glas., L.M., Edinburgh; Peter Cullen, M.R.C.S. and L.M., Bengal; Henry Eales, M.R.C.S.L., R.N., London; Henry William Williams, L.R.C.P. Ed., L.F.P.S. Glas., Northamptonshire.

At the same time:—

George Henry Anderson, M.A., M.B., C.M., hon. Med., Middlesbro', York; Stewartson Clark, M.B., C.M., Banff; Alfred Swaine Lethbridge, M.B., C.M., Axminster, Devon; George Mackie, M.B., Insch; George Mair, M.B., Turriff; Douglas Moir, M.B., C.M., Manchester; John Murray, M.B., C.M., Aberdeen; George Frederick Wales, M.B., Belfast; Charles James Wills, M.B., C.M., Brighton; James Yates, M.B., C.M., hon. Sur., Oldham,

Received promotion to the Degree of M.D.

The Degree of M.B.

Alfred Henry Authonisz; Henry Child Buckley, M.R.C.S. Lond., Llanelly, Carmarthenshire: James Cameron, Laurencekirk; James Charles Gordon Carmichael, Maryculter; James Allan Coutts, Kincardine O'Neil; John Craigie, M.R.C.S. Lond., L.S.A., Doddington, Kent; George Henry Roque Dabbs, Newport, Isle of Wight; Alexander George Duncan, New Pitsligo, Aberdeenshire; James Farquhar, Buckie, Banffshire; Robert Grant, A.M., Tomintoul, Banffshire; John Thomas Hughes, London; Frederick Wm. Jackson, M.R.C.S., Broadstairs; Sydney Johnson, Laxton, Nottinghamshire; Hugh Johnstone, A.M., Savoch, Aberdeenshire; Timothy Lewis, Narberth, South Wales; Charles Maclean, Kiltearn, Ross-shire; Alex. Hunter Mair, A.M., Savoch of Deer; John Sturrock Mitchell, Letham, Forfar; Alexander Reid, A.M., Gartly; Augustin Le Rossignol, B. ès. Sc., M.R.C.S., Jersey; Arthur Stephen, A.M., St. Cyrus, Kincardineshire; Henry Shinglewood Taylor, M.R.C.S., L.R.C.P. Lond., Alton, Hants; Wentworth Raynes Tindale, M.R.C.S., Peckham Rye.

The Degree of C.M.

Alfred Henry Authonisz, Henry Child Buckley, Edwin Burrell, James Cameron, James Charles G. Carmichael, James D. Mackay Coghill, James Allan Coutts, John Craigie, Peter Cullen, George Henry R. Dabbs, Alexander G. Duncan, Henry Eales, James Farquhar, Robert Grant, Sydney Johnson, Hugh Johnstone, Timothy Lewis, Charles Maclean, Alexander Hunter Mair, John S. Mitchell, Alexander Reid, Augustin Le Rossignol, Arthur Stephen, Henry S. Taylor, Wentworth R. Tindale, and Henry W. Williams.

Of the above-mentioned Candidates, James Cameron, James Allan Coutts, Hugh Johnstone, and Arthur Stephen received their Degrees in Medicine and Surgery with highest Academical Honours. James Charles G. Carmichael and Timothy Lewis received their Degrees in Medicine with Academical Honours; and the following were declared to have passed part of their Examinations:—

Charles Adam, George Ed. D'Arcy Adams, Robert Reid Alexander, John Batten, James T. Crowden, Ed. L. Crowther, Frederick A. Davson, Thomas Birch Dyer, Alexander Forbes, Henry Grant, John S. Gunn, George W. Hutchison, James Ironside, Henry Kirwan King, Alexander Laurence, Alexander M'Arthur, Robert Macpherson, George Wm. Mousley, Patrick Nicol, James Allan Philip, Ed. Payne Philpots, Richard James Quinnell, John Robb, John Roberts, David Shirres, John Shives, George Alexander Simpson, David Sinclair, Joseph H. Smith, Francis W. Smith, Patrick B. Smith, Alfred C. Taylor, John L. Thomas, Hercules S. Trail, David Tulloch, Albert Williams, Richmond C. Willock, Alexander G. Wood, and Ed. R. Woodford.

The next Professional Examination for Degrees in Medicine commences on Saturday, July 27, 1867.

Royal College of Surgeons.—The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Court of Examiners on the 18th inst., and, when eligible, will be admitted to the Pass Examinations:—

Messrs. W. Crowsdon Barwith, James Wardley, Robert Patrick, Silvester March, and Richard Fletcher, students of the Manchester School; A. Rowland Ticehurst, Frederic Durham, Ridley T. Hilder, and J. N. C. Davies-

Colley, of Guy's Hospital; Richard Petch, Charles E. Hoar, and J. Alexander Rayner, of King's College; W. Oram Jones and E. Pierce Hardy, of St. Mary's Hospital; Charles Jones and Thomas Gurney, of the Middlesex Hospital; William H. Putsey, Ashley W. Barrett, and Frederick J. Elsom, of the London Hospital; Maximilian F. Simon, of St. Thomas's Hospital; George R. Lake, of St. George's Hospital; R. Mansell Jones and Horatio E. Maunsell, of the Dublin School; Horatio N. Hardy and R. A. H. Wood, of the Liverpool School; F. Arnold Lees, of the Leeds School; John Johnson, of Birmingham; and John H. Hunter, of Cork.

It is stated that fourteen out of the 107 candidates who offered themselves for examination failed to acquit themselves to the satisfaction of the Court of Examiners, and were consequently referred to their studies for three months.

The following gentlemen were admitted Members of the College on the 23rd inst.:—

Messrs. Edward Collett Shoppee, Kentish-town; Thomas Morgan Joseph, Builth, South Wales; David Havard, Newport, Pembroke; Thomas Charles Murphy, Ealing; Thomas Charles Lloyd, Llandyssil, Cardiganshire; Anthony Herbert Martin, L.S.A., Evesham, Worcestershire; and Essex Thomas Williams, St. Davids, Pembrokeshire, students of University College. James Rawlings, L.S.A., Liskeard, Cornwall; James William Barry, Ramsgate; Edward Noble Edwards, L.S.A., Kennington-terrace; William James Bennett, Dorchester; and John Frederic Codrington, Newcastle, Australia, of Guy's Hospital. William Wingate Saul, Sibsey, Lincolnshire; Philip Downing Hopgood, Chipping Norton; John Terrill Williams, Tavistock; and Charles Wade, Cross, Somerset, of St. Bartholomew's Hospital. Clement Dukes, L.S.A., Hackney; and John Fairbank, Highbury, of St. Thomas's Hospital. George Francis Jones, Prittlewell, Essex, of the London Hospital. Charles Trew Winckworth, L.S.A., Horsham, of the Westminster Hospital; and William Abraham Walker, Chesterfield, of Belfast.

Admitted Members on the 24th inst.:—

Messrs. Thomas John Burroughs, L.S.A., New Cross-road; Benjamin Walker, L.S.A., Handley, near Chesterfield; John Webb, Hannington, Hants; James Baynard Saundry, Penzance; Johannes de Liefde, Peckham, Surrey; Rowland Evans Daniel, Lampeter; Charles James Worts, Colchester; and George Frederick Trotter, Holmfirth, Yorkshire, students of Guy's Hospital. George Sangsford Clay, Birmingham; Henry Cox, Birmingham; and Matthew Hall Wright, Birmingham, of the Birmingham School. George Thompson, Leeds; George William Wigin, Methley, near Leeds; and Edmund Robinson, Huddersfield, of the Leeds School. Francis Ewbank, Ryde, Isle of Wight; and Henry William Diver, Bombay, of St. Bartholomew's Hospital. Thomas Greenhalgh, Manchester; and Alexander Oberlin McKellar, Oldham, of the Manchester School. Richard Francis Hay, L.S.A., Bridport, Dorset, of the London Hospital. Alfred Wilson, Cleveland, Yorkshire, of the Newcastle School; and John Badcock Harris, Gosport, of St. Thomas's Hospital.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 18, 1867:—

Richard Morgan, Aberdare; Nelson Congreve Dobson, Holbeach; William Anderson, Stockwell, S.; Christopher Samuel Jeaffreson, Birmingham; John William Morgan, Oystermouth, near Swansea; Francis Boynton Lee, Beeston-hill, Leeds; Thomas Tinley, Whitby; Edward Henry Beaman, Upholland, near Wigan.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

GROSVENOR, A. O., has been appointed Resident Medical Officer at the Lambeth Parish Workhouse.

HARRISON, CHARLES, M.D., has been elected Honorary Surgeon to the Lincoln General Dispensary, *vice* John Hewson, F.R.C.S., deceased.

MACNAB, R., M.D., L.F.P.S., has been elected Physician to the Suffolk General Hospital.

RICHARDSON, BENJ. W., M.A., M.D., F.R.C.P., has been appointed Physician to the London Infirmary for Epilepsy and Paralysis.

SMITH, H., F.R.C.S.E., has been appointed an Assistant-Surgeon at King's College Hospital.

TRUBSHAW, A., M.R.C.S.E., L.S.A., has been appointed Junior House-Surgeon to the Southern Hospital, Liverpool.

TURNER, ROBERT S., M.A., L.R.C.S. Edin., has been appointed Resident Assistant to the Extra Physicians at the Royal Hospital for Sick Children, Edinburgh.

WOOD, J., F.R.C.S.E., has been appointed an Assistant-Surgeon at King's College Hospital.

BIRTHS.

ARNOLD.—On April 22, at Fountainville-terrace, Belfast, the wife of Dr. Wilberforce Arnold, L.K.Q.C.P.I., of a son.

BOWER.—On April 17, at 2, Clarence-villas, Windsor, the wife of Edward Bower, M.D., of a son.

BUCHANAN.—On April 21, at 53, Harley-street, W., the wife of G. Buchanan, M.D., of a daughter.

COWAN.—On March 27, at the Green Mountain Hospital, Ascension, the wife of Michael Waistell Cowan, Esq., M.D., Surgeon, R.N., of a son.

DIAMOND.—On April 16, at Dudley-villa, Effra-road, S., the wife of Dr. W. H. Diamond, of a daughter.

HASTINGS.—On April 22, at 13, Queen Anne-street, Cavendish-square, the wife of Dr. Cecil Hastings, of a daughter.

MARTIN.—On April 21, at The Briars, Crawley, Sussex, T. H. Martin, M.R.C.S., of a daughter.

MILLER.—On April 20, at 540, St. Vincent-street, Glasgow, the wife of Hugh Miller, M.D., of a daughter.

SAUNDERS.—On April 16, at 13, Queen-street, Cheapside, the wife of W. S. Saunders, M.D., of a son, stillborn.

REED.—On April 15, at 46, Hertford-street, W., the wife of Dr. Reed, prematurely, of a daughter.

ROBERTS.—On April 17, at Telhurst-park, South Norwood, the wife of S. B. Roberts, M.D., since deceased.

MARRIAGE.

EWEN—WALKER.—On April 23, at the parish church, Algernon Ewen, M.R.C.S.E., of Long Sutton, Lincolnshire, to Elizabeth Lucy, second daughter of the late M. Walker, Esq., of Sutton Marsh. No cards.

DEATHS.

BICK, A., L.R.C.P., at Loddiges-road, Hackney, on April 12, aged 29.

HOCKIN, W., retired Inspector-General of Hospitals, Bombay Presidency, at Castleton House, Sherborne, Dorset, aged 57.

MAURICE, T. B., F.R.C.S., at 96, London-street, Reading, on April 20, in his 73rd year.

MORTON, D. T., M.D., Surgeon-Major, Madras Army, and Staff-Surgeon at Port Blair, Andaman Islands, on February 11.

VACANCIES.

BIRKENHEAD BOROUGH HOSPITAL.—Assistant-House-Surgeon.

BLACKBURN INFIRMARY.—House-Surgeon.

DORSET COUNTY HOSPITAL.—House-Surgeon.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON.—Resident Clinical Assistants.

ROYAL PIMLICO DISPENSARY.—Honorary Attending Medical Officer.

ROYAL PORTSMOUTH, PORTSEA, AND GOSPORT HOSPITAL.—Assistant-House-Surgeon.

SUFFOLK GENERAL HOSPITAL.—Physician.

THE ROYAL GENERAL DISPENSARY, BARTHOLOMEW-CLOSE.—Assistant-Physician.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Eton Union.—The Stoke District is vacant; area 5910; population 21; salary £40 per annum.

Scarborough Union—The Scarborough District is vacant; area 2291; population 18,377; salary £120 per annum. Also the Workhouse; salary £80 per annum.

Wellington (Som.) Union.—The Sixth District is vacant; area 4575; population 869; salary £20 15s. 9d. per annum. Also the Workhouse; salary £30 per annum.

APPOINTMENTS.

Axbridge Union.—R. P. Tyley, M.D., M.R.C.S. and L.A.C., to the Wedmore District.

Barnstaple Union.—John Robert Elliott, M.R.C.S.E., L.K. & Q. Coll. Phy. Ire., to the Eleventh District.

Ely Union.—John Muriel, M.R.C.S.E., L.S.A., to the Second District.

Fylde Union.—Thomas Clarke, M.R.C.S.E., to the Poulton District.

Melksham Union.—Edward E. Meeres, M.D., M.R.C.S.E., L.S.A., to the Fourth District.

Nottingham Union.—Charles J. O. Smith, M.R.C.S.E, L.S.A., to the First District.

Pembroke Union.—Dr. Gwynne Harries to the Fifth, Pembroke Dock, District.

Wincanton Union.—Henry Adams, L.R.C.P. Edin., L.F.P. and S. Glas., to the Queen Camel District.

THE QUEEN'S UNIVERSITY IN IRELAND.—The Master of the Rolls gave judgment on April 16 on the petition filed by three graduates of the above University, praying for an injunction to restrain the Senate from granting degrees under the Supplemental Charter of 1866. The petitioners dispute the right of the Senate to accept or reject the Charter, and contend that in order to render it valid it should be accepted by the corporation at large, the fact being that the majority of the members of the University are opposed to the acceptance of the Charter. On this serious question the Master of the Rolls did not pronounce a decision, although he intimated that his present opinion, which, however, he said, might be changed on further argument, was in favour of the views put forward by the petitioners. His judgment was confined to the preliminary question, whether the suit could be maintained notwithstanding that the Attorney-General was not a party to it; and on this point he decided against the petitioners, with costs. It was stated by the petitioners' counsel that they intended to apply to the Attorney-General to proceed by information, and thus raise the question of the validity of the Supplemental Charter.—*Saunders's News Letter.*

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—During the recent sittings of the examiners the following gentlemen have passed the First Professional Examination of the Faculty:—William J. Mitchell, John Mackinlay, Alexander C. Moffat, James Robertson, Glasgow; Samuel A. Payne, Manchester. The following gentlemen have passed

the Final Examination of the Faculty :—Henry Knowles, John Vance, R. F. W. E. Goldicke, Thomas K. Salter, London; James Conolly, M.D., Galway; William Jameson, Manchester; James Ogilvie, Glasgow; James M. Grant, Aberdeen. The following gentlemen have passed the First Examination for the Double Qualification granted conjointly with the Royal College of Physicians of Edinburgh :—Thomas Richmond, George W. Johnstone, Edward P. Edwards, Duncan C. Milroy, James G. Beasley, James P. Cunliffe, Barnard W. Wellings, Adam Wilson, Richard Longher, William Stephen, James Kelly, George R. Atkinson, Glasgow; James H. Fletcher, Manchester. The following gentlemen have passed the Final Examination for the Double Qualification: —William H. Belcher, Cork; William Belcher, Dublin; John Kershaw, Manchester; Edward Carse, Edinburgh; Edwin Hollings, William H. Armitage, B. R. Boast, William L. Muir, Joseph H. Hill, Thomas Tinley, Hugh J. Lloyd, Henry E. Trestrail, Glasgow.

The Convalescent Institution.—Mr. William Gilpin, the late treasurer of Christ's Hospital, has bequeathed £200 to the above excellent institution.

Female Beneficence. — Mrs. Mary Ann Smith, lately deceased, has bequeathed £1000 each to several charities, and has not forgotten three of the most deserving institutions in this metropolis as recipients in each case of this handsome bequest—viz., the Royal Free Hospital, Gray's Inn-road; the London Fever Hospital; and the Samaritan Free Hospital. Miss Elizabeth Wickins, of the Cathedral-close, New Sarum, Wiltshire, amongst numerous legacies to other institutions not strictly Medical, has bequeathed £100 to the Salisbury Infirmary.

Reported Suicide of a Medical Student.—On Easter-day a young man committed suicide at the Trent station, near Nottingham, by cutting his throat. He is supposed to be the son of a clergyman named Bucknall, residing at Nuneaton. The cause of the rash act is said to be his non-success in attempting to pass an examination at St. Bartholomew's Hospital.—*Guardian.*

National Association for the Promotion of Social Science.—A meeting of the Health Department of this Association will be held at the office of the Association, on Monday evening, at eight o'clock, to discuss Dr. Lankester's Fourth Annual Report of the Coroner for Central Middlesex, embracing—(1) The employment of experts in coroner's courts. (2) The introduction of the inquiries of the coroner's court into workhouses. (3) The erection of mortuaries in the metropolis. Also to discuss Mr. Curgenven's paper on "The Waste of Infant Life."

Cattle Plague Inquiry.—During the week ending April 20, two fresh outbreaks of cattle plague, embracing five attacks, are reported; one on premises containing three cows, in the Petty Sessional Division of Bakewell (County of Derby), and the other on a farm having a stock of 28 cattle in the Petty Sessional Division of Barton-on-Humber (Lindsey Division of Lincolnshire). In the former case, one cow was attacked and was killed by order of the Inspector; in the latter, four steers contracted the disease, three of which were killed by order of the Inspector, and one died. No healthy cattle were slaughtered during the week through having been in contact with infected animals. The total number of cattle reported to have been attacked in Great Britain since the commencement is 253,902, and 52,703 animals have been slaughtered healthy to prevent the spread of the disease.

Walker *v.* the Great Western Railway Company. —Liability of a Railway Company to pay the Medical Expenses of their Servants when injured by Accidents on their Line.—(Court of Exchequer: Sittings in Banco, April 18.)—This was a case tried before Mr. Baron Pigott at Worcester. The action was brought by a Medical man to recover compensation for services rendered by him to persons injured by accidents on the defendants' line. It appeared that the plaintiff was the Surgeon for a certain district of the defendants' line to a provident institution which had been formed among the men employed by the Company, and he had been appointed to that office under the authority of the general manager of the Company, and he now sought payment for services rendered in three instances to servants of the Company injured by accidents within that district. The Company denied their liability to pay. In one of the cases it appeared that after the attendance the Company had paid part of his claim. In the second the general manager had expressly ordered by telegraph that Medical aid should be procured. In the third the plaintiff was sent for by the stationmaster, the case being within his district. The jury found a verdict for the plaintiff. Mr. Huddleston now moved to enter a nonsuit, on the ground that there was no evidence of liability. The Court refused the rule.

New Year-book.—The well-known *Canstatt's Jahresbericht* is no more, but in its place we are to have something which promises to be still better. Professors Virchow, Hirsch, and Gurlit, of Berlin, propose to bring out a couple of annual volumes containing the latest researches in all departments of Medical Science; and when we find among their collaborateurs such names as Meyer, Fick, Scherer, Cohnheim, Husemann, Liman, Friedreich, Gerhardt, Weber, Veit, and many others not less eminent, we may be sure that the work will be well and thoroughly done. Each volume is to consist of three parts, containing more or less allied subjects, and strict punctuality is promised. The work is to be published by Hirschwald, Berlin, at 33s. annually. Subscribers' names in this country are received by Messrs. Asher and Co., Bedford-street, Covent-garden.

Small-pox in London.—The report of the Small-pox Hospital for 1866 draws attention to the fact that this disease still rages and continues to spread in London, the epidemic having now lasted for a longer period than "any similar visitation within the memory of the present generation." Since the present Hospital was opened in 1850 we have seen four epidemics, one in 1851-52, when 1482 patients were admitted, another in 1854-56, when 2321 patients came in; again, in 1859-60 there were 2060 admissions; whilst in the present epidemic, which began in 1863, no less than 5691 patients have entered the Small-pox Hospital; the average admissions in each year in each of these epidemics being 741, 773, 1030, and 1422, the present number being about double that of 1851-52. Such facts speak for themselves; they tell of something wrong somewhere, be it want of vaccination, careless vaccination, or overcrowding of dwellings. Certainly it is high time the matter was properly investigated.

Vaccine Lymph.—Dr. Pissin has been for some time engaged in endeavouring to increase the efficacy of transmitted lymph. He found in 1866 that while in the cases vaccinated direct from the cow at his establishment the failures only amounted to 2 or 3 per cent., they rose to 35 per cent. when the same lymph was transmitted to a distance. By mixture with glycerine, this 35 per cent. became reduced to 25 per cent., this substance, moreover, not only preserving the lymph from the influence of the air, but also preventing its drying up so rapidly. But he thinks that not only may the air act injuriously on the lymph, but the light also, and he now employs his capillary tubes, made of yellow glass—black glass is not suitable, preventing the condition of the lymph within the tubes being inspected—and, as far as his trials have gone, they show that the lymph may be preserved active for a much longer period than in the ordinary tubes. The heat employed in closing the tubes, when too great, may be disadvantageous, whether this be done by melting the end or by sealing-wax; and Dr. Pissin employs a mixture of resin and wax, which melts at a lower temperature than ordinary sealing-wax.—*Deutsche Klinik*, No. xi.

Early Organic Residuum.—At the annual meeting of the Swedish Academy of Science, M. Nordenskiöld announced that a discovery of great importance to geological science had been made in the hill of Nullaberg, in Sweden. A large deposit of bituminous gneiss 33 metres in thickness, has been found embedded in layers of gneiss and mica schist. It is composed, in addition to feldspar, quartz, and mica, of a black substance like coal, containing carbonated hydrogen—in fact, a real organic substance, formed of the remains of plants or animals coeval with the deposit. He added that there could be no doubt as to the antiquity and geological situation of the strata of Nullaberg; infiltration was impossible. The inference to be deduced was that the crystalline stratified rocks of Scandinavia were formed when there existed animated creatures, but at a time long anterior to the period when life is supposed to have first existed on the earth.

Hydrophobia in Van Diemen's Land.—The *Hobart Town Mercury* gives an account of a fatal case of hydrophobia in that city in February, and states that it is believed to be the first case that has ever occurred south of the equator.

The *Geelong Register* mentions the slaughter of 3000 kangaroos in a single hunt, on the station of Mr. Whitehead, near Caramut. About 120 persons drove the poor things into an enclosed stockade, where they were butchered.

WIGHT *v.* WIGHT AND FIELD.—(Court of Probate and Divorce, April 24: Before Sir J. P. Wilde.)—In this suit for dissolution of marriage, which was tried at the last sittings, the jury found that the adultery charged had not been committed. Dr. Tristram, for the defendant, moved that the petition might be dismissed with costs. Mr. Serjeant Tindal Atkinson moved for the co-respondent's costs, including the costs of the first trial, in which the jury were discharged because they could not agree to a verdict. Mr. Searle, for the petitioner, opposed the motion as to the co-respondent's costs of the first trial. The Judge Ordinary dismissed the petition with the respondent's costs and the co-respondent's costs of the second trial. With regard to the costs of the first trial he held that the Court had a discretion to make any order it might think just, but he was of opinion that this was not a case in which that discretion ought to be exercised by ordering the co-respondent's costs to be paid by the petitioner. On the first trial no evidence was called on behalf of the co-respondent, and the result was that the jury were unable to come to a conclusion. On the second trial he brought forward a mass of evidence, some of which was decisive of the question at issue. The jury believed that evidence, and refused to act on the petitioner's evidence. But, as that evidence was not brought forward on the first trial, he declined to order the petitioner to pay the co-respondent's costs of that trial.

AUSTIN *v.* THE GREAT WESTERN RAILWAY COMPANY. —DAMAGES FOR INJURY TO A CHILD NOT PAYING A FARE.—(Court of Queen's Bench: Sittings in Banco, April 18.)—This case raised a rather singular point. The action was by, or on behalf of, an infant child, about 3 years of age, to recover damages for an injury sustained by the child while being carried by its mother as a passenger on the Company's line. The train was a parliamentary train, under the statute (7th and 8th of Victoria, cap. 85), by which it is provided that children under 3 years of age, in their mother's arms, shall be carried free of charge. In this case the child was a month or two over the three years; and was in the arms of its mother, who said nothing (being asked nothing) about it, but simply, with the child in her arms, took a ticket for herself, nothing being asked for the child. It did not appear that she knew anything about the enactment, nor was it at all suggested that there was any fraud on her part. At the trial, at the last assizes, on the Oxford Circuit, before Baron Pigott, the objection was taken that as nothing was paid for the child she was not carried for hire, and that, therefore, the Company was not liable. It was answered that they were entitled to recover the fare for the child if they chose, and that it was legally due, and that it was not because they chose not to take it that therefore they could be allowed to cause injury to the child by their negligence, with impunity. The point of law was reserved, and, subject thereto, the verdict went for the plaintiff for £50. Mr. Huddleston now moved on the part of the Company to set aside the verdict on the ground above stated, but the Lord Chief Justice said the Company were content to take the child without payment, and there was a very common understanding that "children in arms" were not charged for. The question did not turn merely upon the terms of the Act, but upon the general obligation of the Company as carriers of passengers. The Company agreed to take the mother with the child (which they saw in her arms) for her fare alone. And then, by the negligence of their servants, the child was injured. They were clearly liable. The other three judges concurred. Rule refused.

DISINFECTING POWDER.—M. Demarquay employs the following powder, which may be applied without causing pain to ulcers emitting fetid odours, as open cancer, for example:—Permanganate of potash, powdered carbonate of lime, and powdered starch, equal parts.—*Union Méd.* No. 48.

SHORT-SIGHTEDNESS IN GERMAN UNIVERSITY STUDENTS. —Dr. Cohn furnishes an account of the examination which he made of the condition of eyesight in 387 of the 964 matriculated students of the Breslau University. Of the 387, 126 were found to have normal vision, and 230 (or two-thirds) were short-sighted, the remaining 31 having some other anomaly of vision.—*Deutsche Klinik*, No. xi.

A RIDE ON A HOBBY HORSE.—M. Diday explains the degeneration of the *noblesse* after his own fashion. Noble families, he observes, were exclusively perpetuated, at least in the legitimate line, through their eldest sons. Now it is known that hereditary syphilis, whether manifesting itself by its proper symptoms, or acting only as a debilitating agent, decreases in its effects with each successive child, always affecting less powerfully the younger than the elder children of a family. Thus, during a period of nearly three centuries noble families have been exclusively perpetuating themselves by those of their children who had the chance of being most seriously damaged by syphilis.—*Gazette Méd. de Lyon*, No. 9.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Sidney Ringer's paper on Nightmare in Children shall be published at once.

T. D.—The strong form causes considerabl pain, and should therefore generally be used considerably more diluted.

Taunton.—Sir W. Fergusson, Bart.

Madrid, Puerta del Sol.—Your name is not in our list of subscribers.

P.—Write to P. Holland, Esq., Burial Acts Office, Whitehall, S.W.

Ishmael.—If a registered Practitioner, his evidence will be received. He might be disagreeably cross-examined.

Mr. Tucker, Exeter.—Consult Dr. Gervis Murray, Hon. Sec. to the Obstetrical Society of London, Green-street, Grosvenor-square, London, W.

A Father.—We cannot undertake to recommend Medical men. Consult your ordinary Medical attendant, and take his opinion as to any further advice that may be requisite.

S. C.—Arsenic is chiefly employed in the scaly diseases of the skin, as psoriasis. Patients take it with impunity for many years, if the case be one adapted for it, and with increase of health and strength.

M.S.—The "Surgeon's Vade Mecum," published by Renshaw; the "Physician's Vade Mecum," by the same; Dr. Tanner's "Practice of Medicine;" Heath's "Minor Surgery;" Churchill's "Midwifery."

The Secretary of the Female Medical Society.—The matter is not one of public interest, and it would answer no good purpose to publish it, especially as the erroneous statement has been rectified.

T.—Neville's splints are manufactured by Ferguson, Giltspur-street, E.C. There are three sizes, ready for application. The price is 15s. each, or with the cradle 30s. additional.

Bromine in Hospital Gangrene.—Bromine may be used in hospital gangrene and allied disorders, with an equal proportion of water, or in a still more dilute form, if desirable.

Assistant-Surgeon, Netley.—According to Dod's Peerage, etc., it is stated that in military precedence Inspectors-General of Hospitals, if with an army in the field, or after three years' full-pay service, rank with, but after, Major-Generals; and that Deputy Inspectors-General of Hospitals, after five years' full-pay service, rank with, but after, Colonel. According to the same authority, junior Assistant-Surgeons rank with, but after, Lieutenants; whereas Apothecaries of fifteen years' standing rank immediately after the junior Captain.

A Student.—A knowledge of bandages and their application is necessary, not that of Surgical instruments.

Inquirer.—Watts, in his "Bibliotheca Britannica," mentions George Fordyce, M.D., F.R.S., as the nephew of Sir William Fordyce, M.D., F.R.S. The other Fordyce, D.D., was an eminent dissenting clergyman. William Turner, who was educated at Cambridge, took the degree of Doctor of Physic at Ferrara. *Watt* does not state that Daniel Turner *was* an "M.D.," and in most of his works it appears "by Daniel Turner, of the College of Physicians." In one we have seen he appears as "Daniel Turner, *M.D.*, of the College of Physicians." Edmond Phillips had £40 4s. 8d. for embalming the body of Thomas Sutton, the benevolent Founder of the Charter House. The two Serjeant-Surgeons to George II. each received for the same duty £122 8s. 9d., and the apothecary £152 for cerecloth and rich perfumed powders.

SUBSCRIPTIONS FOR MR. FIELD'S CASE.

*** It will be noticed that, according to a decision, of which we publish an account this week, Mr. Field will have to pay the costs of the first action.

Amount previously announced, £180 17s. 6d.

G. Burnand, Esq., £5 5s.; G. Burt, Esq., £2 2s.; E. Barker, Esq., £1 1s.; A. B. Carpenter, Esq., £1 1s.; Dr. Carr, Blackheath, £1 1s.; W. Cathrow, Esq., £1 1s.; G. Critchett, Esq., £2 2s.; Dr. Falconer, Bath, £1 1s.; Dr. Battershall Gill, £1 1s.; Major Greenway, £2 2s.; Dr. Harling, £1 1s.; U. S. Harris, Esq., £2 2s.; C. Lingen, Esq., Hereford, £1 1s.; Dr. Morell Mackenzie, £1 1s.; J. Morgan, Esq., £1 1s.; Dr. T. Nicholson, £1 1s.; E. Newton, Esq., £2 2s.; Dr. Royston, £1 1s.; Dr. A. P. Stewart, £1 1s.; T. H. Smith, Esq, St. Mary's Cray, £1 1s.; Dr. Tanner, £3 3s.; G. Turner, Esq., £1 1s.; W. Thomas, Esq., £5 5s.; N. B. Ward, Esq., £1 1s.; Dr. Wight, £10 10s.; Erasmus Wilson, Esq., £2 2s.

BLOOD AS FOOD.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will Dr. Wray have the kindness to inform me what his orthodox clerical friend says to the reiterated injunction to Christians, both Jewish and Greek, to abstain from things strangled and "from blood?" Only one sect to my knowledge—namely, the Sandemanians or Glassites—obey this express command, and a division was a few years ago opened amongst them by the question whether blood could be entirely washed out of an animal shot as game. It is somewhat remarkable that the bloody pudding should be such a favourite dish with the Scottish poor, who show an almost Jewish dislike to pork. I am, &c.

St. Paul's Cray, April 22, S. WORDSWORTH POOLE, M.D.

Scottish Diet of Blood.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I am an Englishman—a Southron—and although I love all men, as a Christian should, yet I must confess that I always hated an old-fashioned Scot. Hate is, perhaps, the wrong word. It is rather a kind of pity for some of their unfortunate surroundings, and of hatred for the mean ways which a probably high-minded people are led to adopt in consequence of the aforesaid surroundings. But I confess that my blood has seldom met with such a cold chill as it did on reading that quotation from Hugh Miller's "Schools and Schoolmasters," which Dr. Wray brings forward in support of the plan of using blood as food.

If blood is to be used, let it be so; only let it be taken fairly. Cut the beast's throat, and take it as it flows. The Liverpool people have, it is said, a school of butchery, set going by the late Dr. Carson, whose peculiarity is that it kills animals, not only without drawing, but without displacing blood. The minute vessels are left full of circulating fluids as they are during life. The blood is, consequently, everywhere mixed with the flesh, and the latter has a fuller, richer flavour, but with no predominant taste of blood. Or, if people like to take the blood of an animal that is killed by bleeding, and cook it in any way they please, let them. The blackpudding, *Rothwürste*, and similar dishes have their admirers, and may stand on their own merits, such as they are. Only, let us protest against that peculiarly miserable ultra-Scottish mode of bleeding a poor beast by the lancet, and letting it live on. The religious prohibitions against eating blood are supposed to be directed, not so much against blood *per se*, as against cruel and unnatural means of obtaining it. Blood *must* be eaten. Bleed an animal as much as you please, and more or less remains in the flesh. But the prohibition seems directed against the use of *living* animals; of blood as the symbol and instrument of life; against cutting off parts of living animals, as Bruce's Abyssinians did, and against bleeding, as Hugh Miller's Scottish friends did. The fact that so zealous a Puritan could sanction such an abominable custom, shows that hunger is stronger than religion, even in a Scot.

It is gratifying to learn that wheaten bread is gradually displacing oatmeal, and that the food of the poor Scot is becoming really more human. But, whilst this is going on, don't let us have an old habit, which necessity alone could justify, quoted in support of a diet from which every well-regulated stomach turns in disgust. Did you, Mr. Editor, ever eat a blackpudding? Did your teeth ever meet through that soft, subcrisp, vapid blood-clot? Ugh! If I go on I shall be sick!

I am, &c. John Bull, M.D.

Wanted, a Situation.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I have my full course read for the degree of M.D. in the Q.U.I., and I have my first half examination passed for the degree of M.D. I am open to an engagement at present, so I write to you to see if you could find anything that would be likely to suit me. If you know of anything that would suit, I shall be happy to hear from you as early as possible. I am 26 years of age, weight 10 stones and 8 lbs., height 5 feet 11 inches, can ride and drive, and your attention to the above will much oblige, while I remain, Sir,

Yours respectfully,

Alexander Mac ———.

Cleator Moor, Cumberland, April 20.

*** Candidates for the honour of employing Mr. Mac ——— are requested to send application, with testimonials, to our office.—Ed.

Boards of Guardians and Medical Officers.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The subject of the treatment of the sick poor by parochial authorities has been much commented on recently by the public press, and a beneficial alteration in the law has been the result. But from a report of the proceedings of the Guardians of the Holborn Union, in a local paper of the 13th inst. (which I enclose), it appears that the Medical officers are not treated much better. On the question as to the remuneration for extra attendance on patients during the recent attack of cholera, it was stated that Dr. Roberts had visited 89 cases, and given medicines and attended to 507—a greater number than was attended by the other Medical officers all together. Notwithstanding this difference, the Board decided that they should all be paid alike, on the alleged reason that if Dr. Roberts had more to do this time he might have less to do on the next occasion. Perhaps, if this subject were mentioned in your influential paper, it might meet the eye of some one connected with the Poor-law Board, which has the power, I believe, to rectify such a striking instance of inequality of remuneration and service as the above.

An Outside Observer.

Advertising a Cure for Cancer.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I send you a copy of the *Londonderry Sentinel* of this date, in which I have marked an advertisement headed "Infallible Cure for Cancer." What a comment this same advertisement furnishes on the present condition of the Naval Medical Service, when a Surgeon on the active list, as I believe the advertiser to be, can publish with impunity an advertisement of this description, adding the *quondam* honourable initials R.N. to give force to his effrontery. I enclose my card, and beg to subscribe myself

Anti-Quackery.

April 19.

*** The following is the advertisement to which our correspondent refers:—

"Infallible Cure for Cancer without CUTTING.—Apply to Dr. Hamilton, R.N., at Roddy's Hotel, Society-street, Londonderry, the first and third Wednesday of each month, between one and two o'clock."

Milk in the Breasts of Ineants.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Although an indirect subscriber for many years, I take the liberty of asking you to publish in your next issue the following extraordinary case which occurred in my practice:—

A woman brought to my surgery a male child, fourteen days old, with enlargement of both breasts, which she evidently supposed to be gatherings. On close and careful examination, I found them to be hard nodulated and movable tumours, and, on applying steady pressure, unmistakable milk exuded therefrom. The said tumours, being under the usual treatment, still continue to remain *in statu quo*. You will kindly oblige by enlightening me on the subject from any of your numerous readers as to whether they have met with a similar case in their practice, and the future treatment to adopt. I am, &c.

James Mitchell, L.R.C.S.E., L.M.

9, Roper-street, Barrow-in-Furness, Lancashire, April 22.

*** There is nothing unusual in this. Ordinary treatment, or none, suffices. Anything but the milking and squeezing which old women perpetrate.

Styptic Colloid.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Will you kindly tell me where to procure the "styptic colloid" spoken of by Dr. Richardson in the *Medical Times and Gazette* of April 13? Can I get it from Morson and Son? I am, &c.

Ishmael.

April 23.

*** Robbins, chemist, Oxford-street.

Acarus Scabiei.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—"C. L." is severe. He upbraids me for having expended pen, ink, and paper without "replying to the gist of" his "question," and demands "an explicit reply."

His question was, "Can the Acarus scabiei withstand a heat greater than clothes can?" and now, after I have explained (apparently to his entire satisfaction) that it does not matter twopence whether it can or cannot, he wants to know all about the ova. That, at all events, is the "gist" of his questioning now, and it certainly was not the "gist" of his former question, for it is plain that he was not even thinking about the ova then. He surely cannot profess that when he said acarus he meant ovum. Eggs are eggs, we know; but an acarus is no more an ovum than a chicken is an egg. I think I am fair in concluding, from the form in which his question was put, that "C. L." had settled in his own mind that the acarus was the direct infecting agent, and that everything depended on getting him killed; furthermore, that the proper way of doing this was by roasting him, and that all that "C. L." wanted to know was how hot he ought to give it him so as to make sure;—that, I think, was what his question came to.

Now that I have thrown out hints about the ova, he will "be glad" to know "whether my organised dust or ova can convey the disease by means of the clothes." This is a totally different question, and more to the point by a good deal. I have already explained to him that the ova, if taken from skin to skin, can convey the disease—that, in fact, it is in that way that the disease is commonly communicated. What "C. L." wishes to know now is whether the ova lose their vitality by remaining for a short time on the clothes—*i.e.* separated from the skin. If he means anything, he means that. I must confess I have never attempted this very delicate experiment. After all, suppose it to be ascertained that they do not lose their vitality under these conditions, that would only be an *à priori* ground for assuming that it is a matter of expediency to disinfect the clothes of persons who have caught the itch. But a single *à posteriori* conclusion is always worth a dozen *à priori* ones, and "C. L." may take it, if he likes, on my guarantee, that if he manages to eradicate thoroughly "the itch" from the skin his patient will in no case relapse through catching it afresh from his own clothes. I do not mean to say that relapses of scabies are not of common occurrence, but that, when they do happen, it is either from the skin not having been thoroughly disinfected or from the patient catching it anew from another person, generally from the very source whence he caught it at first. I state this with confidence, since in many hundred cases that I have treated without disinfecting the clothes the general result, so far as I have means of knowing, has been a radical cure, and since in all relapses that have returned to me I have been able to establish either that there has been renewed contact with the original focus of contagion, or that the patient has greatly failed to follow out the directions given to him for the thorough disinfection of his skin. And now I must bid "C. L." farewell. It is easier, they say, to ask questions than to answer them; but it also takes far less time, as everybody who has been up for examination will allow. When I first took up my pen I did not contemplate quite so great an expenditure of time as that rash act has entailed on me; and I now lay it down, trusting that if "C. L.'s" patrons should ever catch the Caledonian complaint I have already said enough to prevent him from singeing all their clothes. I am, &c. X. Y. Z.

On the Nature and Treatment of Acute Rheumatism.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Acute rheumatism is in general, if not always, based upon or associated with malarial fever, and its treatment, therefore, as in the case of intermittent and this class of fevers, consists in the due impregnation of the blood with quinine. This, I know, is not generally so considered by the Profession, but it is nevertheless a fact, which ample experience has taught me; and, in proof, this relapse in the case of her Royal Highness goes far to establish, recurring, as it did, without any apparent re-exciting cause, like unto those recurrences of fever at a month or two's interval, so common to those who have been the subjects of intermittent and this type of fever in India and elsewhere. The local inflammatory affection excited by, and developed by the agency of, the febrile cause is therefore of a modified character, and amenable only, or principally so, to the treatment of the constitutional febrile affection. Indeed, it might with reason be said that the affection of the joint was intermittent fever here localised, and, as such, quinine I have found its only efficient remedy, (a) and to keep the blood imbued with it necessary to prevent a relapse. The febrile affection in these cases of localised fever is often so masked and obscured by the more prominent symptoms of the local affection, that its remittent character escapes notice, though periods of exacerbation and remission of fever, or otherwise of pain in the part, are in general to be discerned when carefully watched.

In illustration of the utility of quinine in the cases enumerated, I here insert the following cases:—

"*Acute Rheumatism.*—On the Saturday preceding the Tuesday on which the election took place, I visited a hairdresser, aged 56. I found him in bed, to which he had been confined for nearly a month with acute rheumatism, which had attacked him on the day succeeding to one that he had spent in the amusement of fishing. One of the knees had been first attacked with swelling and pain, which was accompanied with much fever; the disease then migrated into the other knee, and attacked also

(a) See subjoined cases in illustration, extracted from my work on "Life: Its Nature, Source, and Varied Phenomena in Health and Disease." John Churchill and Sons, New Burlington-street.

one of the wrists. The swelling and pain were now confined to one of his wrists. He had been bled, purged, and abundantly sweated, and was now profusely perspiring, and much attenuated. I immediately ordered him to take two grains of quinine every four hours without intermission. This he took, with the effect that the next day he was better, and on the Tuesday was so much improved as to be capable of attending the poll and giving his vote as an elector. He continued the quinine after this twice a day, and took an occasional pill of calomel and aloes for the period of about a month, and was restored by these means to perfect health.

"Another man I accidentally met limping about, by the aid of a stick, with a swollen knee. He was a butcher by trade, and told me that he had been for some time thus afflicted and incapable of work. Fever had accompanied the swelling of the knee in the primary attack. He had been twice in the Hospital, on one occasion for ten, and on the other for six weeks, during which time he had been salivated, leeched, blistered, used hot-baths, and had adopted many other remedies, but with only temporary benefit. I directed him to take three grains of quinine three times a day, and to use a liniment composed of one drachm of sulphuric acid and fifteen drachms of olive oil to the knee night and morning, rubbing it well in for half an hour at each time. A fortnight after using these remedies, he was so much benefited that he was not only capable of resuming his occupation, but declared that he was able to walk, as he expressed it, ten miles at a stretch."

In India I have seen many other forms of this localised fever. A very striking instance was that I witnessed of ophthalmia in the fortress of Vellore—sentinels going on duty at night on the ramparts, surrounded by a very stinking ditch, quite well, being brought into Hospital in the morning with the pupils so swollen and painful that it was impossible to open the eye, with a good deal of fever and constitutional disturbance; cured in a few days by quinine, without reference to the local treatment, further than the application of warm poultices or cold appliances, as was most agreeable to the feelings of the patient. Whereas, on a former visitation, we lost as many as *twenty men* by blindness, under the then generally practised treatment by bleeding and the large class of anti-phlogistic remedies. This is the same disease by which we lost so many men some half-century ago in Egypt.

I am, &c.

26, Osnaburgh-street, London, N.W. C. SEARLE, M.D., M.R.C.S.E.

COMMUNICATIONS have been received from—

Dr. MACNAB; Mr. TUCKER; Mr. TRUBSHAW; FATHER OF FAMILY; T.; A. B. C.; Mr. C. HUNTER; Dr. FLEMING; Rev. J. P. GELL; AN OUTSIDE OBSERVER; L. M. G.; ANTI-QUACKERY; Dr. MORGAN; Mr. MITCHELL; Dr. MARTYN; Dr. POOLE; M. S.; Dr. SEARLE; Dr. R. B. TAYLOR; Mr. H. T. L. ROOKE; Mr. POOLE; Dr. GERVIS; Mr. CURGENVEN; ISHMAEL; Dr. ROSS; Dr. ABBOTTS SMITH; Dr. PALFREY; Mr. COLLINGWOOD; Mr. ROBINSON; Dr. B. BALL; Dr. W. OGLE; Dr. D. MILLER; Dr. MACPHERSON; Rev. Dr. S. HAUGHTON; Mr. T. G. HULETT.

BOOKS RECEIVED—

Buchan's Handy Book of Meteorology—Bernutz and Goupil on the Diseases of Women—Report of the Cheshire Lunatic Asylum—The Prevention of Pauperism—Dobell's First Stage of Consumption—Photographs of Eminent Medical Men, No. 2, Vol. II.—Eleventh Annual Report of the Victoria Central Board of Health—Winslow on the Influence of Light—Brande's Dictionary of Science, Part XII.—The Indian Medical Gazette, 1866—Roth on Mortality of Infants in Manufacturing Towns—Eleventh Annual Report of the Nottingham Lunatic Asylum—Davey on Suicide—Davey on Insanity and Crime—Second Annual Report of the Glamorgan County Lunatic Asylum—Annual Report of the Cumberland and Westmorland Lunatic Asylum—Annual Report of the Committee of the Manchester and Salford Sanitary Association—Health Officers' Report of the Bombay Municipality, 1866—Richardson's Poisons of the Spreading Diseases.

VITAL STATISTICS OF LONDON.

Week ending Saturday, April 20, 1867.

BIRTHS.

Births of Boys, 1026; Girls, 1008; Total, 2034.
Average of 10 corresponding weeks, 1857-66, 1938·9.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	643	580	1223
Average of the ten years 1857-66	662·2	637·2	1299·4
Average corrected to increased population..	..	..	1429
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,388	8	1	3	..	6	3	..	..
North ..	618,210	8	4	2	1	12	12	1	..
entral	378,058	3	1	..	1	11	5	..	..
East ..	571,158	13	1	5	..	13	11	3	..
South ..	773,175	12	..	9	2	5	15	4	..
Total ..	2,803,989	38	7	19	4	50	46	8	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·443 in.
Mean temperature	50·9
Highest point of thermometer	64·8
Lowest point of thermometer	42·5
Mean dew-point temperature	45·7
General direction of wind	S.W.
Whole amount of rain in the week	0·68

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, April 20, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending April 20.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending April 20.	Temperature of Air (Fahr.). Highest during the Week.	Temperature of Air (Fahr.). Lowest during the Week.	Temperature of Air (Fahr.). Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	2034	1421	1223	64·8	42·5	50·9	0·68	69
Bristol (City) .	165572	35·3	126	74	‡76	61·8	43·9	50·6	0·93	94
Birmingham (Boro')	343948	43·9	233	167	121	61·0	42·0	49·8	0·83	84
Liverpool (Borough)	492439	96·4	307	285	254	60·9	40·8	51·0	1·02	103
Manchester (City) .	362823	80·9	201	205	‡154	63·0	43·0	50 5	1·48	149
Salford (Borough) .	115013	22·2	63	58	52	60·2	41·9	48·7	1·61	163
Sheffield (Borough).	225199	9·9	161	119	97	62·7	40·6	49·0	1·06	107
Leeds (Borough) .	232428	10·8	170	118	130	68·5	39·5	50·3	2·28	230
Hull (Borough) .	106740	30·0	87	49	57	..	..	..	..	..
Nwcstl-on-Tyne, do.	124960	23·4	91	66	64	59·0	40 0	48·5	0·32	32
Edinburgh (City) .	176081	39·8	141	85	100	57·7	37·0	48·1	0·30	30
Glasgow (City) .	440979	87·1	395	257	244	55·9	35·6	46·7	0·94	95
Dublin (City and some suburbs) .	319210	32·8	145	†157	153	60·9	36·5	49·7	..	
Total of 13 large Towns . . .	6187764	34·8	4154	3061	2725	68·5	35·6	49·5	1·04	105
					Week ending April 13.	Week ending April 13.				
Vienna (City) .	(1863) 560000	..	..	..	358	..	..	§ 46·0	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·443 in. The barometrical reading decreased from 29·79 in. on Wednesday, April 17, to 28·90 in. by the end of the week. The general direction of the wind was S.W.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 46·7°.

APPOINTMENTS FOR THE WEEK.

April 27. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

29. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Dr. C. H. F. Routh, "On Hypertrophy of the Breast in connexion with Uterine Disease."

30. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ANTHROPOLOGICAL SOCIETY OF LONDON, 8 p.m. Dr. Dupont, "Further Discoveries of Early Man in Belgium." Dr. Hyde Clarke, "Turkish Nomenclature." K. Mackenzie, Esq., "Stone Axe from Brazil." Dr. Houghton, "Dyaks of Sarawak."

ROYAL INSTITUTION, 3 p.m. Prof. Blackie, "Plato."

May 1. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 2 p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.

OBSTETRICAL SOCIETY OF LONDON. 7 p.m.: Council Meeting. 8 p.m.: Mr. Dunn, "On a Fatal Case of Rupture of the Uterus." Dr. Barnes, "Pregnancy complicated with Small-pox." Dr. Hicks, "On a Case of Extra-uterine Fœtation." Dr. Playfair, "On the Treatment of Labour complicated by Ovarian Tumour." And other Papers.

ROYAL INSTITUTION, 2 p.m. Annual Meeting.

2. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

HARVEIAN SOCIETY OF LONDON, 8 p.m. Mr. H. Power, "On Ulcers of the Cornea." Adjourned Debate "On the Causes of Excessive Infant Mortality."

ROYAL INSTITUTION, 3 p.m. Prof. Huxley, "Ethnology."

3. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8 p.m. Prof. Blackie, "Music of Speech in Greek and Latin."

WESTERN MEDICAL AND SURGICAL SOCIETY, 8 p.m. Nomination of Officers. Dr. Martyn, "On the Cause of the Premature Decay of the Teeth."

WHY NOT USE THE BEST?

"MAIZENA"

Is the ONLY "PRIZE MEDAL" CORN FLOUR. It was also reported by Jury of 1862, London,
"EXCEEDINGLY EXCELLENT FOOD."

It is superior to the best Arrowroot; makes in short time, and at trifling cost, delicious Blanc-mange, Puddings, Cakes, Omelets, Creams, and scores of other dishes, and is always an invaluable Food for INVALIDS and CHILDREN. Sold in Packets, with directions, by Chemists, Grocers, &c.
N.B.—The price is *no more* than for inferior articles.

TRY IT ONCE.

BURGUNDY WINES.—It being established beyond question, and daily confirmed in the practical experience of many eminent Members of the Medical Profession, that the use of Burgundy Wines is of the greatest advantage and benefit to a great variety of Invalids, as well as that they are the most salutary and enjoyable Wines for daily use by the brain-working community, it should only be necessary to indicate a pure source, and the class of Wines that are best adapted to the climate of England.
MM. PIOT FRERES, having heard complaints from both Doctors and the Public, and knowing of their own experience what factitious and fortified mixtures are commonly sold here under the name of Burgundy, have been induced to establish a Depôt for supplying true and unsophisticated Wines, the produce of their own Estates and others of the first reputation; and while they have the pleasure to acknowledge the commendations of many leading Members of the Medical Profession, they beg to invite and offer every facility for Medical Men to examine and become acquainted with the character of these Wines.
PIOT FRERES, Growers and Factors of BURGUNDY WINES.—Depôt for England, 282, REGENT-STREET, W.

PURE FLOUR OF LENTILS.

Wholesome. Nutritious. Easy of digestion. Recommended for Invalids and Children. 1s. per lb. Manufactured by Horsnaill & Catchpool, Bullford Steam Mills, Essex; and 355, Goswell-road, London, E.C. Wholesale Agents, Maw & Son, 11, Aldersgate-street, E.C. Prices to the Trade: 1 lb. Tins, 8s. per Doz.; ½ lb. Tins, 4s. per Doz.

INVALID TURTLE.

As the best restorative for strength, used and recommended by all Physicians in cases of WEAKNESS and PROSTRATION.
Kept ready for use in Half-pints, Pints, and Quarts, by Mr. DONALD, St. James's Hall, Regent-street, W.

Natural Mineral Waters of Vals, Vichy, Carlsbad, Seltzer, Kissengen, Homburg, PULLNA, FRIEDRICHSHALL, &c., direct from the Springs; also the Artificial Mineral Waters prepared by Dr. Struve and Co. at the Royal German Spa, Brighton.—Agents, W. BEST and SONS, 22, Henrietta-street, Cavendish-square, London, W.

NATURAL MINERAL WATERS OF VICHY,

Efficacious in Stomach, Liver, and Renal Diseases; Gout, Rheumatism, Diabetes, &c.
Also, the celebrated OREZZA MINERAL WATER, containing Iron, and which is extensively prescribed as an invaluable Tonic.
VICHY PASTILLES, the best Digestive Lozenges; and VICHY SALTS for Baths. Also, other French and German Natural Mineral Waters.
VICHY WATERS COMPANY (only Depôt in Great Britain), 27, MARGARET-STREET, REGENT-STREET, LONDON, W.

The Mineral Water of Geilnau (Nassau), an Acidulous and slightly Alkaline and Chalybeate Water, of very agreeable and refreshing taste, owing to its large proportion of carbonic acid; a valuable Dietetic Beverage in many morbid tendencies through its antacid, diuretic, and tonic qualities.
Specimen and analysis of the Water may be obtained from Messrs. BECKER and JUNG (Ems), the appointed Agents, 9, Rood-lane, Fenchurch-street, E.C., London, who supply also the other German Mineral Waters.

BARTH'S OXYGEN WATER holds free Oxygen in solution. It gently stimulates the functional action of the stomach and secretory organs, and is a very useful beverage. Wentworth Scott's Analysis gives as contents of a bottle—"Nearly half an imperial pint of pure distilled water, and about 13·5 cubic inches, or 4·6 grains of gaseous oxygen; equivalent to that contained in 21·4 grains of chlorate of potash." 4s. per dozen.
OXYGENATED WATER COMPANY (LIMITED), 36, LONG-ACRE.

HUBBUCK'S PURE OXIDE OF ZINC.

See Pharmaceutical Journal of May 1, 1856.

Sold in Stamped Boxes of 14 lbs. each, by the following Wholesale Druggists:—

Messrs. Baiss, Brothers, and Co.	Messrs. Drew, Barron, and Co.	Messrs. Hodgkinsons, Tonge, and Stead.
,, Barron, Harvey, and Co.	,, Evans, Lescher, and Evans.	,, Langtons, Scott, and Co.
,, Battley and Watts.	,, Samuel Foulger and Sons.	,, Preston and Sons.
,, Burgoyne and Burbidges.	,, Hearon, McCulloch, and Squire.	,, Southall, Son, and Dymond.
,, Cox, Gould, and Co.	,, Herrings and Co.	,, Wright, W. V., and Co.
,, Geo. Curling and Co.	,, Hodgkinson, Luckombe, and King.	,, Wyleys and Co.

CRYSTAL COD-LIVER OLEINE.

THE FINEST SAMPLE OF ANIMAL OIL PRESENTED TO THIS TIME.

It is nearly transparent, inodorous, and almost tasteless. It can be taken without any menstruum, and creates less nausea and eructation than any other quality of Oil. From the fact that the solid parts of the crude Oil are removed in the process of refining, the substance approaches more nearly to a food than a medicine, admitting of the easiest digestion and assimilation. This preparation is shown by scientific analysis to contain 99·810 per cent. of Pure Oil, a degree of purity hitherto unapproached.
"It seems to us one of the pleasantest-looking, pleasantest-smelling, and pleasantest-tasting specimens of Cod-liver Oil we have seen."—Medical Times and Gazette, September 29, 1866.
"Medical Practitioners of eminence have found that the Oleine of Cod-liver Oil is the best constituent."—Chemical News, December 7, 1866.

May be procured in Capsuled Bottles, 25s. or 44s. per dozen, Wholesale of the Agents, Messrs. Barclay and Sons; Sutton and Co.; W. Edwards; Newbery and Sons; J. Sanger and Son; Cleaver (late Hannay and Co.); F. R. Lloyd and Co.; J. Robbins and Co.; Butler and Crispe; W. V. Wright and Co.; W. Schacht; E. Constance; H. Turner and Co.; Leath and Ross; Jas. Epps, London; H. Turner and Co., Manchester; Thompson and Capper; Raimes and Co.; Evans, Sons, and Co., Liverpool; Ferris and Co., Bristol; Polk and Smith, Torquay; Randall and Son, Southampton; Raimes and Co., York; Wm. Foggitt, Thirsk; Oldham and Co., Dublin; Duncan Flockhart and Co., Edinburgh; and of the Refiners,

BEDFORD BROTHERS, 87, Tower-hill, London.

ORIGINAL LECTURES.

LECTURES ON CHRONIC DISEASES AND THE DISEASES OF OLD AGE.

DELIVERED AT THE SALPÉTRIÈRE,

By Dr. CHARCOT,

Assistant-Professor at the Paris Faculty of Medicine, etc.

(Continued from page 246.)

ANALYTICAL EXAMINATION OF THE CAUSES OF GOUT.

GENTLEMEN,—After having briefly surveyed the history and geography of gout, we must now descend from this philosophical and comprehensive point of view to the minute examination of facts, in order to appreciate the conditions which, under various circumstances, give rise to that disease. In the course of this lecture, we shall seize the opportunity of calling your attention to some interesting particulars which, up to the present time, had remained almost entirely unknown in France.

I. Individual Causes.

1. *Spontaneous Development.*—It is certain that gout, in some cases, arises spontaneously. The fact is corroborated by the testimony of all the authors who have written on the subject; and in my own practice I have met with cases of this kind. There exist, therefore, in the constitution of certain individuals, conditions which favour the development of gout; and external circumstances only serve to bring them to light. We need scarcely be astonished at this; for an excess in the production, or a deficiency in the elimination, of uric acid appears to lie at the root of the gouty diathesis. But in the normal state a small proportion of uric acid already exists in the blood: let its amount be increased, and the morbid process will at once begin.

2. *Hereditary Predisposition.*—The definition of gout, as given by modern writers, invariably comprehends the notion of hereditary transmissibility. Hospital Physicians have already ascertained its existence; and in town practice it is still more prominently brought forward. A few figures will better impress the fact upon your minds. The hereditary taint has been noticed

By Scudamore, in 523 cases of gout, 309 times.
„ Patissier, „ 80 „ 34 „
„ Garrod, „ 100 „ 50 „

Hereditary gout is often premature; it frequently makes its appearance before the age of 30 or 35, the usual period for the spontaneous manifestation of the disease. It often exhibits itself at the same age among all the members of certain families. Garrod informs us that in one of the most illustrious houses of England the eldest son is invariably affected with gout on succeeding to the title; and this singular inheritance has been entailed in the family for the last four hundred years.

3. *Sex.*—The influence of sex on the production of gout is evident. It cannot be denied that females enjoy a peculiar immunity in this respect. Out of the eighty cases collected by Patissier, seventy-eight were observed in men, and only two in women. The change of life is the period at which the disorder chiefly exhibits itself in female patients—a remark which had not escaped the sagacity of Hippocrates.

We discover here an essential difference between gout and chronic rheumatism. This rule suffers, no doubt, a few exceptions, and some ladies are affected with gout early in life; but in such cases we almost invariably recognise an hereditary taint.

It must be added that the low asthenic forms of the disease predominate in female subjects.

4. *Age.*—The classical time of life for gout extends, according to Scudamore, from 30 to 35. It is seldom met with before 20 or after 60.(a) Garrod, however, has seen it once in a boy 9 years old, and once in a lad of 17. He has also observed a few cases in which the first attack occurred in men of 60.

Rheumatism, on the contrary, is met with at an earlier age, and usually makes its first appearance before the patient is 35.

5. *Constitution.*—Attempts have often been made to establish the characteristics of a peculiar constitution which predisposes the subject to this disease; but experience has shown that gout spares no constitution whatever, and assails weak, debilitated patients as well as powerful, athletic men. The type of the disease corresponds, however, to the general condition of the system. The sthenic or acute form is principally observed in strong plethoric subjects; the low asthenic form in women and invalids.

II. Hygienic Causes.

From the causes of gout which are inherent to the patient himself, let us now turn to those which result from the conditions in which he lives. Let us examine his habits, and more especially his diet; we shall discover facts of the highest importance in prosecuting this study.

1. *Climate.*—Medical geography has already taught us that gout belongs almost exclusively to the temperate zones of the globe, and flies from tropical regions; but, although entirely unknown in Brazil, in Africa, and under the line, it occasionally affects Europeans, who have brought into hot climates the habits of northern countries. For this reason the English in India are sometimes troubled with its symptoms, though less frequently than in their own native country.

2. *Full Diet, and Want of Exercise.*—It has at all times been acknowledged that an easy life and high feeding—two conditions not unfrequently combined in the same individual—constitute a strong predisposition to gout; it predominates, in consequence, among the higher classes of society, and is less prevalent in the lower ranks. In familiar style, gout is often said to be the result of a surplus of receipts. We shall soon see that facts cannot always be so easily interpreted; but it is quite certain that an excess of animal food promotes the development of this complaint, and that voracious eaters are frequently numbered among its tributaries.

3. *Influence of the Nervous System.*—The influence of cerebral activity cannot in this case be denied. Intellectual labour, strong emotions, great mental exertions, have always been numbered among the causes of gout. Sydenham, who was himself a martyr to this affection, attempts to console himself by reflecting that "*divites interemit plures quam pauperes, sapientes quam fatuos.*" The chief politicians of England have been numbered among its victims. We need only mention the two Pitts, father and son. The Earl of Chatham was by no means a votary of Bacchus. It is true that the same can hardly be said of his illustrious son, who never addressed the House of Commons without having previously inflamed his eloquence by freely resorting to the bottle.

4. *Venereal Excesses.*—The depression of the nervous system which results from sexual indulgence creates no doubt a strong predisposition to gout. But a natural explanation here suggests itself. Looseness of morals in general is closely allied to intemperance, which in this case probably plays the chief part in the production of disease.

5. We have now to examine the action of two of the most important causes of gout—I allude to *fermented liquors* and *lead-poisoning.*

Such is the influence of fermented liquors that, according to Garrod, man deprived of these drinks would never have known gout. The action of lead-poisoning is far less extensive, but, as regards the theory of the disease, it is a fact of the utmost importance.

We will now proceed to investigate these two points.

A. *Fermented Liquors.*—A broad line of distinction must be drawn between spirits (rum, brandy, whisky, gin, etc.), which contain from 40 to 70 per cent. of alcohol, and ordinary fermented drinks (wine, beer, cider), the alcoholic strength of which varies from 4 to 20 per cent. At first sight it seems natural to suppose that the more potent liquors are by far the most conducive to gout. But you will perhaps be astonished to find that the use of ardent spirits does not appear to be connected in any degree with the production of this disease. In fact, gout is far from being widely diffused among the dram-drinking populations of Europe. It is scarcely ever met with in Sweden, where *alcoholism* (b) is so frequent, according to Professor Magnus Huss. The same is the case in Denmark, Russia, and Poland. In Scotland and Ireland gout is seldom observed among the lower classes. At Edinburgh Bennett and Christison have scarcely met with more than one or two cases in their Hospital practice. Now the only strong drink in general use in those two countries is whisky.

In London, on the contrary, gout is exceedingly frequent among workpeople, and is constantly observed in Hospitals. Now the only important difference which exists in this respect between the northern and the southern parts of Great Britain is the enormous quantity of *strong beer* absorbed by the inhabitants of the metropolis, under the various names of *ale*, *stout*, and *porter*. The extraordinary influence of these

(a) Dr. Charcot speaks, of course, of a first attack.

(b) A term coined by Magnus Huss to express the general consequences of chronic intoxication.

drinks is acknowledged by all English Medical writers. Scudamore informs us that since the use of porter has been universally adopted in London, gout has become infinitely more frequent among the labouring classes. Watson, Budd, and Todd corroborate this assertion. According to the last-mentioned author, most of those who usually drink beer, and especially porter, become, sooner or later, victims of gout.

An interesting instance of this is recorded by Budd, whose words we shall here beg leave to quote :—"There is a body of men employed on the Thames whose occupation it is to raise ballast from the bottom of the river. As this can only be done when the tide is ebbing, their hours of labour are regulated by that circumstance, and vary through every period of night and day. They work under great exposure to inclemencies of weather ; their occupation requires great bodily exertion. . . In consideration of this, their allowance of liquor is very large : each man drinks from two to three gallons of porter daily, and generally a considerable quantity of spirits besides. This immoderate consumption of liquors forms the only exception, as far as relates to food, which these men offer to the general habits of the lower classes in London. Gout is remarkably frequent among them, and although not a numerous body, many of them are every year admitted to the Seaman's Hospital ship affected with that disease."(c) These poor labourers are therefore admitted for once to share in the privileges of the peers of the realm, yet they are almost all derived from the peasantry of Ireland, and can scarcely, therefore, inherit a disposition to gout.

Garrod has also arrived, on his side, at similar conclusions. He states that persons employed in breweries are frequently affected with gout ; and the abuse of malt liquors, especially porter, is the only plausible explanation of this morbid tendency.

And yet the various kinds of beer are far from containing any large amount of alcohol. Mulder states that Scotch ale contains 8 per cent., and porter only 5 per cent. This proportion is below that of our French wines, and not superior to that which exists in German beer—a liquor the effects of which are entirely different, notwithstanding the enormous quantity absorbed by our neighbours across the Rhine.

You therefore see, gentlemen, that *à priori* reasoning cannot be brought to bear upon this subject, and that the influence of fermented liquors on the production of gout is entirely independent of the amount of alcohol which they may happen to contain. Other conditions, our knowledge of which is hitherto very imperfect, appear to take the lead, and it is only from experience that we can learn the real state of things.

Let us now examine the action of wine. The highest rank, as far as our subject is concerned, evidently belongs to the wines (port, sherry, Madeira, Marsala) which are so generally preferred in England by all classes of society. They all contain a large proportion of alcohol, which varies from 17 to 20 per cent.

Light wines (Rhine, Moselle, champagne, claret) are far from exerting a similar influence.

But the same cannot be said of Burgundy, which, however, does not contain more spirit than the qualities we have just named. Gout is contained in every glass of red Hermitage and Burgundy, especially the latter, if Scudamore is to be trusted.

Cider itself, an apparently inoffensive beverage, is said to favour the development of this disorder. According to Garrod, this injurious property does not belong to *hard cider*, and only exists in the new unfermented liquid.

Having, as we believe, sufficiently illustrated the connexion between gout and fermented liquors, let us now turn to a different subject.

B. *Lead Poisoning.*—Garrod had ascertained some time ago that out of eighty-one gouty patients admitted into his wards no fewer than sixteen were painters and plumbers, and ulterior investigations have corroborated this singular result. The introduction of *lead* into the system must therefore be placed in future among the causes of gout.

The fact having been established, documents in its favour came pouring in from all sides. Among the authors who had noticed the coincidence before Garrod we will quote Musgrave, who saw gout appear immediately after *colica pictonum ;* Falconer, who notes the same fact ; Parry, who shows that gout frequently exists in cases of paralysis from lead poisoning ; and lastly Todd, who mentions several cases of gout observed under similar circumstances.

(c) Tweedie's "Library of Medicine," vol. v. p. 219.

Since the appearance of Garrod's excellent work, several English authors have published observations of this kind ; we will only mention Burrows and Begbie. But the habits of English workmen, which have just been discussed, exert, in all probability, a powerful influence in such cases. In France, where lead colic is so frequent, why is gout so seldom met with among the lower classes ?

A few gouty patients exist, however, among those who have undergone the process of lead poisoning. I have been so fortunate as to observe the coincidence myself in one most remarkable case, and Dr. Bucquoy has just met with another at La Charité.

The cause of this singular connexion between two very different disorders still remains obscure. Garrod has discovered that lead poisoning produces an undue accumulation of uric acid in the blood, especially in an advanced stage, where paralysis already exists. The fact has been ascertained in patients who were not labouring under gout, and who do not seem to have been affected with Bright's disease. On examining the urine the proportion of uric acid was found to have considerably diminished, but we are not informed whether there existed any degree of albuminuria. Garrod is not able to decide whether there is an excess in the production of uric acid or an insufficient elimination. He leans towards the latter hypothesis, and relies upon the following experiment.

After having analysed every day, during a certain lapse of time, the urine passed by several patients affected with various diseases not connected with the urinary organs, he gave them medicinal doses of acetate of lead. Under the influence of this preparation, the excretion of uric acid was seen gradually to decrease.

If, therefore, the introduction of lead into the system calls forth the manifestation of gout, its action seems principally to bear upon the kidneys. It paralyses their functions as far as the excretion of uric acid is concerned. But can this single cause give rise to the gouty diathesis ? It may do so in a few insulated cases ; but if there exist other predispositions acting in the same direction, the effects of lead poisoning will appear in their full light.

III. Exciting Causes.

Although incapable of creating gout by themselves, the conditions which we are now going to enumerate are sufficiently powerful to provoke attacks of the disease when it has already taken possession of the system.

1. *Alcoholic Liquors.*—In gouty subjects certain wines (port, champagne, etc.), even if taken in small quantities, will determine an attack of gout, which is sometimes limited to the great toe. According to Garrod, whenever a few glasses of wine produce inflammation of the joints, that inflammation is invariably connected with gout.

2. Indigestion and all other derangements of the stomach act in the same manner.

3. Cold and damp, and suppressed perspiration, produce similar effects.

4. Immoderate intellectual exertions exert on the production of gout an influence to which we have already called your attention.

5. Surgical injuries, operations, fractures, act in the same way. I have myself seen a wound produce simultaneously trismus and gout.

6. Debilitating causes, such as loss of blood, protracted illness, etc., etc., have also a marked influence in the production of gouty symptoms. This fact deserves notice, gout having often been described as a malady peculiar to plethoric subjects ; but Todd has amply proved that it is equally severe in debilitated patients.

Our next lecture, gentlemen, will be devoted to the theory of gout.

French Rural Medical Service for the Poor.—According to the Report just presented to the Emperor, the new rural gratuitous Medical service has been adopted in only forty-eight out of the ninety-one departments ; but in these it seems to have worked very satisfactorily, relieving a vast number of indigent persons at their own homes, many of whom must have otherwise resorted to the *hospices*. The expenses, which are chiefly defrayed from local taxation, are only slight, since the number of persons treated from 1861 to 1865 amounted to 1,019,135, at a cost of 4,973,876 fr.—*i.e.*, 4 fr. 88 c. per person. The other departments are earnestly urged in the Report to adopt similar measures.

ORIGINAL COMMUNICATIONS.

ON NIGHTMARE OF CHILDREN.

By SYDNEY RINGER, M.D.,

Professor of Materia Medica and Therapeutics at University College; Physician to University College Hospital; Assistant-Physician to the Hospital for Sick Children, Great Ormond street.

SCREAMING OF CHILDREN.

VIOLENT screaming, which cannot be quieted, and which may last for a few minutes to several hours, is frequently witnessed in children. This is generally produced by one of three causes —hunger, pain, or nightmare. These remarks treat of screaming from the last cause.

The following account gives a fair example of a case of this kind:—

Charles L., 2 years old, came under my care at the out-patient department of the Children's Hospital. The child was badly nourished, and was afflicted with a frequent hacking cough, that troubled him much more at night than day. For two months he had, twice or three times each night, started from his sleep, screaming violently. Each paroxysm of screaming lasted about half an hour. Sometimes he rolled about the bed, threw his arms wildly about, and knocked his head violently against the bed; on other occasions he sat up in the bed and screamed so violently that he became black in the face. While thus afflicted his eyes rolled, and he appeared to be quite unconscious, as he did not recognise his mother, and could not be brought to by her care and attention. His mother stated he did not appear to have his senses. He gave no signs of being in pain. He did not talk, he only screamed violently. After each paroxysm he fell asleep, but his sleep was disturbed, and his eyes still rolled, and he frequently moaned. His gums were neither red nor swollen. His appetite was good, but his bowels had been relaxed for three weeks, and his motions were green and slimy, but no worms were ever seen in them. He was fed judiciously. He wetted the bed at night. During the fortnight that preceded his application for relief at the Hospital, he had suffered from two convulsive fits, when his arms worked and his face twitched. Each of these fits lasted twenty minutes.

This case may be accepted as a very fair example of the screaming of which we are now speaking.

Such screaming may occur in children of all ages; but, while it is met with in children of 10 or 12 years of age, it is of more common occurrence in those of a few months to 2 or 3 years old.

These attacks may last a very variable time, for though the paroxysm may pass away in a few minutes, it sometimes continues for half an hour to one or even two hours. During this time the screaming is violent and continuous. Sometimes the children appear to be asleep throughout the paroxysm, while other children wake from their sleep, but continue to scream with unabated violence; but even when awake they often appear to be unconscious of what occurs around them. They seem to be, as their mothers state, "out of their senses;" thus they for the most part cannot be quieted. Others appear to awake thoroughly, and are then terribly frightened, and often tremble all over. Such children can generally be quieted in a short time by kindness and attention paid to them, but they remain for some time much agitated, and refuse to be left alone, or, if removed from their bed, they are afraid to return to it. Some children cry only a little, but they wake up frightened and trembling.

Such screaming may continue to occur for months and even years, sometimes disappearing for a time, and then, from various causes to be immediately mentioned, it returns again. It is often repeated several times each night for several months.

Such attacks are naturally a source of much annoyance and much anxiety to the parents, and thus Medical men are not unfrequently consulted for this affection. The screaming may be so violent that the child becomes "black and blue" in the face, and occasionally it even terminates in a general convulsion. This, however, is unusual, and in my experience occurs only in children who suffer from convulsions without screaming and from other causes. Such paroxysms of screaming sometimes recur only with long intervals. The child may have one attack, but this may not be repeated for some weeks, or even some months. On the other hand, they may recur ten or twelve times a night.

This screaming differs from delirium, as it does not occur in those diseases accompanied by delirium. Moreover, there is no incoherent talking or muttering, while some children can be roused from this state and are then perfectly rational, although greatly frightened; it occurs only during sleep. The mothers often call it nightmare.

The children, the subjects of this affection, are very generally pale, often ill-nourished, and out of health. The immediate cause of this screaming appears to be some disturbance of the stomach and intestines. The nature of this affection of the intestinal canal may be very various in different cases, for one child may suffer from constipation while another is troubled with diarrhœa. This disturbance is very generally dependent on food ill-suited to young children; for this irregularity of the bowels, and the screaming which accompanies it, are especially frequent in those children who have been brought up by hand, and who, consequently, suffer on the one hand from diarrhœa, on the other from constipation. Children thus reared suffer, as is well known, very generally from constipation, and pass hard, pale, lumpy motions, something like marbles. These masses may consist of fæces; they are often composed of coagulated undigested milk, of a yellowish or greenish-yellow colour outside, but are white and cheesy within, looking like, and, indeed, being composed of, curds of milk. (It may be here mentioned, in passing, that not uncommonly children pass by the bowel, or sometimes vomit, large masses of the same composition. These are generally two or four inches long, and about an inch in diameter. They often excite much wonder and anxiety on the part of the mother. When broken, the white curdy appearance at once declares their nature.) Children who suffer from the affection now under consideration are sometimes infested by thread worms, and also show signs of the altered condition of the mucous membrane of the stomach and intestines by itching, heat, and dryness of the inner part of the nose, with itching at the anus. This screaming is increased by anything that interferes with the general health of the child. Thus, it is observed to be worse when the teeth are making their way through the gums, although the irritation and pain which arise from teething appear to be incapable of themselves of exciting this screaming. It is also made worse by slight attacks of catarrh of the lungs, or eruptions on the body. By treatment this screaming can usually be at once arrested. Both general and local treatment are in most cases required, the former to improve the general health, the latter to remove the conditions immediately exciting the screaming.

The diet should be attended to, and any irregularity in the hours at which food is given to the child, or any unsuitability in the nature of the food, must be remedied. Attention to these points will very generally arrest any diarrhœa which may be present, but constipation with hard shotty motions will generally prove more obstinate, for such motions are almost invariably passed by young children under six months old when brought up by hand, and this although they may be correctly fed and take nothing but good cow's milk sufficiently diluted with water. We have seen that these hard, round, lumpy motions are partly composed of coagulated undigested milk. This coagulation in mass can sometimes be stayed by the addition to the milk of alkalies, such as limewater or bicarbonate of soda. The latter is preferable for this purpose, as limewater confines the bowels, and thus bicarbonate of soda should be preferred.

If the bowels are confined, an active purgative will, in the great majority of cases, suffice to stay the screaming, and will insure to the child calm and refreshing sleep. A powder of rhubarb and soda repeated every night, or every other night, till three powders have been given, is useful. If the child be pale, and the constipation recurs and is obstinate, the following prescription will be found very advantageous—namely:—Steel wine, to which is added a few drops of tincture of rhubarb, in quantities adapted to the age of the child and to the obstinacy of the constipation. Usually six drops of tincture of rhubarb in a teaspoonful of steel wine given three times a day will open freely and comfortably the bowels of a child from six to nine months old.

In order to effect a permanent cure it is often necessary to give medicines to improve the general health of the child, as these children are frequently pale and badly nourished.

Thus, in children suffering from the affection we have just described, to effect a permanent cure, if the general health be bad, treatment must be directed to the restoration of the body to sound health. In these cases iron, cod-liver oil, with cold sponging prove most useful. Of the various preparations of

iron, the tincture of the sesquichloride, in my experience, is decidedly the best. It has appeared to me that bromide of potassium is able to stay this screaming, but as its administration has been accompanied by the use of purgatives, or a regulated diet, it is difficult to determine how far the bromide was useful. It is, however, I feel sure, worthy of a trial in obstinate cases. Cold baths must be given with care; for while they may, if properly administered, do much good, if administered without certain precautions they will do great harm to children. If too great a shock be given to the child, depression of the system will be produced, and this may last even several days after the bath is administered, when the child may be languid and depressed, and may suffer from much chilliness with loss of appetite. Thus the amount of shock produced by the bath must be regulated to the age and strength of the child. In cold sponging of the body the shock caused is proportioned to the coldness of the water and the length of time the bath is continued; while the younger the child, or the weaker its health, the less able is it to bear up against the effect of the shock to which it is exposed. Hence with young children, and especially with those whose system is depressed, the bath should be continued only for a short time, and if the weather be cold, the water must be slightly warmed. When the child is weak, the bath should be continued at first for a few seconds only, and its duration be gradually increased as the child becomes accustomed to its use.

If the following simple plan be adopted, the child, even if very weak, can take the cold bath with advantage, and all chance of depression is removed. The child should be placed before a good fire with its feet in warm water, while the cold water is freely poured over every part of the body except the head and face. The healthy reaction, with the agreeable sensations which follow the use of the bath, may be much increased by placing the child for a short time in the warm bed from which it had just previously been removed. The bath should be given immediately the child leaves its bed, and the breakfast should be taken soon after the sponging is completed.

ON THE

COMPARATIVE IMMUNITY OF RABBITS TO THE POISONOUS ACTION OF ATROPINE.

By W. OGLE, M.D. Oxon., M.R.C.P.,
Lecturer on Physiology at St. George's Hospital.

Towards the end of last summer,(a) public attention was turned to a case of poisoning by atropine, and among the questions which were discussed at the time was one as to the supposed immunity of rabbits from this poison. It is to this incidental question that the following paper and experiments have reference. It will be as well to begin with stating briefly the condition in which the matter lay at the time when these experiments were instituted.

Some forty years ago Runge, "secteur" in the University of Berlin, stated in a paper published in the *Journal de Pharmacie*, x. 85, that he had fed a rabbit for eight days on the leaves of belladonna, datura, and hyoscyamus, and that the animal suffered no inconvenience. He stated, moreover, that the poison had not escaped absorption, for it was found by the physiological test—viz., the dilatation of the pupil of a cat—to be present in the rabbit's urine. This latter fact would only show that some of the alkaloid—perhaps a minute portion—had been absorbed; but a further observation showed that in reality all had been taken up, for when the rabbit was killed the residue of the food in the rectum was found by the same test to be completely free from atropine.

The accuracy of this experiment has never, to the best of my belief, been called in question till this year. It has been accepted by the German and French writers on Materia Medica, and is quoted as authoritative in their various treatises.

Mr. Herapath, however, in the evidence which he gave on the trial which led to this question being raised, is reported to have said that he had never heard of rabbits eating belladonna. This, of course, does not amount to an actual denial of the fact, but Mr. Herapath's experience in all matters connected with poisons is such that his words were not unnaturally considered as at least throwing great doubt on the matter.

Some years after Runge's paper had been published there appeared in the *Archives Générales* an account of some experiments made by M. Reisinger. This gentleman stated that the dose of atropine and hyoscyamine—in his opinion identical substances—which produced in half an hour symptoms of poisoning in a puppy of three months' age produced no effects at all on young rabbits; and he concludes his paper with saying, that "ces animaux paraissent insensibles à l'action interne ou externe de ces substances." (*Arch. Générales*, xviii. 302.)

On the other hand, in a letter addressed to the *Times* in August last, Dr. Macgill, of Ashburton, makes the following statement:—"Into the right eye of a rabbit I put one drop of a weak solution of atropia (the No. 2 solution of oculists); in forty-five minutes the pupil of the eye operated upon was visibly dilated, the other eye being in a normal condition. In an hour and a half the iris of the right eye was almost invisible, while the pupil of the other eye was much dilated. Into the mouth of another rabbit I introduced four drops of the same solution four hours afterwards; it was unable to run straight, had the pupils much dilated, and appeared confused and stupefied. It gradually recovered, and ten hours afterwards was apparently quite well."

The writer of a leading article in the *Lancet* (September 2) exaggerates the symptoms described by Dr. Macgill as resulting from four drops of No. 2 solution—viz. apparent confusion and inability to run straight—into "paralysis of the extremities," and states that he also has frequently obtained this same result. He also states that, if rabbits can eat belladonna with impunity, it is because the atropine is not absorbed, for that this alkaloid is as distinctly poisonous to rabbits as it is to man.

These statements and opinions are so incompatible with each other that I think it worth while to publish a few simple experiments which I have made to ascertain the real truth.

1. Can rabbits eat belladonna with impunity?

Experiment.—In the beginning of last August I was supplied, by the kindness of Mr. Squire, with a large quantity of fresh-cut belladonna. I first satisfied myself that the leaves contained atropine, by applying a crushed one to the eye of a kitten for a few seconds. The pupil was soon enormously dilated. I then fed a healthy young rabbit, about four months old, for six days exclusively on the plant. The animal ate the belladonna with the greatest readiness, consuming all the leaves, blossoms, and young green shoots, but leaving the harder stems and roots. It consumed several times its own weight during the course of the week. During the whole time it remained perfectly well. The pupils were very large at the outset, and remained so throughout. The only symptom observed was, that in running about the animal occasionally gave a comical kick out with its hind legs, which was taken at the time, by myself and others who watched the rabbit, for an accidental exaggeration of a movement often seen in rabbits, but which I have now no doubt was really due to the belladonna.

After six days, my stock of belladonna being exhausted, the rabbit was killed. The viscera were quite healthy; the stomach and intestines full of *débris* of green leaves; the bladder empty.

The rabbit, after skinning and cleaning, was given to a dog in order to ascertain whether the flesh was in any degree poisonous. But though the dog was kept for three whole days from all other food, it refused to eat a morsel of the rabbit, so that this part of the experiment came to nothing. I was not aware till then that some dogs will undergo starvation rather than touch the flesh of rabbits.

This experiment corroborates that of Runge, and shows clearly that a rabbit can live, at any rate for six days, on the leaves of belladonna without any inconvenience.

2. When a rabbit is fed on belladonna, is the atropine absorbed?

It will be seen that in the experiment above the bladder was found empty after death, so that I had no means of ascertaining whether the urine contained atropine. I fell back, therefore, on Runge's experiment. He found, as already said, that the urine of his rabbit contained atropine, and that the contents of the rectum had lost this substance in their passage down the intestine. All discussion on this point is, however, rendered unnecessary by the experiments presently to be given;

(a) It is necessary to state that this paper was written and sent to us towards the end of 1865. The expressions, therefore, "last summer," "this year," and so forth, must be interpreted accordingly.

in which atropine was injected under the skin and undoubtedly absorbed.

3. Is atropine as distinctly poisonous to rabbits as it is to man?

In order to answer this question it is necessary to ascertain how much atropine is a poisonous dose for a man. Cases of poisoning by this substance in which the amount of the poison taken has been accurately known are very rare. I can only refer to two. In each the fatal dose was two grains. One is the case given by Dr. Taylor ("Med. Jurisp.," 5th ed., p. 194) in which a young man took this quantity before going to bed, was heard to snore heavily during the night, and was found dead and rigid in the morning. The other case was communicated to me by Mr. Pollock. A gentleman swallowed by mistake a lotion in which were dissolved two grains of atropine. In less than a quarter of an hour he was dead. From these two cases it would appear that the maximum dose which can be taken by an adult man is, at any rate, not so much as two grains. When the poison is injected under the skin, the dose which can be tolerated is doubtless very much less than this. The thirtieth of a grain I have often seen injected with very little greater effect than some dryness of the fauces, occasional headache, and dilatation of the pupils. But the only cases in which I have seen much more than this injected have presented marked symptoms of poisoning. In one case one-tenth of a grain, in another one-twentieth, was injected, and in each violent delirium was produced. A case appeared lately in the French papers (*Bulletin Général du Thérap.*, September 15), in which a patient was nearly killed by the injection of one-seventeenth of a grain. Administered, then, in this way, the poisonous dose, though at present unknown, is doubtless very small.

Let us now compare these results with those obtained from experiments on rabbits. Bearing in mind the small weight of a rabbit when compared with that of a man, we should expect to find that a much smaller dose resulted in its case in death, supposing that rabbits and men are equally amenable to the poison. It will be seen that this is far from being the case.

Experiment 1.—I administered to a healthy rabbit, three months old, a grain of sulphate of atropine dissolved in water. The rabbit's mouth was held open and upwards, and the solution was passed down the œsophagus in a tube, great care being taken that none escaped. The animal was watched carefully for many hours consecutively, and then visited and examined at frequent intervals. No other symptom was produced than dilatation of the pupils.

Experiment 2.—To another rabbit of the same age two grains of sulphate of atropine were administered in the same way. Dilatation of the pupils was produced, as in Experiment 1, and also the symptom which I noticed before in the animal fed on belladonna—viz., a slight exaggeration of the action of the hind legs now and then, when the rabbit was running about. This symptom had not the least resemblance to muscular paralysis. The rabbit ran just as well as ever, and the movement of which I speak only occurred now and then at intervals as it ran. In all other respects the rabbit seemed perfectly well, and ate its food as usual.

It results from these experiments that a rabbit of three months' age can take by the stomach, without inconvenience, a dose of atropine which would kill a man. I come now to the more severe test of hypodermic injection.

Experiment 1.—To a rabbit about three months and a half old I administered, by subcutaneous injection in the back, one grain of sulphate of atropine. The rabbit in a quarter of an hour began to lick its forepaws, as though there was some uneasy sensation in them. After three-quarters of an hour it was seen again to lick its forepaws, and then to drum with them rapidly for a few seconds, and this same spasmodic drumming occurred some half-dozen times in the course of the next three hours. There was also noticed now and then, when the animal was running about, the same curious "kick out" with the hind legs which I have before mentioned as occurring in the rabbit fed on belladonna. There was no muscular paralysis whatever. The animal ran about as well as before the injection, playing with another rabbit, and from time to time nibbling at some lettuce leaves. The uneasiness in the paws was not manifested in any way after four hours, and after that time no other symptom was observed than dilatation of the pupils, which began soon after the injection was made, and lasted till the next day. I should say that I have produced the same symptoms—viz., dilatation of pupils, drumming with forepaws, "kick out" with the hind legs—with half the dose used in this experiment. On the other hand, these symptoms have sometimes been so slightly marked as almost to escape notice when the dose injected has been much larger.

Experiment 2.—I injected three grains of sulphate of atropine into each of two rabbits, one six months, the other three months old. In each the same symptoms ensued as were described in the last experiment; and notwithstanding the tripled dose, there was no greater severity in the effects produced.

Experiment 3.—I injected, with the aid of Dr. Dickinson, three grains and a half of sulphate of atropine into the subcutaneous tissue of the back of a large rabbit six to seven months old. The same symptoms were produced as before, lasting for about five hours, with the exception of the dilatation of the pupil, which lasted till the next day. During this time the rabbit ate cabbage leaves, and ran about as though nothing had happened. A few drops of the urine, passed an hour and a half after the injection, were let fall into the eye of a kitten, and produced marked dilatation.

Experiment 4.—I injected five grains of sulphate of atropine into the same rabbit as had served a week previously for the last experiment. The same effects, and no others, were produced. The urine was again tried on the eye of a cat, and again dilatation resulted.

Experiment 5.—As it might be supposed that the rabbit in the last experiment was enabled to tolerate so large a dose owing to its having previously taken a smaller one, and so being habituated to the drug, I procured a large rabbit between two and three years of age, which had not previously been used in any experiment, and injected again five grains of sulphate of atropine. To my surprise, there was even less effect produced than in any of the other experiments. The pupils were soon very largely dilated, the animal seemed rather "piano," and once only, after some two hours, was seen to lick its front paws, and rub them against its nose, as though it felt some uneasiness. The pupils were still dilated the next day. How little uneasiness this rabbit experienced was plain from its being seen seven hours after the injection to mount a doe rabbit.

In all these experiments, which are only a few out of many, the greatest care was taken that all the fluid injected was retained. They were all performed in the presence of witnesses, who examined the puncture to see that none of the injection escaped. Care also was taken to procure from Mr. Squire the atropine unadulterated and accurately weighed. There can, I think, remain no doubt whatever that rabbits can tolerate enormous doses of atropine—doses sufficient to kill several men—without any material interference with their wellbeing. I might have pushed my dose further, and seen how much a rabbit can take and yet live, but this point was foreign to my purpose, and has, moreover, been recently investigated by Dr. Camus. This French experimenter states that he has accurately determined the amount of atropine which constitutes the minimum fatal dose for a rabbit, (b) and that it is no less than one gramme—that is, fifteen grains and a half. (*Gaz. Hebdom. de Méd. et de Chir.*, August 11, 1865.)

It will be observed that the immunity of rabbits from the action of atropine is a comparative and not an absolute one. This would seem to clash with the statement of Reisinger, that "these animals appear insensible to the poison, whether administered internally or externally." But it will be noticed that Reisinger especially says "young" rabbits. It occurred to me that there might be a difference depending on age; that while adult or half-grown rabbits enjoy a comparative immunity, *very* young rabbits might enjoy a greater or even an absolute one. This would be consistent with the facts observed in the case of sundry poisons. Young infants are less amenable than older children and than adults to various contagious diseases. The poison of the Tsetse fly is fatal to the adults of many species of animals, but innocuous to their unweaned young. This immunity depends, not on the nature of the food, but on the age, for when an adult is fed on milk it is found to be just as amenable to the poison as when it is taking its ordinary food. (Livingstone, "South Africa," p. 81.) In the case of this very poison (atropine), Dr. Fuller has shown, in a very interesting paper (*Med. Chir. Trans.* vol. xlii.), that children can tolerate very much larger doses than can adults. A very few experiments convinced me, however, that this is not the case with rabbits.

Experiment 1.—I procured a rabbit four weeks old, a kitten of the same age, and a well-grown rabbit of four months and a half. To each I administered, by subcutaneous injection,

(b) The age of the rabbit used in Dr. Camus' experiments is not given in his paper.

a grain of sulphate of atropine. The effects produced differed greatly. The elder rabbit presented the slight symptoms I have already so often described—dilatation of the pupils, uneasy movements of the paws, the latter symptoms being much less marked than the former. The younger rabbit was much more seriously inconvenienced; it fell soon after the injection into a half-torpid condition. From this it could be roused, and, when roused, it could still crawl about with difficulty, the difficulty depending apparently on loss of power in all the limbs, but especially in the right hind leg. There was no drumming with the forepaws, nor spasmodic movements of any kind; neither were the pupils dilated. This animal was watched for four hours, and at the end of that time was still in the same state. The next day it was found perfectly recovered. These effects were, however, mild in comparison with those produced in the kitten. Spasmodic movements began in this creature's forelegs and facial muscles in a few minutes after injection; in eleven minutes it fell on its side in convulsions, and in forty minutes was dead.

Experiment 2.—The young rabbit which had suffered so much from the injection of one grain in the last experiment was kept for three months—that is, till it was now four months old—and then, with a fresh rabbit of one month, formed the subject of a second experiment. To each was administered by injection three grains of the sulphate. The elder rabbit presented the usual symptoms—dilated pupils, uneasy movements of the forepaws, and nothing else—that is to say, it suffered less now from the injection of three grains than it had done three months earlier from the injection of one. The effects, moreover, were not only different in degree, but in kind. The younger of the two rabbits three minutes after injection became confused and unsteady; a few minutes later it became comatose, lying on its side, and breathing slowly and spasmodically; in thirty-five minutes it was dead. During this time its pupils were scarcely, if at all, enlarged.

These two experiments, together with Experiment 5, show convincingly that young rabbits, so far from enjoying a greater immunity than older ones, are in fact much more seriously affected than these by equal doses of atropine. It must be admitted, then, that Reisinger's statement that young rabbits are insensible to the action of this substance is incorrect. They are, however, as the first experiment shows, much less sensible to it than are the young of other animals, or, at any rate, than are kittens—that is to say, a dose of atropine which is death to a kitten only occasions temporary mischief in a rabbit of the same age.

I have hitherto said nothing of the effects produced by the application of atropine to the conjunctiva. There is no doubt that dilatation of the pupil can be produced in this way both in young and old rabbits. As regards this local effect, age confers no greater immunity on adults; it has, indeed, appeared to me, from the few experiments I have made on very young rabbits, that the contrary is the case, and that the pupil of the old rabbit dilates much more rapidly, more widely, and more permanently than that of the very young one. Be this, however, as it may, of this I am certain, that the readiness with which the pupil dilates, either from the external or the internal administration of atropine, is no index whatsoever by which we can judge of the general sensibility of an animal to the action of that poison.

The general conclusions which I draw from the foregoing experiments are these:—

1. That a rabbit of middle age can live for, at any rate, six days exclusively on belladonna without inconvenience.

2. That a rabbit can tolerate enormous doses of atropine administered either by the stomach or by subcutaneous injection, and that this tolerance is not due to non-absorption of the poison.

3. That this tolerance increases with the age of the rabbit.

4. That dilatation of the pupils is, however, produced just as readily, if not more so, in an old rabbit as it is in a young one.

Prize Questions on the Cattle Plague.—The Belgian Academy of Medicine offers a prize of 12,000 francs for the best essay, written in legible French or Latin, on the following questions:—"Give an account of the symptoms, causes, anatomical lesions, and nature of the epizootic contagious typhus in the different species of animals which are susceptible of contracting this disease; and exhibit the differential characters of the various other typhoid affections with which it may be confounded." Memoirs to be forwarded before January 1, 1869.

RECURRENCE OF AN EPITHELIAL CANCER AFTER AMPUTATION (FOR ITS REMOVAL) AT THE SHOULDER-JOINT.

By J. FAYRER, M.D., F.R.C.S.,
First Surgeon Medical College Hospital, Calcutta.

In the *Medical Times and Gazette* of December 1, 1866 (No. 857), I published an account of an amputation at the shoulder-joint, performed for the removal of an epithelioma, which had been developed in the cicatrix of an old burn. The patient, who was admitted on June 18, 1866, was amputated on the 10th of the following August, and was discharged on September 1 much improved in general health, with the stump all but healed.

On September 23 I saw him, and noted that although "the stump has healed I fear the disease is returning, for in the anterior part of the axilla there is a hard tumour forming, and it is rapidly increasing in size." He was readmitted into Hospital October 2. It is noted that—"The stump is swollen and painful; he is feverish; and there is a discharge from a sinus which has reopened."

He left the Hospital, and I did not see him again until January 27, 1867, when he was readmitted with a large abscess in the axilla. The stump was round and tense, apparently distended with the morbid deposit. Opened the abscess; there was a free discharge of pus, and he was relieved. The opening remained patent, giving exit to a purulent discharge, the shoulder all the time increasing in size. His general health, however, was not bad; he had little pain, and no appearance of cachexia.

March 5.—It was reported to me that he had died rapidly from an attack of hæmorrhage, which came on quite suddenly on the evening of March 4. There appears to have been no blow or injury. The attack was spontaneous, and although the loss of blood was not more than a few ounces, he died from the effects of the hemorrhage.

The following abstract of the post-mortem examination of the stump has been kindly furnished by Professor Colles:—

"Abstract of examination of the stump of Thakoor Doss, who died of hæmorrhage from a malignant ulcer of left shoulder on March 4, 1867.

"(1.) The scapula, clavicle, and upper ribs, with the soft parts covering them. There is a ragged opening which was originally, probably, a little larger than a shilling, situated about an inch below the junction of the outer and middle thirds of the clavicle. Some firm slightly defibrinated clots hang out of it. It leads into a large ragged cavity, bounded in front by a mass of morbid deposit infiltrated into the substance of the pectoral muscles, the muscular tissue of which could not be recognised; externally, by the remains of the deltoid infiltrated with similar deposit and having a layer of it between its outer surface and the skin; posteriorly, by the scapula (the glenoid cavity of which is roughened, but otherwise healthy); and in all other directions by soft parts infiltrated by deposit, and so broken down and softened as to be undistinguishable. The cavity reaches above almost to the clavicle; posteriorly, an offshoot from it, large enough to admit the forefinger, turns round the lower edge of the scapula, and runs for about an inch between its dorsum and the soft parts. Another very large offshoot of it leads down behind the large mass of morbid deposit first mentioned as forming the anterior wall of the cavity to the lower edge of the pectoralis major, where it is only covered by skin and fascia.

"Along the cicatrix of the amputation, below and to the outside of the ragged opening which leads into the cavity, is a large ulcer, about one and a half inches in diameter, and one or two smaller ones. None of these involve more than the skin and fascia, but the tissues forming their floors are infiltrated with the deposit.

"*Microscopic Characters of a Portion of the Deposit in the Pectoral Muscle.*—There were some traces of a fibrous stroma and a great number of cells. Most of these were flattened, roughly polygonal or ovoid, and had granular contents, but were mostly without nuclei. There were also some much larger cells—oval, pyriform, or caudate—with large nuclei, containing one or more nucleoli, the nucleus being so large as to be like a small cell enclosed within the parent one. There were also some large cells filled either with large nuclei or small non-nucleated cells, and occasionally groups of the latter, free from the parent cell, but still adhering to each other.

"(2.) The upper lobe of the right lung contained in its apex

a small mass of morbid deposit. Under the microscope this shows a fine closely woven stroma of pulmonary elastic tissue, containing in its meshes some granular matter and a few non-nucleated cells like those marked A.

"(3.) One of the kidneys contained a large cyst in the cortical substance, but was otherwise healthy.

(Signed) "J. Purefoy Colles, M.D."

Remarks.—In a former notice of this case I remarked that the chief interest lay in the occurrence of an epithelioma in the cicatrix of a burn, showing that local degenerations, especially in adventitious tissues, like that of a cicatrix, may, and probably do, have an influence in favouring the development therein of malignant disease—that is, of a heterologous form of tissue, whose destiny is rapid growth and infiltration of neighbouring structures, and finally rapid disintegration, such being the characteristics of the epitheliomata. The microscopic structure corresponds with what are known mainly to characterise the epithelial growths—large cells with nuclei, and laminated capsules. But with the recurrence of the disease after amputation new features of interest are also developed. The epitheliomatous character of the cell—if there be such a distinction—is lost, and all the microscopic characteristics of medullary cancer appear. The general indications of true cancer—rapid growth and infiltration of the surrounding tissue—presented themselves, and it appears more than probable that the infiltration was becoming general, for the deposit in the lung is probably of the same nature as that in the stump. In this case, therefore, at a certain period of life—not an advanced one, either—a cicatrix of some years' duration becomes the seat of degenerative changes which exactly resemble epithelial cancer, and the similarity is not confined to mere histological structure, for it spreads and infiltrates like that disease. This, after removal, is rapidly replaced by a new morbid growth with even greater resemblance to the so-called malignant diseases than the former one. This also grows rapidly, spreads, infiltrates not only the surrounding but distant organs, and finally destroys life by inducing hæmorrhage. Here we appear to have all the characters of carcinoma spontaneously developed, the starting point being the local degeneration of a cicatrix. It is surely suggestive of the local origin of cancers generally, and points towards their probable initiation in degeneration of the natural structures. It surely also points to a community of nature in the so-called malignant growths, and indicates the possibility of any one form of cancer being, after removal, replaced by another, if, indeed, it does not tend to prove that they are all convertible, and at the most but varieties of one species. Inquiry, it is to be noticed, failed to elicit any evidence of hereditary proclivity to carcinoma in this case. I have thought it right to publish the termination of this interesting case, as the history would be very unsatisfactory and incomplete without it.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

Changes on the Hospital Staff—Strangulated Inguinal Hernia, in which the Sac was opened, and some Omentum removed; Recovery—Congenital Deficiency of the Anterior Wall of the Bladder—Congenital Hypertrophy of the Tongue; Partial Removal; Complete Articulation—Cyst contained in the Body of the Lower Jaw; Operation.

The friends and supporters of King's College Hospital must look forward with pleasure to the shortly-to-be-effected changes in its immediate locality. Instead of being hidden and cramped in the densely populated neighbourhood in which it at present stands, the building of the new Law Courts will give it, by destroying the miserable tenements about it, a clear open thoroughfare to the Strand and Fleet-street. Near as it is to these densely thronged thoroughfares, but few of the passers-by have any conception of the close proximity of one of the largest and most important Hospitals in London. This may possibly have a beneficial effect, moreover, in rendering the building of the new wing absolutely necessary, and, by attracting notice, afford means for its completion.

Few changes of any great importance have taken place lately within the Hospital. A Children's Ward has been founded, containing twenty beds, for which the Hospital is indebted to the liberality of Pantia Ralli, Esq., and called after him the Pantia Ralli Ward.

Up to the present time the changes on the staff have only been so far as its junior members are concerned. The Surgical and Medical Registrarships have been filled up by the appointment of Mr. H. Royes Bell and Dr. Charles Kelly. The duties of these officers, however, are somewhat altered from formerly. Thus the Surgical Registrar, in addition to recording the cases admitted within the Hospital, makes the Surgical post-mortem examinations and registers the reports upon them. The same remarks apply to the duties of the Medical Registrar. The Surgical Registrar has, in addition, to administer chloroform at the operations. A separate appointment of Curator of the Museum, formerly associated with the Pathological Registrarship, has been awarded to Dr. Henry Trimen. The Assistant-Surgeoncies have been reduced to two, and Mr. John Wood and Mr. Henry Smith have been permanently appointed.

Sir William Fergusson has lately had under his care the following instructive case of a strangulated inguinal hernia, in which, taxis having failed, he operated, opening the sac and removing a considerable amount of congested omentum. The practice of ligaturing protruded omentum and then cutting it off has been abandoned by Surgeons latterly, from the dread of peritonitis being induced by the constriction of the ligature. "It may, however, be safely followed in some instances—in those particularly in which the protruded mass is very much indurated, having a narrow neck. . . . It possesses the advantages of freedom from hæmorrhage and impossibility of deep retraction of the cut edge of the omentum into the cavity of the abdomen, provided moderate traction be kept up on the ligatures." (Erichsen's "Surgery," p. 811.) The practice was eminently successful in this case. The management of protruded omentum in cases of strangulated hernia is certainly one of the nicest points in practical Surgery, and one that cannot be too much studied, and from the proper treatment of which such important results ensue.

Mr. Bell, the Surgical Registrar, kindly placed the following notes at our disposal:—

A labourer, aged 32, powerfully built, was admitted January 22, 1867. He was first taken ill on the night of Friday, January 18, when he noticed that he could not return his rupture. He had great pain in the swelling; vomiting and hiccough soon came on; the vomiting and hiccough became very severe, and the pain across his belly was intense; his bowels were confined. He consulted a Surgeon on the 21st, and several attempts were made to reduce the rupture, but without success. He went to the Infirmary, and, the rupture still proving irreducible, he was sent into King's College Hospital on the afternoon of the 22nd.

On Admission.—On the right side there is a large oblique inguinal hernia, which has descended and occupies the scrotum. It is about the size of a large hydrocele. The swelling is tense, and gives no impulse on coughing; there is a constricted appearance at the external abdominal ring; the outline of the testicle is well marked at the lower part of the swelling. He says that the rupture, up to the present time, was always reducible.

January 22.—The taxis having been tried and failed, the man was operated on by Sir William Fergusson in the theatre. Chloroform was administered. An incision was made over the tumour; the different coverings of the hernia having been cut through, the sac was exposed and opened, when about two drachms of fluid escaped. The stricture, which was a tight one and situated deeply at the internal ring, was divided, and a small knuckle of intestine liberated; but the chief content of the sac was omentum, which was firmly adherent to it; the adhesions not breaking away readily, a double ligature was passed, and it was tied in two parts and cut away; the ligatures were left hanging out of the wound, and the sides of the incision brought together, the omentum serving to act as a plug. Two ounces of omentum, which was slightly congested, were removed. Water dressing was applied to the wound.

23rd.—As far as the operation is concerned he is doing well, but has a constant cough and a good deal of bronchitis. He is also much worried by a constant hiccough; no vomiting.

24th.—His bowels were opened by an enema the first time since the 18th. Has been taking sp. æth. sulph., which has much eased the hiccough. Cough still troublesome; wound looks healthy, the parts are a little swelled; poultices. No pain in the belly.

The ligatures separated in due time, and the case continued

to do very well. Several abscesses were opened by Mr. Welch, the House-Surgeon. The wound is just healed; there seems to be a good deal of consolidation about the parts, and no protrusion of the hernia. His bronchitis is also well. Discharged, well pleased with his condition.

Our readers will remember that in 1864 we published a series of cases of congenital deficiency of the anterior wall of the bladder, in which Mr. Wood operated with most remarkable success. These cases he has lately brought before the Societies. The following case is one of the most complete, and shows what may be effected by plastic Surgery, a branch of the healing art which our Continental neighbours seem to have elaborated more than we have hitherto done. Mr. Wood has lately restored the nose of a man who lost that organ from the ravages of syphilis, and for whom a most perfect nasal appendage has been afforded. We hope shortly to publish this case in detail. Mr. Perrin, Mr. Wood's late dresser, has kindly furnished us with the following particulars:—

A lad, 14 years of age, admitted under the care of Mr. Wood, with congenital deficiency of the anterior wall of the bladder and the adjoining portion of the abdominal parietes.

The patient is a pale-looking lad. When standing, his back is bent like that of an old man, this position being an assumed one, for the purpose of freeing the excoriated bladder as much as possible from friction. On examination, it was found that a circumscribed portion of the abdominal parietes, and the anterior wall of the bladder, were deficient. Through the aperture projects the posterior wall of the bladder, as a highly vascular tumour. At each angle, the orifices of the ureters are visible, through which the urine slowly and constantly dribbles, passing over the groins of the patient, causing great uneasiness and discomfort by continued excoriation of the parts. From the lower margin of the deficiency the rudimentary penis projects, which, on examination, is seen to consist of an imperfectly formed glans, the corpora cavernosa not being united to the median line, and the upper wall of the urethra being totally absent.

Operation, October 6, 1866.—Chloroform was administered. Mr. Wood made two vertical incisions, one on each side, close to the protruding mucous membrane of the bladder, commencing from a point immediately below the umbilicus, and continued it downwards as far as the base of the congenital deficiency. The two incisions were then united by a curved transverse one with an upward convexity, and the flap thus formed dissected downwards to the upper edge of the protruded bladder, the size of the flap being about three and a half inches in the long, and two and a half inches in the short diameter. He next dissected a pyriform flap, with the attached base towards the thigh and scrotum, about three inches across, from each groin. The bleeding, which was trivial, was completely arrested by allowing sponges of cold water to trickle down upon the exposed parts. He then inverted the superior flap, so that the skin surface should lie in contact with the posterior wall of the bladder, and its raw surface looking upwards. Over the superior flap he placed the lateral ones, their raw surfaces being brought into contact with that of the superior flap. These were then held in apposition by harelip pins, which were made to transfix the deeper inverted flap, as well as each lateral one, in order to secure a firmer and more perfect coadaptation. The edges of the wound left in the site of the lateral flaps were then approximated transversely, so that no strain should fall on the flaps, and secured by means of wire sutures; a pledget of wet lint was applied, and the patient removed to bed, and placed in a sitting posture, with the shoulders supported and the knees drawn up, care being taken to keep him as clean as possible.

11th.—Two needles removed. Complete union had taken place in the median line, between the two lateral flaps; also to a considerable extent on the left and upper part. On the right side and right upper part no union had taken place. Patient progressing favourably.

12th.—Three needles and three sutures removed.

13th.—Two more sutures removed.

15th.—Remaining sutures removed. The parts in which union has not taken place are granulating favourably.

November 10.—The wounds are completely healed in every part. The urine still flows from two small fistulous apertures, one on each side of the glans penis.

Second operation (November 24th). Chloroform was given to close the small fistulous aperture on the left side of the glans penis. Mr. Wood pared the edges of the aperture, and by means of three harelip pins approximated the edges, silk being twisted in figure of 8 shape around the pins, and afterwards collodion applied. The bleeding was allowed to cease before the wound was closed.

28th.—One pin removed.

30th.—Remaining pins removed. Complete union had taken place.

December 18.—Third operation, to close the fistulous aperture on the right side. A similar proceeding was had recourse to as for that on the left side.

19th.—One pin removed.

22nd.—Remaining pins removed. Union had taken place between the edges.

January 4, 1867.—The patient discharged, with one opening only, leading into the artificial cavity of the bladder, placed in its normal situation directly above the imperfect penis. The patient is now kept dry and comfortable by means of a urinal applied in the ordinary way.

Sir William Fergusson lately removed a portion of the tongue from a female child, aged 8 years, for congenital hypertrophy of that organ. In our Hospital Reports during 1866 we detailed some cases in which the tongue was partially removed at St. Bartholomew's Hospital, and there called attention to the curious fact that articulation was almost as complete as if the member were entirely present.

In the present instance the tongue was congenitally hypertrophied, and at the time of operation protruded for about an inch and a half or two inches from the mouth. She articulated very well, notwithstanding the deformity.

Sir William Fergusson transfixed the tongue with a needle armed with ligature thread at its centre, and, dividing the string, withdrew the needle. He then tied the ligatures tightly on either side, thus isolating that portion which he intended to remove; this he effected by means of a bistoury, cutting close up to the constricted portion.

The hæmorrhage was pretty considerable, but was soon controlled.

The wound healed very quickly and well, and the child can now retain the tongue in her mouth, and can speak very well and easily.

At a recent visit to the Hospital we saw a very interesting case of tumour in the lower jaw, caused by expansion of its walls, in a young lad, in which Sir W. Fergusson extracted a tooth and then broke into the dentinal cavity, and removed the contents, which consisted of a small quantity of gelatinous material. He had recourse to this method of dealing with the case for reasons which he had formed from a considerable number of cases which had occurred in his own and in the practice of other Surgeons, in which capital measures had been resorted to at first, and a large portion of the jaw removed, when probably some conservatism might have effected in time as much. With regard to this puncture of the contents of the bony cyst of the inferior maxilla, he deduced his experience from similar cases in which he had seen the walls of the antrum expanded by growths not *of* the jaw, but *in* the jaw, such as the one now under treatment, semi-fluid growths contained in a bony cyst, which had been entirely cured by puncture and evacuation of the contents. He called to mind a case in which he removed a considerable portion of the lower jaw, and a large mass of dentine was found between the expanded, flexible laminæ of the body of the jaw. This, he considered, would have been a case for exhibiting the conservation of previously scooping out the cavity before having resort to the formidable proceeding of removal. We shall watch the progress of this case with interest, and give some notice of it in our next report.

We hope shortly to notice the Medical practice of the Hospital.

ST. BARTHOLOMEW'S HOSPITAL, ROCHESTER.

SYPHILITIC ULCERATION OF THROAT—ERYSIPELAS OF HEAD AND NECK—RECOVERY—REMARKS.

(Under the care of Dr. ATKINSON.)

Leonora B., aged 35, widow, residing at Chatham, admitted into St. Bartholomew's Hospital, Rochester, February 22, 1865, with a foul, somewhat extensive ulceration at the back of the throat and palate. Says that she has a purulent discharge from the vagina, but denies any syphilitic contagion. Tongue clean; appetite fair; bowels confined; pulse feeble. Ordered a gargle of chlorinated soda, a mixture consisting of

fifteen minims of dilute nitro-hydrochloric acid, ten grains of chlorate of potash, and half an ounce of infusion of gentian, to be taken three times daily. Half an ounce of castor oil to-morrow morning, and an injection consisting of four grains of chloride of copper and twelve minims of the tincture of perchloride of iron to the ounce of water. Middle diet; half a pint of beef-tea, and three ounces of wine.

28th.—Throat much better; complains of pain in the left side; respiration feeble, and some friction sounds audible at the base of left lung. Ordered beef-tea diet; half an ounce of the solution of acetate of ammonia to be taken three times daily, and a mustard poultice to the side.

March 4.—Better; pain in side less. Ordered three grains of iodide of potassium in half an ounce of the infusion of quassia three times daily, middle diet, and one pint of beef-tea.

9th.—Not so well; puffy swelling about the eyes and face; throat of a somewhat dusky hue; pulse very feeble; tongue covered with a brownish fur. Ordered half an ounce of castor oil at once, poppy fomentation to the face, a mixture consisting of four grains of sesquicarbonate of ammonia in half an ounce of decoction of bark three times daily, beef-tea diet, an extra pint of beef-tea, and six ounces of wine daily.

14th.—Erysipelas greatly increased, not a feature of the face discernible; delirium since yesterday morning; hoarse rapid gurgling respiration, about 30; great difficulty in swallowing; pulse scarcely perceptible. Ordered twenty minims of the tincture of perchloride of iron and two grains of muriate of cinchonine in half an ounce of water every other hour; wine to be increased to ten ounces.

20th.—Sensible; puffiness of face almost entirely disappeared; respiration pretty tranquil; pulse still very feeble.

26th.—Puffiness of face quite gone, but the pulse continues remarkably feeble. Ordered four grains of sesquicarbonate of ammonia in half an ounce of decoction of bark three times daily, milk diet, fish, one pint beef-tea, wine ten ounces.

April 5.—Well, but very weak. Ordered seven minims of spirits of turpentine, six minims of sulphuric ether, seven grains of ammonio-citrate of iron in half an ounce of mucilage three times daily; middle diet, beef-tea one pint, eggs two, wine six ounces.

27th.—Discharged cured.

Remarks.—This case shows the great benefit that may occasionally be derived from the use of quinine and iron in the treatment of erysipelas. Ammonia and bark were here tried without any effect. The patient was fast getting worse, and there was evidently, from the nature of the symptoms, œdema of the epiglottis. The patient began to rally rapidly after the commencement of the quinine and iron, and this, in fact, I believe, saved her life. Instances occasionally occur, however, where the opposite treatment—viz., calomel and antimony—is required. In the majority of cases, probably nothing more is necessary besides an effervescing saline and a dose of castor oil. I attribute the healing of the sores in some measure to the carbolic acid and opium lotion; for I have seen very great benefit derived from its use in numerous other instances. I believe it to be the best application in cases of sloughing sores, and I now invariably use it where a stimulant is required. It will be found useful also as an injection in cases of internal chancres—*i.e.*, where the sides of the vagina are extensively ulcerated: in such cases I never use anything else. In ozæna, also, it is sometimes very beneficial.

SLOUGHING ECTHYMATOUS SORES AND HECTIC—TREATMENT BY SULPHURIC ACID AND PERMANGANATE OF POTASH—RECOVERY—REMARKS.

(Under the care of Dr. ATKINSON.)

Eliza G., aged 28, married, residing at Brompton, admitted into St. Bartholomew's Hospital, Rochester, August 22, 1866, with large ecthymatous sores over the legs, arms, and abdomen. They first appeared, she says, as little red pimples about three months ago. Denies having had syphilis, though there are scars about her thighs and face, and she admits having nocturnal pains in the shin bones and occasional sore-throat. Face pale and haggard; tongue clean; appetite good; bowels regular; pulse small and feeble, about 76. Ordered five grains of ammonio-citrate of iron, three grains of iodide of potassium, and half an ounce of infusion of quassia three times daily. Nitric oxide of mercury ointment to the sores, and a powder consisting of fifteen grains of grey powder and five grains of Dover's powder at night. Diet middle; extra half-pint of porter, and one pint of beef-tea.

September 1.—Sores not looking much improved. Health still bad. Ordered nitric acid lotion, and the iodide of potassium to be increased to five grains.

8th.—Has had very little sleep the last two nights; seems very weak; appetite failing; sores spreading. Ordered a mixture consisting of fifteen minims of dilute nitric acid, half a drachm of compound tincture of cardamoms, half a drachm of compound tincture of cinchona and compound infusion of gentian to the half-ounce three times daily. Ten grains of Dover's powder at night, and six ounces of wine daily.

27th.—Not much improvement; restlessness at night; diarrhœa; pulse very feeble. Ordered four grains of alum and four grains of extract of hæmatoxylon, to be taken when required; ten grains of Dover's powder every night, and ten ounces of wine daily.

October 7.—Sleeplessness; night sweats and flushes; diarrhœa; sores look angry, rapidly extending. Ordered twenty minims of dilute sulphuric acid, fifteen minims of tincture of opium and decoction of bark to the half-ounce thrice daily; a lotion consisting of ten grains of tannic acid and twenty minims of tincture of opium to the ounce of water; and milk diet, fish, one pint of beef-tea, three eggs, and twelve ounces of wine.

13th.—Still diarrhœa; wakefulness continues; but little improvement in the condition of the sores. Ordered half a drachm of tincture of catechu, half a drachm of tincture of kino and infusion of krameria to the half-ounce, to be taken when required.

14th.—No abatement of diarrhœa; still flushes and night sweats. Ordered one grain of permanganate of potash, ten minims of dilute sulphuric acid and water to the half-ounce every hour; and a lotion consisting of one drachm of carbolic acid and twenty minims of tincture of opium to the ounce of water.

21st.—The diarrhœa entirely ceased. Sleeps well without any opiate. Has lost the night sweats, and the sores are very nearly healed. The medicine to be given now only four times a day. To have middle diet, three eggs, beef-tea one pint, and wine twelve ounces.

30th.—Has been up to-day for the first time. Feels weak, but otherwise well. Sores perfectly healed.

November 7.—Discharged perfectly well.

Remarks.—This case is interesting, I think, as showing the effect of sulphuric acid and permanganate of potash. The woman was rapidly sinking from hectic, and the sores were daily extending, but under this treatment the diarrhœa (which was before apparently uncontrollable) quickly stopped, and sleep was obtained without the use of opiates.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0

Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

Terms of Subscription for India, £1 15s. per annum.

The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.

Post-office Orders and Drafts on Army or Navy Agents, should be made in favour of Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d. | A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d. | A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, MAY 4, 1867.

THE COLLEGE OF SURGEONS AND THE COUNCIL ELECTION.

The election next July by the Fellows of the Royal College of Surgeons of England of three Members of Council is already beginning to excite much attention both among our town and country correspondents. Messrs. Skey, Kiernan, and Wormald retire by rotation, and present themselves for re-election. Should they be re-elected, of course the present Council will

remain without any change. The first question which is debated, therefore, is—Should any or all of these three gentlemen be re-elected? We can fortunately offer a reply to the question without the faintest suspicion of being influenced by personal motives; because year after year, for many years past, we have consistently argued and re-argued that re-election should not be a matter of course, but a rare exceptional reward for unusually great or meritorious service. The very object of retirement by rotation is defeated if re-election is made this rule; and the honour of re-election is lost if it become a mere matter of routine to return to their former places all who are compelled by the laws of the College to retire after the period for which they were elected has expired.

As we have insisted upon this principle in former years when other personal interests were involved, we cannot be suspected of other feelings than anxiety for the public good, if we maintain that the retirement by rotation this year of the three gentlemen whose turn it is should be really carried out. If this be done, there will be three vacancies to fill up next July; and many names are already mentioned as those of probable candidates. Some attempt is spoken of as likely to be made by the *Fellows by examination* to set aside the *Fellows by election* who are senior to them on the list of Fellows, and to propose Mr. Holden—not because he is a better man than many of his seniors, but because he is a Fellow by examination. For our own parts, we confess to sympathy with a move of any sort—any breath of novelty stirring the sleepy surface of the waters—and, *primâ facie*, this move looks well. Still, we sincerely trust that no such step will be taken without due and serious consideration. Mr. Holden could not be elected without passing over Mr. Prescott Hewett, Mr. Spencer Smith, Mr. Simon, Mr. Bowman, Mr. Spencer Wells, Mr. Wharton Jones, and Mr. Humphry, of Cambridge. We need hardly say that it would be hard to find among the Fellows by examination gentlemen who have done more to deserve a seat in the Council of this College than the seven whom we have just named; and it would be hard indeed if they were to be passed over on a mere point of detail, and their College standing and seniority ignored, because they were thought worthy of the honour of election to the Fellowship before any of their juniors went up for examination. It is said that Mr. Prescott Hewett will not come forward, on the ground that a candidate who does not canvass may probably be defeated, and that he considers canvassing to be improper. We trust that a general stand against canvassing may be made, and that Mr. Hewett may appear on the list of candidates. It may be impossible altogether to put a stop to canvassing, but we feel sure that no amount of canvassing could endanger Mr. Hewett's election if it were only known that he would come forward. If he should still decline, we should not be sorry to see Mr. Simon, Mr. Bowman, and Mr. Spencer Wells, or Mr. Humphry, of Cambridge, placed on the list of candidates against Messrs. Skey, Kiernan, and Wormald, and the issue joined upon the question whether re-election of retiring Members of Council is to be the rule or the exception. These gentlemen have done excellent work, have attained the highest honours in the Profession, and have had their opportunities of carrying out their ideas on the government of the Profession and the education of its younger members. They may therefore retire with honour. We do not hesitate to express our own strong and confirmed opinion that re-election should be reserved as a rare—a very rare—reward for conspicuous merit or distinguished service.

PAUPERISM AND PREVENTIBLE DISEASE.

Few save those who are accustomed to think lightly, if at all, about the sufferings and troubles of their poorer fellow creatures, will have forgotten in the bright genial weather of a May-day the hard stern winter through which we have this year passed. The miseries of frozen water-pipes and accumulations of snow, with their sequel of domestic inundations, the almost impassable condition of the thoroughfares of this misgoverned, uncared-for metropolis during several days, are minor evils, which are endured without leaving any permanent impression on the minds of men busily engaged in the competitive battle of life; but the darker side of the picture is not to be so easily obliterated. A period of hard frost gives healthy and pleasant exercise to thousands of vigorous frames, to whom the keen crisp air is "seasonable" and "bracing;" but to a large and, we fear, increasing proportion of the population of our cities and large towns the feeble glow of life is extinguished or diminished by that very cold which invigorates the healthy and the strong. In London and some other of the great centres of population the weekly returns of the Registrar-General kept us *au courant* with the effect which the exceptional deficiency of temperature and the prevalence of bitter searching winds during the greater part of the month of January were exercising on that sensitive health-barometer the death register. We were able, for instance, in London to reckon with great precision the cost in human lives directly due to the extreme cold, amounting, according to official authority, to a loss of upwards of 1200 persons in three weeks, chiefly of very young or of advanced ages. But for the rest of the country, where the weather was known to be equally severe, nothing was accurately understood of its effects on the mortality beyond the concurrent testimony of general correspondents to the destitution prevailing in many places; and where destitution exists a high death-rate is inevitable.

The Registrar-General has now issued his report (of which we print a summary on another page) on the state of the public health during the three months ending March 31, and it is eminently satisfactory to learn that, despite climatic changes of the most sudden and extreme character, the mortality has not exceeded the average. "The death-rate is exactly the average of the season, but it is lower than it was in any of the three previous winters." And it is abundantly clear, from the evidence supplied by the registration officers, that, but for the intensely cold weather in January, the quarter's results would have been still more favourable, as indicating that, thanks to the sanitary schoolmaster being abroad in the land, we are slowly indeed, but steadily, laying the groundwork for an immense subsequent improvement in the hygienic condition of England. The most direct testimony is borne by some of the registrars to the benefit arising from local sanitary operations, and we may reasonably hope that the effects of recent legislation will now begin to exhibit themselves more and more perceptibly in diminished sickness and death-rates throughout the country.

The cholera epidemic, which last summer and autumn assumed such grave significance, has happily subsided, and does not now appear to have a single focus among us beyond an occasional case in the metropolis, just sufficient to remind us of the necessity for constant and vigilant supervision.

As regards one feature of the Quarterly Return, it corresponds entirely with what might have been predicted with absolute certainty—"Pauperism exhibits a marked increase." Frost and snow put thousands out of work, to whom idleness means either relief from the parish or starvation, and the Poor-law Returns show an aggregate of nearly a million as the average number of persons relieved weekly during the quarter. In the first week of January the total number of indoor and outdoor paupers relieved was 922,702, and in the succeeding weeks of the month the numbers were successively 947,942, 1,004,363, 1,053,920, and 1,023,551—the setting in of milder weather reducing them eventually to the still very high figure of 966,600 for the last week in March.

In the metropolis, where by far the largest increase of pauperism was recorded of any part of the kingdom, there was an excess in the numbers relieved in the first week of January

of 32 per cent. as compared with the same week in 1866; in the second week the relative excess was 40 per cent., then 57 per cent., in the fourth week 72½ per cent., and in the week ending February 2 it was again 57 per cent. In no other division of England did the inclement weather create such an excess of pauperism as in London, the highest relative excess elsewhere being 27 per cent. in the large towns of Lancashire in the coldest week of January. If there be any meaning at all in the old saying that God made the country and man made the town, it must surely imply that it ought to be our special duty to take care of our own handiwork, and, not resting content merely with the luxury and refinement which great cities afford, to make such provision for the poor, who will naturally abound in all large communities, as shall at the same time mitigate the hardship of their lot, and prevent them also from becoming sources of danger in the propagation and dissemination of disease. Destitution weakens both the bodily and mental organism, and renders them susceptible of morbific influences which a healthy constitution would repel. Thus it is that typhus and other fevers are indigenous amongst the badly-housed poor inhabitants of towns; and one can hardly doubt that if the cost in money of preventible disease every year in this country were computed, the aggregate would amount to such a sum as would demonstrate irrefutably the penny-wise and pound-foolish economy which in times past has been too much the rule in our poor-law and sanitary administration.

The fatal prevalence of small-pox, not in one but in scores of localities, is a national sin and a shame in these days, when it is morally certain that, if the legislature were to take the matter seriously in hand, that disease might be, if not altogether extirpated, at any rate rendered comparatively harmless. Let it be granted that vaccination is an imperfect protection; then let small-pox be vigorously attacked as the cholera was, so as to secure the destruction of the germs that lurk in clothing, bedding, and old uncleansed houses.

The most prominent impression which the Registrar-General's Returns convey is that, to a degree certainly not yet fully realised, the public health may be improved and human life prolonged by means which an allwise Providence has placed within the reach of all civilised communities. *L'homme propose, et Dieu dispose;* that is to say, the one disposes the means to a beneficent end, and the other proposes to compass the end too often with little or no regard to the means. Inclement weather we cannot prevent, but we can prevent dirt and defilement, which are infinitely more dangerous than "bad weather" of any sort, and are unfortunately far more common.

THE SOCIAL SCIENCE ESTIMATE OF MEDICAL KNOWLEDGE AND SKILL.

One of those agreeable, if slightly theoretical, *conversazioni* for which the Social Science chambers in the Adelphi are becoming celebrated, was devoted, on Monday last, to the discussion of certain propositions arising out of the last report of Dr. Lankester, the Coroner for Middlesex, which affirm the desirability of—1. The employment of experts in the Coroners' Courts; 2. The erection of public mortuaries in the metropolis; and 3. The introduction of the inquiries of the Coroner's Court into Workhouses.

The attendance was rather scanty, considering the important question in reference to Medical ethics which was to be the main subject of consideration, very few representatives of the Profession signifying either by their speech or presence that they were alive to the nature of the change of practice which is sought to be introduced as regards Medical evidence under the Coroner's inquisition. Dr. Farr, F.R.S., occupied the chair.

Dr. Lankester's proposition was that there should be attached to the Coroner's Court a special officer—call him an "expert" or any other less objectionable name—whose duty it should be to perform all necessary post-mortem examinations and chemical analyses, and to report thereon to the jury. The reason for this is the alleged incapacity of the ordinary run of General Practitioners to make a post-mortem examination with sufficient skill and discrimination to arrive, in difficult and obscure cases, at the real cause of death, on which the finding of the jury depends. Dr. Lankester believes that his plan, if adopted, would find much greater favour with the Medical Profession than is at first sight supposed, inasmuch as at the present time few Medical men in good practice will undertake these post-mortems for the very small fee allowed. If, from any circumstance connected with the death, some Medical man in very good position be called on by the Coroner to give evidence, he most frequently gets somebody to make the post-mortem for him. On economical grounds, Dr. Lankester holds that the appointment of a special Medical officer, with competent skill in analysis, who would have his laboratory adequately fitted for the purpose, is in every way desirable. Another reason in support of the proposition is that miscarriage of justice, or, at any rate, uncertainty as to the real cause of death, often arises from the confused and unsatisfactory nature of the evidence tendered by Medical men unaccustomed to express themselves with precision, or unacquainted with the elements of Medical jurisprudence. Dr. Lankester states that the Coroner is bound, under the Medical Witnesses Act, to send for the last Medical Practitioner who saw or attended the patient, and he does not propose to dispense with such Medical evidence, but he desires, in addition, to have a specially qualified Medical man to make the post-mortem examination; and he maintains that the science of Medical jurisprudence would benefit by the systematic and precise record of facts which are now virtually lost.

Dr. Rogers, the Medical Officer of the Strand Union, believed that the public would regard such an appointment as a slur on the Medical Profession, whose rising generation are fitting themselves, by their high standard of education, for all such duties as Dr. Lankester contemplates.

Mr. P. Holland said the intention of the proposition was not to supersede, but to assist, the General Practitioner, whose study is directed to the laws of disease rather than to special causes of death. Many of the cases which are investigated involve the imputation of bad Professional practice, and these should not be decided upon the evidence of a possibly rival Practitioner, but on the impartial testimony of a public officer. In post-mortems where the presence of poison is suspected delicate chemical analyses have to be performed, and but very few possess the necessary apparatus.

Mr. Lord, the Health Officer for Hampstead, objected to Dr. Lankester's proposition as a condemnation of the General Practitioners, and he referred to the contradictory testimony obtained from "experts" in the witness-boxes of the law courts. The Coroner ought to have the power of calling for special assistance when needed.

Mr. H. W. Rumsey, as a provincial Surgeon, remarked that, whatever might be the rule in London, it was undoubted that, in the country generally, coroners never troubled themselves about Medical evidence; their object seemed to be to "burke" inquiry, so that the interests of the Medical Profession at large were certainly not consulted. He deprecated as much as any man interference with the position of the Profession, but the curative Practitioner's attention ought never to be diverted from the careful watching of the progress of disease in his patients by his being called away to perform a post-mortem in some garret or hovel. Dr. Lankester sees that there is special work to be done, and wants special men to do it. There is great objection to the term "experts," by reason of the sort of quackish reputation which attaches to them; and, beyond doubt, the true basis for the organisation

of Medical jurists and sanitary officers is laid down by Dr. Farr in his recommendation for the appointment of a Registration Medical Officer in every district of the country. To make the record of death and its causes more complete is the great end to be kept in view, and this would be the chief duty of Dr. Farr's proposed officer, who would be available in all cases for the assistance of the Coroner. Mr. Rumsey expressed his full conviction that the general body of the Profession is not up to the mark for these special functions.

Mr. Herbert Safford (a barrister, as we judge) thought that scope should rather be given to the magistrate or coroner to select special persons for special Medico-legal purposes, than that an "expert" should be appointed by the Crown who would most likely be very widely regarded in the light of a public prosecutor. At any rate, counsel for the defence would frequently find means to impress this on the minds of jurymen as a reason for giving an accused the benefit of whatever doubtful feature might result from the expert's post-mortem and subsequent analysis. Mr. Safford mentioned an instance in which an expert, under cross-examination, admitted that in the few cases in which he had been employed by the defence, he had generally failed to detect poison, but in the majority of his analyses for prosecutions he had found traces of poison. As a non-Medical man, it was his opinion that the Coroner, as the representative of the Crown, should be empowered to pay such fees as might be necessary to procure competent assistance. He spoke from some years' experience of the criminal law courts, and he felt strongly the great necessity for an extended acquaintance on the part of the Profession with the principles of Medical jurisprudence.

Mr. Rendle testified to the unfitness of a General Practitioner to perform post-mortems. He had been himself a prizeman in chemistry at Guy's, but he would not now undertake an analysis. "Experts," as such, he held to be a mockery: they can be hired by anybody, and will give evidence on whichever side they are paid. The proper "expert" would be a highly qualified Medical man holding a public appointment, who should be debarred from private practice altogether.

Dr. Edmunds could not see that any slur was cast on the Profession by saying that certain men were specially qualified in the various branches of Medicine and Surgery. No General Practitioner, for instance, would undertake an operation for cataract. Irrespective, however, of Professional ethics, everybody would admit the great danger consequent on General Practitioners performing post-mortems, and then going among their patients, particularly in midwifery cases.

Dr. Tilbury Fox feared that the result of appointing a special officer for all post-mortems would be disconnected investigation. Instead of the impression of the Medical man, acquired during life, being carried on and compared with the results of the post-mortem, there would be the two separate impressions of two possibly antagonistic observers. He therefore agreed with Dr. Rogers that the requirements of law and science would be satisfied if the Coroner had larger power to call for a second opinion in doubtful or obscure cases.

Dr. Lankester remarked that a secondary examination would be worth nothing at all; in fact, it was almost impossible satisfactorily to repeat a post-mortem examination. He wanted an instructed man for all post-mortems, whether difficult or not.

After a somewhat desultory discussion, a combination of the views of Dr. Lankester, Mr. Rumsey, and Mr. Rendle was adopted by general consent as expressing the sense of the meeting—namely, that it was desirable to attach to the Coroner's Court a specially qualified Medical Officer to undertake all necessary post-mortems and chemical analyses, and that, in the event of Dr. Farr's proposed Registration Medical Officer becoming *un fait accompli*, these duties should devolve on him.

We have endeavoured to give an impartial—we readily admit an imperfect—account of a discussion upon a subject which we regard as exceedingly important to the Profession. Of course, such a matter cannot be considered definitively settled by what took place at the Social Science Rooms on Monday night; too many interests are involved—the interests of the General Practitioner, of the public, of science, of law—for anything short of a thorough weighing and sifting of the evidence for and against to be acquiesced in. For our own parts we are satisfied that, granting the necessity for an improvement in the quality of the Medical evidence ordinarily available in the Coroners' Courts, any amendment must be brought about tentatively and with a due regard to the feelings and interests of the Profession. It is clear from the statements made—1st. That the Coroners often fail in carrying out their duties according to any high standard. The mode of appointment of these officers, their qualifications, and responsibilities, ought at a fitting time to come under review. 2nd. Supposing that we have Coroners well qualified, and, animated by a due sense of responsibility, desirous of using their office to the utmost for the public benefit, and of giving full publicity to their work and its results, then, like Dr. Lankester, they find fault with the instruments, in the shape of Medical witnesses, on whom they must depend to make investigations and to put their conclusions into a scientific shape. 3rd. That Medical men should acquire greater skill in Medico-legal investigations, and that this skill should be recognised by some special diploma, as proposed by Mr. Rumsey, deserves fair consideration. The Army Medical course at Netley would be a capital model. But whether men so qualified should be retained absolutely, or be called in from time to time; whether a man who is a good pathologist would be a good enough chemist; whether an official chemist would stand his ground against his independent brethren who would be called in; and whether the Medical Profession, as a whole, would benefit by the erection of a class of experts, are questions on which we wait to hear both sides.

The remaining subject of interest discussed on Monday evening was as to the desirability of erecting public mortuaries in the metropolis, and on that point there could be little difference of opinion. To remove the dead from the confined and crowded dwellings of the poor has been shown over and over again to be the duty, not of the metropolitan authorities alone, but of all the municipal and city authorities throughout the kingdom. Dr. Lankester only speaks the sentiments of all right-minded men when he asks for something quite different from the parish dead-house—a hateful name to the poor—which is usually tacked on to the workhouse:—a structure, ecclesiastical in character, so arranged and placed as to keep alive and foster those feelings of respect for the dead which are natural to us all; and where so suitable a locality as the London burial-grounds which are closed for purposes of sepulture, but which would be most appropriately devoted to buildings for the temporary reception of the dead awaiting interment elsewhere? But who will bell the cat, and be the first to essay the Quixotic experiment of inducing the London parishes to incur the requisite expenditure?

SANITARY SCIENCE IN INDIA.(a)

Some of our readers may remember that in our article entitled "Annus Medicus, 1865,"(b) when speaking of the origin of cholera in India, we stated that an able and accomplished Medical officer of her Majesty's Indian Army had just been appointed Health Officer of Bombay, and that the municipal authorities of that city seemed to be setting themselves earnestly to work to improve its sanitary condition. We have

(a) Bombay Municipality. Health Officer's Report for 1866. Addressed to the Municipal Commissioner for the City of Bombay. Folio. With map, plates, and tables.

(b) *Vide* vol. i. 1866, p. 11.

been favoured with an opportunity of examining that officer's report for 1866, and we strongly recommend it to the notice of our readers as a most interesting and instructive document. We are sure that while all who peruse it will be impressed with a high opinion of Dr. T. G. Hewlett's efficiency and energy as a Health Officer, they will also from it acquire a much more vivid idea of the incredibly filthy and unhygienic condition of our Indian cities, and of the immense amount of sanitary work to be done in them, than they are likely to be able to gain in any other way. They will not wonder that those places should be frequent breeding-places of cholera, fever, and other zymotic diseases, but rather why they are not perpetually desolated by such maladies. But as this report is not likely, we fear, to fall in the way of many, we propose to endeavour to give here some idea of its contents, though it is very difficult to convey to those who have no personal acquaintance with India any real idea of the immense difficulties sanitary science has to contend with there.

The total population of the Island of Bombay, which is about eleven miles long by two broad, amounted, in February, 1864, to 816,562 persons, nearly 800,000 of whom live on the island, the rest forming the harbour population. The "Native Town is the most densely populated part," affording an average of only six and a half square yards to each of its 449,891 inhabitants. It has risen up gradually and irregularly, without plan or care, round the Fort, and contains "narrow and irregular streets, with houses varying from one to five stories in height; no open spaces for ventilation, and no provision made for effectual drainage." It has no real system of drainage, though it has been "most imperfectly drained" into a natural watercourse, which, arched over in its course through the town, passes as an open sewer from the suburbs along the flats, and discharges itself on the western foreshore, its total length being about three and a half miles. "The covered street drains appear to have been built after one model—viz., flat sides with flat bottom, of an average depth of one foot and a half, with a width of one foot. The top is covered over with roughly hewn slabs, and an attempt is made to prevent earth falling through into the drain by stopping up the interstices with small stones. In most of the open drains the sides only are made, the bottom being unpaved." These drains were opened and cleansed during the year to an extent equal to about fifty-nine miles' length.

Such of the daily garbage as used to be collected from the city "was deposited in the low-lying parts of the island, in the immediate vicinity of the most crowded parts of the Native Town, which were thus filled in with tons upon tons of decomposing organic matter." On part of the eastern foreshore were the "Fort necessaries," which "consisted of two long tiled sheds, supported on wooden piles, and approached by a wooden bridge from the edge of the old Fort ditch. The buildings themselves were over the highest watermark in Moody Bay, so that only at the highest tide was the filth below washed away. Close to them the halalcores had been accustomed to deposit all the night-soil collected in the Fort, which, mixed with the foul mud in the bay, emitted a stench only exceeded by that proceeding from the foreshore in front and in the immediate vicinity of the Native Infantry lines." These necessaries are now removed, and Moody Bay is in process of being filled in by the G. I. P. Railway.

After the publication, early in 1864, of Deputy Inspector-General Leith's "most admirable, but startling, report on the sanitary state of the island, in which its extreme filthiness was the most salient point," Government was roused into taking steps for the improvement of the city. A Sanitary Act was passed, and on November 1, 1865, a Public Health Department came into existence. Over this Dr. T. G. Hewlett presides, having under him the following executive establishments:—

1. The Scavengering Establishment.
2. The Drain-cleaning do.
3. The Road-scraping do.
4. The Town-sweeping Bunder do.
5. The Foreman Carpenter and Storekeeper's do.
6. The Market and Slaughterhouse do.
7. The Nightsoil and Halalcores' do.

The means and powers for carrying on sanitary operations appear thus to be centralised under the command of the Health Officer in a degree which may excite the admiration and envy of Health Officers at home.

The island was then divided into eleven wards, to each of which is told off a distinct establishment of bullock carts and coolies; over each gang of coolies a native "muccadum" is placed, and over each ward a European inspector.

The garbage collected daily is now placed in railway wagons and sent off to "Coorla Swamp," nine and three-quarter miles from Bombay. More than 103,000 tons of garbage were thus sent out in 1866, about 45,000 tons having been taken out in 1865.

One of the great evils of the city is the horrible state of the cow and milch buffaloes' sheds, some of which are described in the report. One "is an enclosed courtyard, the ground of which is paved in places, though almost all the stones are loose. On three sides of the court are upper-storied buildings, the ground floors of which are turned into buffalo stables, whilst the owners live in the rooms above. . . . . The heat, the faint sickening odour, the walls moist with exhalations from the animals, the stifling smell of ammonia, make one sick on first entering the stables. I have found a difference of 10° between the temperature of the external air and that of the interior of one of these stables. . . . Near all the large centres of population are congregated these milch buffalo stables—not one or two, but twenty, thirty, or fifty dealers live in a street." In two of the streets named "the ground floor of every house in the street is converted into a stable, while the owners live above. The overcrowding of the cattle is excessive. They have barely room to stand, their sides touching each other. In some places the owners keep men on watch all night to prevent the cattle lying down." These stables are kept under inspection, and cleanliness enforced as much as possible, but, as may be supposed, no inspection can do much to improve them, and Dr. Hewlett recommends that the bylaws regarding space for each animal should be made applicable to them, that the owners should be brought under the sections of the Act providing for dangerous and offensive trades, and that the municipality should erect in each quarter proper stables, the owners of milch buffaloes "being allowed only to keep their cattle at such stables, and paying a small rent for the same."

All the nightsoil of the native town is deposited in large iron tanks placed on the eastern foreshore; "the tanks are connected by a movable sluicegate with an iron pipe leading to low-watermark in the harbour. At half-ebb the sluicegates are lifted, and the contents of the tanks flow out into the sea. At night, between the hours of 11 and 4, the nightsoil carts from the various depôts are emptied here, and during the day, from 4 a.m. till about noon, the halalcores are engaged in emptying their baskets, which have lately amounted to about 4000 daily." The nightsoil is brought from public latrines, necessaries, and depôts, and from the private houses by the halalcores, who belong to the lowest of the various castes throughout India. Under the old system, these men, then numbering about 500, enjoyed a monopoly of this pleasant work, and, in consequence, "the privies throughout the town were often left untouched for days;" in three months, in 1865, as many as 1824 persons were convicted in the police-courts for suffering their receptacles for nightsoil to be in a filthy state, their defence always being that they could not secure the attendance of the sweepers. The Health Officer therefore imported additional halalcores from up-country; this led to a strike among the native sweepers, who wished to

retain their monopoly, but after a serious inconvenience of ten days' duration they gave in, and now upwards of 1000 are enrolled under the superintendence of the Health Officer. They are put under native muccadums and European inspectors, and when any case of neglect is clearly proved against them, the gang of halalcores, their muccadum, and their inspector are severely punished by fine. We should think there is a good opportunity here of trying the earth-closet system.

The markets and slaughter-houses are kept under constant inspection, and seven persons were sentenced during the year to various terms of imprisonment, with or without fines, for exposing for sale meat, or bringing for slaughter animals, unfit for human food; many other persons were fined for like offences; upwards of 1000 lbs. weight of food was condemned, and a mutton slaughter-house and a beef slaughter-house were condemned and closed.

The price of provisions of all kinds has very largely increased during the last eleven years, and tables showing this increase are appended to the report. The increase per cent. of price in 1866 over the mean price of the preceding ten years was for cereals 37¼ per cent., legumes or pulses 21, vegetables 108, meat 53, poultry 63, and dairy produce 39, per cent. This great and continued increase in price of the necessaries of life has, of course, a very important bearing on the public health, and Dr. Hewlett suggests several measures for increasing and improving the market produce and stock, among others strongly recommending an endeavour to utilise the night soil for manuring the fields, and informing the municipality of the several experiments that have been made in this way in England and Scotland. There might possibly be, as Dr. Hewlett suggests, caste prejudices in the way of using vegetables grown on land so manured, but at any rate green forage for horses and cattle might thus be greatly increased in quantity.

Various offensive and dangerous trades have been removed from the native town and its precincts.

Difficulties arise, as might be expected, with regard to the various means of disposing of the dead. New cemeteries are being made for the Christian dead, and it is recommended that "the Mussulman burial-grounds, situated to windward of the native town, and the Khojah burial-ground, in one of its most crowded and unhealthy quarters, should be closed, and more convenient sites chosen on the flats." At the Hindoo burning ghat, Dr. Hewlett recommends the erection of a *Cinerator*, "which should be at the disposal of the poor on payment of a small fee." At present, the cremation of a body takes four hours, and, owing to the very high price of fuel, the process is sometimes very imperfectly carried out. Dr. Hewlett is an admirer of scientific cremation, and believes that "this most cleanly method of disposing of the dead will again revive in Europe as the increased population forces the living to encroach on the resting-places of the dead." The Parsee Towers of Silence, where the Parsee dead are exposed and left to the attentions of the vultures, occupy "one of the best situations in the island for building." Dr. Hewlett does not venture to recommend their abolition, but thinks they might be removed to the flats.

"During the year 1866, 16,750 persons died from all causes in the city. This number is 11,881 less than in 1865, and 8265 less than in 1864." Only 324 deaths occurred from cholera. Small-pox caused 1071 deaths in the year, against 567 in 1865, and 1707 in 1864. Measles destroyed 485, against 132 in 1864, and 369 in 1865. Fever had greatly decreased, the deaths recorded from it having been 9833 in 1865, against 12,593 in 1864, and 18,739 in 1865. Taking the deaths from all causes, the rate of mortality was 30·62 per 1000 in 1864, 35·04 in 1865, and only 20·50 in 1866. The death-rate varies greatly, of course, in different districts of the town. "In Chaopatee it was 37·3 per 1000, or 1 in 27. This is better than in 1864, when the death-rate here was 62·42 per 1000, or 1 in 16. Khetwady, bordering on Chaopatee, with the same physical characters, has a similar high death-rate. The lowest death-rate was in Sewree, 8·7 per 1000, or 1 in 114. I have passed over both the southern division of the Fort and the water division, which have still lower death-rates, as there are peculiarities concerning each of these localities." "The mean temperature of the air was 78·3°, which is 2·1° below the average; the mean range was 10·1°, and the extreme range 35·2°."

Dr. Hewlett very judiciously warns the authorities against relying too much on the reduction of the rate of mortality in 1866. He says—"Although the death-rate, as compared with former years, presents a more favourable aspect of the public health, yet I would deprecate the belief that this condition is solely to be ascribed to the increased exertions in cleansing the town. It is at present only safe to say that we have effected the deportation of 103,098 tons of matter which, whilst in a state undergoing decomposition, is believed to be prejudicial to human life, and that the removal of nightsoil from amidst the dwellings of the inhabitants has been during the year much more speedy and effectual than it ever was before. No general conclusion can be drawn from the results of one year. The experiments, to lead to any practical deduction, must extend over a term of years." Managed in this cautious and philosophical spirit, matters are sure to be well and carefully conducted, and not hurried by too highly pitched expectations, or spoiled by disappointed and flagging enthusiasm. The death-rates quoted are such as would not shame parts of England, and would be considered even a triumph in Liverpool; while the removal of much that still most loudly calls for interference in Bombay will in all probability be productive of very marked further improvement. "Fever nests" and "cholera gardens" exist there which would be loathsome and fetid enough in the most temperate climate, but in the stifling East must be appalling dens. Here is a description of one:—"You reach it by a passage about seven feet broad and about twenty yards long. This is formed by the sides of two houses fronting Bellasis Junction-road, the eaves and galleries of which overhang, so that there is only a clear air-space of about two feet. The court, about thirteen feet wide, is composed of continuous one-storied buildings, which shut it in on three sides. There are twelve rooms on the ground-floor and fourteen rooms on the upper story, round which a gallery runs. There are three privies in the corner of each floor. At present some of the rooms are empty, and only sixty-seven persons living in the twenty-six rooms, but in 1864 there were upwards of 200 persons living here, and the deaths from fever were numerous. The place is regularly disinfected once a week." The flats and marshes constantly produce malaria, and require filling-in and draining. Now building sites may be thus acquired, and are greatly needed, both for the native population and, still more, for the largely increased number of Europeans brought to Bombay by the railway establishments. A main drainage scheme for the city is imperatively required, and is in progress. New general Hospitals, and Hospitals for cholera, fever, and small-pox, are required. Street fountains of pure water should be erected, and "dipping wells" abolished. All these, and many other improvements and additions, are set forth and commented on in Dr. Hewlett's report. He recommends, also, the adoption of measures to prevent the importation of cholera into the island. He considers that it has been repeatedly shown that pilgrims from the various "juttras," or religious fairs, have introduced cholera whilst passing through Bombay on their way back to their homes. He would therefore have them all placed under especial sanitary supervision; and he is able to produce proof of the benefit apparently arising from the measures he would recommend. "The fair of Punderpoor is notorious

for having over and over again been the source of cholera. Knowing this, and dreading its introduction from this place into Bombay, I addressed you on the subject just before the fair was celebrated, and you were kind enough to request the revenue authorities in the Mofussil to inform me if any cases occurred. Cases did occur, but they were stopped at Barsee railway station, and by this timely precaution Poona and Bombay escaped." Dr. Hewlett "strongly recommends" that all these fairs be placed under inspection, and that proper rest-houses, under strict sanitary inspection and disinfection, be provided for the pilgrims. And whenever cholera is prevalent he would have a sanitary cordon drawn between Bombay and the mainland, Apothecaries being stationed on the railway lines to inspect the passengers, and, if necessary, detain them in proper buildings and sanitary encampments, and to see to the disinfection of tainted railway carriages. All shipping, also, should be under strict inspection, both on arriving in and on leaving the harbour. It does seem possible to carry out such measures fully and completely in such a place as the island of Bombay; and, to say the least, the experiment would be so interesting and instructive that we should greatly rejoice to hear of its being thoroughly tried.

"The amount of venereal disease in Bombay is something appalling." And here, again, Dr. Hewlett is able to back up his recommendation of preventive measures by his own knowledge of their successful application. "I should not be discharging my duty," he writes, "if I did not ask you to obtain a legislative enactment with a view to bringing all prostitutes in Bombay under strict Medical and police supervision. I can speak from experience of how successfully this plan works in Aden, where there is a Lock Hospital. All the prostitutes from the Mocha lines, the only quarter in which they are permitted to live, are brought to the Lock Hospital every Saturday morning, and are examined by the Civil Surgeon. Those that are found diseased are detained till cured, and those that are well are allowed to return to their houses. Venereal disease, when I was at Aden, was virtually extinct."

Appended to the report are valuable tables of the rates of mortality, of meteorological observation, of the prices of provisions, etc., and some very interesting short accounts of some of the trades of Bombay. From these, and from the report of the exact sanitary improvements now in progress, and of those recommended for immediate adoption, we might quote much more, but our space and time are exhausted. Dr. Hewlett's requirements and recommendations may seem to some rather excessive and Utopian, but we must say that we think most of them are absolutely necessary if the city of Bombay is ever to be a credit to English rule. And the work to be done interests not the island of Bombay alone, but every city and country in communication with it. We have shown that if the authorities fail in the task before them, it will not at any rate be for the want of an able, energetic, and faithful adviser in their Health Officer.

THE WEEK.

CHOLERA IN LONDON?

The Registrar-General's Weekly Report of Wednesday contains a paragraph to the effect that a man died on Thursday, April 25, in the vicinity of Leather-lane, Holborn, after an illness of four days, having suffered during the last twelve hours from cholera. On examination, however, the facts do not appear to be quite so alarming. We have inspected the house in which the death took place, and where, we are sorry to say, the corpse still lies, and find it, for the neighbourhood, exceptionally clean; the waterbutt is uncovered, and although some stones are to be seen at its bottom, it is apparently freer from organic matter than many others we have inspected; the closet arrangements are also above the average. The place where the man worked, however, is excessively badly off as to hygienic matters, and to it (Union-buildings, Leather-lane) we would invite the attention of the Officer of Health for Holborn. We have also learnt from Dr. Clark (Holborn) that he has been called to a very bad case of diarrhœa occurring in a woman from the same workshop. The history of the case, as far as we can make it out, is as follows:—The man had been a hard drinker up to within twelve months ago, but since then has only broken loose twice, and shortly after his last debauch was seized with diarrhœa. How long this had lasted, or the degree of its severity, cannot now be made out; suffice it to say it must have been going on for a week or a fortnight—it may be longer, but not to any great extent. Mr. Lownes, of Hatton-garden, was called to see him on the morning of Thursday, when he found him collapsed, although he had just returned from the shop unable to work. His skin was blue, and his countenance pinched; he was suffering from severe cramps, and occasionally vomited. *He was not, however, purged after he returned from work until he died twelve hours after.* Mr. Lownes, desirous of attracting attention to the sudden nature and surrounding circumstances of the death, occurring as it did at a time when he was encountering an unusual number of diarrhœa cases, signed the death certificate as one of cholera, with a query after it. Thus it stands; whether the death was really due to cholera or not, cannot be ascertained without a post-mortem examination, which the relations obstinately refuse to permit. It should be noted that no other members of the family have been in the slightest degree affected with looseness of the bowels. The whole neighbourhood is in a most unsavoury state, and requires thorough cleansing. We believe the funeral is not to take place till Sunday. Query: Is not this a case for the Coroner?

HOSPITAL CHANGES.

At the London Hospital the Committee have determined to institute departments for the treatment of diseases of the eye, ear, and skin. Mr. Hutchinson and Mr. Cooper have been appointed Surgeons to the ophthalmic department, and Mr. Rivington Surgeon to the aural department. Dr. Hughlings Jackson has been appointed Physician to each of these departments. For skin diseases, Dr. Sutton is Physician, and Mr. Hutchinson Surgeon. All these gentlemen were already members of the staff of the Hospital, and will, of course, retain their ordinary duties. By the resignation of Dr. Alderson at St. Mary's, Dr. Sieveking will obtain a larger share of beds at that Hospital. By Dr. Sieveking's resignation of the Physicianship to the Hospital for the Epileptic and Paralysed, Dr. Hughlings Jackson, the Senior Assistant-Physician, will, we understand, become Physician at that special Hospital.

HYDROPHOBIA.

The Rev. E. V. Bligh, vicar of Birling, Kent, has lately written to the *Times* for the purpose of inducing the public to give £500 for what is known as "the Birling cure" for hydrophobia. He asserts that this "cure" has been dispensed by a family in his parish who are in humble circumstances, and who, whilst possessed of the alleged invaluable prescription, have kept no registry of cases successfully treated by it. Mr. Bligh, however, states that he has been able to ascertain some results of cases treated "which go a long way to prove the efficacy of the Birling cure." At the same time he writes with undisguised contempt of the practice adopted with so much success by the late Mr. Youatt of applying nitrate of silver to the poisoned surface. It is wonderful what a charm the *ignotum* has for the clerical mind. Some country-side nostrum with a reputation founded probably on mere tradition or gossip, or perhaps the half-forgotten remnant of mediæval wort-lore, "contains some ingredient which is a specific cure for this disease;" but a

letter recommending the application of a very soluble and efficacious caustic, on principles approved by physiology and common sense, is sneered at as an "anonymous effusion." The Vicar of Birling may probably find some person credulous enough to buy his secret, but we hope that excision and caustics will not, in any case, be neglected, in order to prove its efficacy. Whilst quinine will cure ague, it would be unphilosophical to assert that a specific for hydrophobia may not be discovered; but the number of alleged specifics is a strong argument against any one of them being really efficacious. There can be no doubt that the vast majority of those who are bitten escape the disease without any treatment whatever, and it is this fact which has supported the pretensions of every nostrum. We may add that the author of the letter in the *Times* which the Vicar of Birling has thought fit to criticise was the late Dr. Robert Ferguson, and the boy who was treated by Sir B. Brodie and himself by the free application of nitrate of silver to the throat is the present Lord L——.

NEW MEDICAL MAGISTRATE.

Thomas Howitt, Esq., F.R.C.S., has been placed on the commission as Justice of the Peace for the County Palatine of Lancaster. He has also very recently been appointed magistrate for the borough of Lancaster.

THE RELEASE OF TOOMER.

Mr. Secretary Walpole has at last listened to reason, and has released the convict Neville Maskelyne Toomer. Of course no one can feel the slightest regret that Toomer has suffered something for his conduct, but the finding of the jury was so contrary to the Medical and circumstantial evidence, and the sentence of the judge was so outrageously disproportioned to the requirements of the case, that the non-intervention of the Home Office left a deep slur upon the public justice. We are very glad that Mr. Walpole has yielded to a petition presented by the convict's father, although the reasons which he gives for doing so, with the exception of that of "the punishment which the prisoner has undergone," are precisely those which might have induced him to yield to the petition from Reading which was presented many months ago. The following is a copy of the letter announcing his decision addressed to Mr. W. R. Bartlett, solicitor, of Reading:—

"Whitehall, April 27.

"Sir,—I am directed by Mr. Secretary Walpole to acquaint you that he has carefully considered the memorial presented to him by Mr. Toomer on behalf of his son, Neville Maskelyne Toomer.

"After an attentive and anxious review of all the circumstances of this doubtful case, and having regard to the long deliberation of the jury, their recommendation to mercy, and the punishment which the prisoner has undergone, Mr. Walpole has felt it his duty to advise Her Majesty to remit the remainder of his sentence.

"I am, Sir, your obedient servant,

"Belmore.

"W. R. Bartlett, Esq., solicitor, Reading."

FROM ABROAD.—REPORT OF THE FRENCH ACADEMY OF MEDICINE ON THE CHOLERA.

M. Briquet has just presented to the Académie de Médecine the report on the cholera in France of 1849; and certainly, if prolonged digestion is necessary for the realisation of an efficient product, that element of success has not been wanting on this occasion, eighteen years having elapsed since the preparation of the report in question was referred to the committee, during which period two epidemics of great importance have occurred. M. Briquet, it is true, is not responsible for this delay, he having been commissioned to prepare his report only four years since. We have no doubt that a most valuable document has resulted from this elaboration, the report being likely to occupy 1000 printed pages, and being amply illustrated with maps and plans. Funds for printing it have not yet been accorded by the Government, but doubtless they will soon be forthcoming. The following are the general conclusions the Committee has arrived at:—

"1. Among the various forms of cholera morbus there is one to which the name of Indian or Asiatic has been applied. The etiological characteristic of this form is the faculty which it possesses of being propagated from one place to another. Its anatomical characteristic is the choleraic intestinal eruption (*psorenterie*); and white stools *sui generis* constitute its pathological character. 2. It originated in India, where it has probably existed from time immemorial; but well-authenticated outbreaks have only assumed importance since about 1760, the epoch of the military struggles between the French and English troops in India. 3. Up to 1820, epidemic visitations of the disease frequently occurred in India, but they had never been observed beyond the limits of that country, unless such was the case in the Low Countries in 1665, Holland being then almost the only country having very intimate commerce with India. 4. From 1817 to 1850 three great epidemics of cholera occurred, which were propagated beyond India, and all three had Bengal for their point of departure. 5. When the propagation of the disease takes place by land, this is effected from person to person (*proche à proche*). By sea, on the other hand, it is effected at more or less greater distances, and the first localities attacked have generally been ports for merchant vessels. 6. The following are the conditions which favour the propagation of the epidemics:—The vicinity of places where the cholera prevails; the proximity of slow-flowing streams of water; inconsiderable altitudes; elevation of temperature; the presence of a large quantity of watery vapour in the air; great atmospheric vicissitudes; defective ventilation; the advent of winds from infected localities; large assemblages of people; overcrowding; war; famine and poverty; bad health and debility; the debilitating passions and exhaustion from fatigue; and, finally, unsuitable alimentation. 7. The conditions opposing the propagation of the cholera are the reverse of those just named. 8. The conditions giving rise to the individual attacks are of the same order as those which favour the propagation of epidemics. 9. It has not yet been demonstrated that special pathological conditions are necessary predecessors (*avant-coureurs*) of epidemics of Asiatic cholera. 10. The attack of cholera ordinarily commences by disturbance in the alimentary canal, and especially by the diarrhœa termed premonitory. 11. The disease itself seems to result from the influence of a thus far unknown specific agent, the effect of which is to rapidly impair vitality in its very sources. 12. The phenomena of reaction are generally the result of phlegmasiæ assuming a special form. 13. A specific for the cholera has yet to be discovered, and the most rational medication consists in combating the various accidents as they arise by appropriate agents, employed with a certain amount of reserve. While resorting to these means, the Physician should ever bear in mind that all treatment in grave cholera cases which extends beyond the bounds of moderation risks the production of very serious accidents. The mean mortality of Asiatic cholera is generally one death in every two patients."

M. Guérin, who was one of the Committee, and in the minority on some of these conclusions, strongly opposed their being voted upon until the voluminous report, which he characterises as the thirteenth labour of Hercules, had been printed and distributed to the Academy. The reasonableness of this view was at once admitted, and the discussion consequently adjourned. Awaiting this, M. Guérin throws out, in the last number of the *Gazette Médicale*, the following suggestion:—

"Without wishing to anticipate any of the new truths this discussion will bring to light, or the hygienic measures it will cause to be put into force, we may be certain that the debate will have great results both for science and humanity. Take a single question; for example:—Suppose that we are visited by the cholera for the fourth (fifth?) time, can we derive no advantage from what experience has recently taught us with respect to the mode of extinguishing an epidemic in its germ? Every one, at least with few exceptions, is at the present day agreed that the cholera is propagated by contagion, reserve being made with respect to the unity or multiplicity of its origins. Holding such conviction, is there no means to do for the cholera what has been done with such brilliant success,

under the auspices of our eminent colleague M. Bouley, for the cattle plague? All sick or suspected animals were at once immolated; and, while we should not demand such a procedure in the case of our poor cholera patients, we might immediately, as fast as they became attacked, remove them out of Paris into isolated well-aired abodes, subjected to a system of ventilation calculated to destroy on the spot cholera emanations. Surely this would give every chance of preventing the formation of centres of infection, and of cutting off those first attacked from being the points of departure for new explosions. We recommend the idea to the attention of the hygienic council; but, in order that the experiment may succeed, it is essential that it shall be tried on the very first manifestation of the return of the disease, and continued with perseverance to the last. The development of the disease will moreover be further prevented in great centres of population, such as barracks, colleges, Hospitals, etc., by paying attention to the prodromic period of cholera, and especially premonitory diarrhœa."

THE REGISTRAR-GENERAL'S QUARTERLY RETURN.

The Registrar-General's return of the births and deaths registered by 2200 registrars in all the districts of England during the quarter ending March 31 last, shows that 195,455 children were born, and 134,254 persons died, so that the natural increase of the population undisturbed by migration was 61,201 during the three months. The marriage returns, which are always a quarter of a year in arrear of the birth and death returns, show that 55,224 marriages were recorded in 12,929 churches or chapels in about 5576 registered places of worship unconnected with the Established Church, and in 641 superintendent registrars' offices, during the three months ending December 31.

Allowing for increase of population, the marriage-rate was below the rate of the preceding December quarter (when marriages were unusually numerous) but above the average rate of the last ten corresponding quarters. The reduced number of marriages is chiefly apparent in the metropolis and the West Midland counties; and, in a lesser degree, in the South-Western and Northern counties, Yorkshire, and Wales.

The birth-rate of last quarter was 3·71 per cent. per annum, as compared with an average of 3·66 in ten corresponding quarters. The rate of birth in some of the large towns was much above the average for all England. In Leeds, 4·34; Glasgow, 4·26; Sheffield, 4·18; Liverpool, 4·14; Birmingham, 4·07; Bristol, 3·98; London, 3·84 per cent. per annum.

The deaths in the quarter were at the annual rate of 26 to every 1000 of the present estimated population; this rate exactly corresponds with the average of the last ten—but is considerably lower than in the last three—March quarters. The first three months of the year are in England almost invariably the most fatal of the four seasons. The death-rate was 27 in the urban, and 23 per 1000 in the country districts. Of the thirteen great cities and boroughs of the United Kingdom, Hull, Birmingham, and Bristol had the lowest rate, 25 per 1000; Newcastle-on-Tyne the highest, 37; the rate in London was slightly below 27 per 1000. The Registrar-General calls attention to the unhealthy condition of Newcastle, which demands "effectual measures of reform" in the dwellings of the people, their water supply, drainage, scavenging, &c. Cholera, which was fatal throughout England in the summer and autumn quarters of 1866, was active only in the colliery villages adjacent to the city of Durham last quarter, and it appears now to have entirely subsided. The two terrible catastrophes at the Oaks (Barnsley) and Talk-o'-the-Hill (Newcastle-under-Lyne) collieries are recorded in the quarter's return. 320 deaths of colliers have already been registered from the Oaks pit, and it is believed that 50 are still unregistered; while the Talk-o'-the-Hill explosion raised the deaths of the district up to 155, the births remaining only 83. An improvement in the health of Southampton is ascribed to the exertions of the sanitary authorities of the town; and the salubrity of Oxford is contrasted with the high mortality of Cambridge. Very little difference is apparent in the death-rate of the groups of counties into which England is divided for registration purposes, except in the South, Midland, and Northern divisions, where the mortality of the quarter has considerably exceeded that of the March quarter of last year. The increased number of deaths is evidently due in great measure to preventible disease, in the form of epidemics of fever, small-pox, and measles.

Mr. Glaisher's meteorological observations show the exceptional character of the weather during the quarter. January opened with a severe frost and great defect of temperature, which lasted nearly a week; a thaw succeeded, with heavy gales of wind, and an excess of temperature during four days. On the 11th frost set in again with heavy falls of snow, and an average daily deficiency of temperature during twelve days of nearly 10°. On the 23rd a great and sudden change took place, the temperature suddenly increasing no less than 20°; and a period of warmth, almost unprecedented for the season, commenced, and lasted for thirty-five days. From February 27 to the end of March the weather, except on a few days, was cold and wintry, with frequent snow and sleet all over the country. January and March, Mr. Glaisher says, will be distinguished in meteorology for their severe frosts and snowfalls; February by its high temperature; and the whole quarter by an unusual succession of heavy gales. In February the excess of rain and the floods impeded agricultural operations, and in March vegetation was checked, and growing crops damaged, by the protracted wintry character of the season.

Pauperism exhibits a marked increase as compared with the corresponding quarter of last year: the average number of persons receiving in-door relief on the last day of each week in the March quarter of 1866 was 139,516; last quarter, 147,620; the out-door average in the two periods was 759,402 and 832,364. The prices of provisions continue high. Beef, as sold by the carcase at Leadenhall and Newgate markets, ranged from 4¾d. per lb. for inferior to 7d. for superior quality; mutton ranged from 5d. to 7¼d. per lb., which is a decided reduction on the quotations of preceding quarters. Wheat fell from 56s. 8d. per quarter—its average price in the last three months of 1866—to 45s. 6d. for the first three months of the present year. Potatoes are excessively dear, the best qualities ranging from 115s. to 160s. per ton at the Waterside Market, Southwark.

Taking the whole of the United Kingdom, 273,584 children were born, and 189,089 persons died, in the first three months of this year. Registration is well known to be defective in Ireland; but after making an approximate correction on that score, the mortality of the United Kingdom during the quarter is found to be at the annual rate of 25·5 deaths for every thousand of the 30,125,248 persons estimated as the present population of these realms. 26,753 emigrants embarked during the quarter from all the ports in the United Kingdom where emigration officers are stationed; the corresponding number in the March quarter of 1866 was 39,672. More than half of last quarter's emigrants were of Irish origin: about 8000 were of English, 1200 of Scotch, and 3000 of foreign extraction.

REVIEWS.

Essai de Pneumatologie Médicale: Recherches Physiologiques, Cliniques et Thérapeutiques sur les Gaz. Par J. N. Demarquay, Chirurgien de la Maison Municipale de Santé et du Conseil d'État, &c., &c., &c. Avec Figures. Paris, Londres et New York: Baillière. 1866. Pp. 861.

Essay on Medical Pneumatology: Physiological, Clinical, and Therapeutic Researches on Gases. By J. N. Demarquay.

M. Demarquay does not expect, probably, that his essay will be very generally appreciated, or attract any large number of readers. If he does, he will, we fear, certainly be disappointed; for the subject is not one in which any considerable proportion of the Profession feels much interest, and of those who do, many will lack the courage to attack so bulky a volume. All, however, who can and will expend on it the time and trouble requisite for its examination will be well rewarded for their labour, for it is a most learned and exhaustive treatise on the whole subject of Medical Pneumatology. The first part is on the *Pneumatoses*—"the term pneumatose being given to any production or accumulation of gas in the natural cavities of our organs." The subject is introduced by a dissertation, historical and critical, on "the gases of the blood in the healthy state," and then follow chapters on "*la pneumatose sanguine, la pneumatose gastrointestinale, pneumatoses des voies génitales et urinaires,*" and lastly on "collections of gases observed in certain periabdominal abcesses." The second part is on Emphysema, which is treated of so fully and

in such detail that it occupies nearly 300 pages. But it is perhaps the third part of the work—that, namely, on "The Therapeutic Application of Gases"—which will be generally considered most interesting. The gases on the properties and uses of which M. Demarquay writes are carbonic acid gas, oxygen, azote, protoxide of azote, and hydrogen; but we have not space enough at our command to give even the "table of contents" of this largest half of the volume. We will, however, show in detail how the subject of oxygen is treated, as we shall thus give some idea of how fully and minutely M. Demarquay works at what is evidently with him a labour of love. Chapter I. is on "The Medical History of Oxygen," and its several sections are headed "Priestley and his Precursors," "From Priestley to Fourcroy," "Fourcroy," "School of Fourcroy," "Beddoes," "Oxygen in Germany and at Geneva," and "Oxygen in the Nineteenth Century." Chapter II. is on "The Physiological Action of Oxygen: 1. The injection of oxygen into the cellular tissue and the serous membranes; 2. Prolonged immersion of an animal in oxygen; 3. Injection of oxygen into the veins; 4. Physiological action of the inhalation of oxygen." An appendix teaches how to prepare, purify, and administer the gas; and Chapter III. is on the "Therapeutic Action of Oxygen," its sections being on "general considerations" on the subject, on the use of oxygen "in the treatment of certain Medical affections," and on its employment, locally and by inhalation, in Surgery. Finally, oxygenated drinks are spoken of. The physiological part is "illustrated" by many carefully performed experiments on man and the lower animals; the therapeutical part by very numerous fully reported cases, from the time of Beddoes down to M. Demarquay and his contemporaries, in all countries and schools we might say, for the research and learning of the author are remarkable. He considers that in the early stage of phthisis, when emaciation and obstinate dyspepsia are present, but there is no pyrexia, oxygen may be of very great service; but its value is more especially and strikingly seen in some forms of anæmia, and especially in that kind of chlorosis of young girls which is marked by persistent anorexia, in the anæmia of convalescents, and the anæmia of lately delivered women. It is of great value also in cases of long-continuing and exhausting suppuration, as it stimulates the appetite and sustains the powers of the patient. He reports it of marked value also in ill-conditioned ulcers, and, above all, in senile gangrene. He, however, by no means vaunts it as an infallible cure for anything whatever. "Dr. Hunter" and Co. will get no support from him, for he handles his subject throughout in the spirit and tone of a genuine lover of science and truth.

GENERAL CORRESPONDENCE.

RISKS OF MEDICAL PRACTICE—POSITION IN LINGERING LABOUR.

Letter from Francis Winter Clarke, Esq.

[To the Editor of the Medical Times and Gazette.]

Sir,—There are some of the amenities of Medical Practice which it may be useful to record for the benefit of beginners, that they may know upon what ticklish ground we all stand. Instance the following:—

At the close of the year 1863 I attended a Mrs. A. in her confinement. The head was unusually large, the perineum very unyielding. After due waiting I judged it proper to put the woman in a sitting posture, between two chairs placed at an angle, in order that a downward tendency of the expulsive efforts should be maintained. I think this practice was first noticed in the columns of your journal—if not, in one of the others. However, to be brief, the patient was delivered with some slight but unavoidable laceration, and ultimately did well. Three or four weeks after its birth the infant was attacked with ecthyma, as testified by the eminent Physician who attended the child with me until its death. During the three weeks preceding this event I visited the child daily, sometimes more than once, watching with great care and interest the progress of the case. Now for the moral!

Pressed for payment, the parents refuse, and I am favoured with a lawyer's letter threatening me with an action on the following grounds:—"1. That I had been guilty of grossly improper treatment and want of skill at Mrs. A's. confinement. 2. That I caused the death of the infant by first of all infecting it with the small-pox, and then by improper and negligent treatment of the disease." There! Could Messrs. Dodson and Fogg have surpassed that if they had tried?

Now would any of your readers kindly inform me whether the practice I adopted in the confinement has been recommended by any authorities, and, if they can, favour me with references?

Apologising for the length of this communication,

I am, &c. Francis Winter Clarke.

Oxford, April 26.

THE BRITISH KNAPSACK.

Letter from Dr. R. Tuthill Massy.

[To the Editor of the Medical Times and Gazette.]

Sir,—When walking in the mountain districts of Switzerland, Scotland, and Ireland, I have found the easiest way of carrying my knapsack, and the easiest way for ladies, is by securing it on the sacrum, which is done by a strap and buckle secured around the pelvis, passing between the superior and inferior processes of the ilium, and I should most strongly recommend the same for our soldier; thereby the chest is free, and the spine is altogether relieved on a march. I am, &c.

R. Tuthill Massy, M.D., etc.

Denmark-terrace, Brighton, April.

CHOLERA ON BOARD SHIP.

Letter from Dr. Edward J. Waring.

[To the Editor of the Medical Times and Gazette.]

Sir,—The following incident in my professional life may not be considered devoid of interest by those who, with praiseworthy zeal, are striving to elucidate the causes and history of cholera:—

In 1845 I was in Medical charge of "the good ship *Cadet*," bound for Trinidad from Calcutta, with coolies. Of these we had about 200 on board, including women and children; they were shipped direct from the emigration depôt in Calcutta, and to all appearance were in a sound and healthy condition. We were towed down the river Hoogly to the Sandheads—a distance of about 120 miles—by a steamer. Three or four hours after starting, cholera, in its most malignant form, appeared amongst the coolies. The attack was sudden: no premonitory diarrhœa; two, three, or more profuse characteristic evacuations, by purging or vomiting, were followed by overwhelming collapse, which proved fatal in periods varying from three to six hours. In the few short hours occupied in the passage from Calcutta to the Sandheads, twelve or thirteen of the coolies succumbed to the disease. Now comes the remarkable point in the history. From the moment of our arrival at the Sandheads, from the time of our quitting the river and reaching the open sea, the disease entirely disappeared. Those who were ill with it at the time recovered, and no other single case occurred on board during a rather lengthened passage to Trinidad.

The impression on my mind then was, and still is, that in this instance the disease arose from, and was dependent upon, a poisoned state of the atmosphere, and that the poison was introduced into the system solely through the medium of the lungs. I am not aware whether cholera was prevailing to any extent in Calcutta at the time, but certainly no case had occurred on board the *Cadet* previous to the embarkation of the coolies. None of the officers or sailors were attacked; the disease was confined solely to the coolies.

I am, &c. Edward J. Waring.

28, George-street, Hanover-square, April 30.

ON THE AUTHOR OF ANÆSTHESIA BY COLD.

[To the Editor of the Medical Times and Gazette.]

Sir,—The beneficial use of cold "as an anæsthetic in operations, and as a remedy of disease," which is claimed as a discovery by Dr. James Arnott, in his letter published in the *Medical Times and Gazette*, March 30, 1867, p. 345, is not as original as Dr. Arnott believes. Thomas Bartholinus, in his very remarkable essay, "De Nivis Usu Medico," Hafniæ, 1661, says:—"Antequam cauterio ulcera in membris excitentur, *nix affricata induit stuporem*. Id me docuit Marcus Aurelius Severinus in Gymnasio Neapolitano olim præceptor meus et hospes, Chirurgorum hoc seculo princeps. Rectissimè autem

nivem in vasculum materiæ convenientis capax, sed oblongâ ad extremum et myrtiformi specie, conjectam, sine rei ullius interventu applicavit. A gangrænæ metu securos nos jussit, medicamento sub angustis parallelis lineis applicato; *sensu vero post horæ quadrantem sopito, secare locum indolentem licebit.*"—Cap. xxii. p. 132.

"Amatus Lusitanus cent. 7, cujusdam historiam pertexit, qui ardente febre correptus, ob summum calorem et gutturis inflammationem nihil deglutire poterat; *is glaciei fragmentum indesinenter sugens*, deglutiendi difficultate et gutturis inflammatione non solum liberatus est, sed etiam febris manifestè remittebat."—*Ibid.*, p. 137.

April 30. I am, &c. S.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 23, 1867.

MR. SAMUEL SOLLY, F.R.S., President, in the Chair.

DR. GEORGE JOHNSON read a paper

ON THE PATHOLOGY AND TREATMENT OF CHOLERA.

The subject was brought before the Society in the hope that a full discussion might establish an agreement as to the nature of cholera and the principle of treatment. The chief conclusions of the author were given, and comment and criticism were invited. 1. The phenomena of cholera result from the operation of a morbid poison. This proposition is very generally admitted. 2. The poison is often swallowed, and enters the system through the alimentary canal; water is frequently the vehicle of the poison. 3. The poison is sometimes taken in with the air through the lungs. 4. In whatever way the poison is received into the system, whether through the lungs or through the alimentary canal, it enters the circulation before it gives rise to its characteristic effects. This is merely the statement of a general law applicable to all poisons. To deny this proposition is to assert that in the case of the cholera poison a general law of physiology is suspended. 5. The symptoms of invasion which have often been observed are *pro tanto* evidence of blood-contamination. 6. What is the pathology of cholera collapse? In what respects does it differ from other forms of collapse? The chief forms of collapse, not choleraic, are these—1st. Collapse from hæmorrhage or from excessive purging. 2nd. From nervous shock—*e.g.*, mechanical injury, the pain of perforating ulcer of the stomach, etc. 3rd. From such poisons as tobacco, digitalis, or antimony. One condition is common to all forms of collapse—*there is a defect of moving blood.* In cases of hæmorrhage and profuse purging there is an absolute deficiency of blood in the vessels; in cases of nervous shock and of poisoning by tobacco, etc., the circulation fails because the heart is weakened. In cholera collapse the blood is arrested in the minute arteries of the lungs. The proofs of this arrest are partly anatomical, partly the harmony of the symptoms during life with the post-mortem appearances, and partly the results of various modes of treatment (venesection, injections into the veins, alcoholic stimulants, etc.), of certain accidents occurring in the human subject (embolism of the pulmonary artery on the admission of atmospheric air into the veins), and certain experiments on animals. It is probable that blood contaminated by the cholera poison is arrested by the contraction of the minute branches of the pulmonary artery, just as blood mixed with a large quantity of atmospheric air is arrested, and as the blood is arrested in the lungs of a dog when a salt of soda has been injected into the veins. The discharges from the alimentary canal are the means by which the poison and its products are thrown out of the system. The discharges always continue during recovery from collapse, a proof that they cannot be the cause of collapse. In the worst cases of collapse there is rather an inverse than a direct relation between the degree of collapse and the amount of the discharges. The suppression of bile and urine, and the diminished exhalation of carbonic acid during collapse, are explained by the defective oxidation consequent on the impeded pulmonary circulation. When reaction occurs there is an abundant formation of carbonic acid, bile, and urine, and these products of oxidation, if not freely excreted, may then accumulate in the blood, oppress the nervous system, and thus induce a state of consecutive fever scarcely less perilous than collapse. *The principles of treatment.*—Patients have recovered from cholera in all its stages under the most varied and opposite modes of treatment, and without any treatment. It is therefore obvious that there is a natural process of cure. An impartial inquiry seems to show that those methods of treatment have been most successful which have interfered least with the natural progress of the disease. A routine opiate and repressive plan of treatment is believed to be injurious in all stages. Of cholera it may be said, as of many other acute diseases, that for the cure of most cases that are curable by any means, the *vis medicatrix naturæ* will suffice. Yet there are few cases in which we cannot render some assistance, and not a few in which, by a discreet co-operation with nature, we may turn the scale, and save a life, which without aid would be lost. If we can agree upon a principle of treatment, we may greatly help each other in working out the details.

A paper by DRS. J. WILSON M'CLOY and ROBERT ROBERTSON was then read on the

TREATMENT OF CHOLERA AND EPIDEMIC DIARRHŒA, WITH A RECORD OF CASES.

In this paper the authors commence by expressing their belief that the theory that the essential phenomena of cholera are referable to a drain of fluid from the blood, has of late received a rude shock. It has been shown to be inconsistent with many of the acknowleged facts of the disease. Another hypothesis attributes the collapse of cholera to a totally different cause. To determine which is right we must bring both hypotheses face to face with the disease, and ascertain which of them embraces the greater number of its facts, and explains the more extensive range of its phenomena. During the recent epidemic the authors had unusual opportunities of observing the disease in all its phases. Their experience they give to the Profession in the hope that it will lead to the establishment of a more rational mode of treatment. Believing that mere statistics are useless, they have given the particulars of a considerable number of cases. Nineteen cases are given in full detail; 100 cases in a more condensed form, so as to illustrate the disease in all its stages. All the cases recorded were treated in the Liverpool Parish Infirmary. The total number of admissions was 375, and the total number of deaths 161; giving a gross mortality under all modes of treatment of 42·93 per cent. The following table shows the mortality under the different modes of treatment:—

Mode of Treatment.	No. of Cases.	Mort. per cent.
Astringent and stimulant; camphor and ice-water; hypodermic injections; applications of ice . .	91	71·42
Castor-oil, with food and stimulants	87	41·37
Castor-oil alone	197	30·45

Most of the cases treated by the first mode occurred at the commencement of the epidemic, and amongst an unfavourable class of patients; but the mortality fell immediately on the change of treatment, and at every period of the epidemic the mortality under the astringent and stimulant treatment was much the same. In the paper, tables are given showing the mortality of different ages under the various methods of treatment. After the narrative of cases, the paper concludes with some general remarks. Several thousand cases of diarrhœa came under observation in the different dispensaries connected with the West Derby Union, and in the Liverpool Parish Infirmary—many of them of a severe choleraic type. The treatment adopted was generally evacuant, and consisted in the administration of castor-oil, calomel, rhubarb, or magnesia. In every case relief was afforded "pleasantly, quickly, and safely." It was but seldom that more than two or three doses of oil were required. In one of the public dispensaries (Bootle) in the neighbourhood of Liverpool many cases of diarrhœa were treated by evacuants, and the testimony of the Medical officers is favourable to their employment:—"We certainly had less trouble with the evacuant treatment; our patients seldom gave us a third visit, two doses of castor-oil or rhubarb being generally sufficient to cure the disease." The ordinary fluid magnesia was found a safe and active aperient for infants. Diarrhœa patients treated with evacuants from the commencement of the attack were never known to require subsequent removal to Hospital. In a large proportion of cholera cases the "premonitory diarrhœa" had been treated by astringents, often for four or five days. In nearly every case of cholera the patients had been previously drugged with opiates and astringents.

Post-mortem examinations were made in eight cases of death during collapse. In all, the appearances were wonderfully similar. The right side of the heart, the pulmonary artery, and its large divisions, were distended with blood; while the ultimate lung-tissue was pale and exsanguineous. In one case examined during reaction there was congestion and purulent infiltration of the lung. The tendency to accidents and complications during the reaction stage was very great. Pulmonary engorgement was most common; uræmia much less frequent. The tendency to these complications seemed to bear a relation to the length and intensity of the previous collapse. The tendency was increased by opium and stimulants, and by the too early administration of nutriment. The authors have no hesitation in saying that nitrogenous food invariably did harm during collapse, and indeed during reaction, until, by the flow of urine, etc., there was evidence that the respiratory changes were being briskly effected. The following remarks are made upon the remedies employed:—*Castor-oil.*—The quantity given varied much. When the natural powers of elimination were active, less sufficed; and *vice versâ*. The object is, not to increase the amount of secretion from the blood, but to assist the evacuation of the bowel. *Turpentine* was considered a valuable adjunct. *Emetics.*—Their value cannot be over-estimated. They were very useful in freeing the stomach from the opiates and stimulants which in most of the cases had been given, and they relieve the feeling of oppression. The emetic given was mustard in hot water. *Venesection* was tried, as a *dernier ressort*, in four cases. The circulation had nearly ceased, and the blood would not flow. *Stimulants.*—Except at the commencement of the epidemic, stimulants were rarely given during collapse. The authors have already said that stimulants in many cases were too early given during reaction. *Ammonia* was found a valuable stimulant. *External heat* was applied with doubtful advantage. Warm baths were not tried, *Chloroform* was often given to relieve cramps; but its free administration appeared to check elimination, and to increase collapse. *Enemata* of water at 120° were very beneficial. Their good effects appeared to be due as much to their purgative action as to their warming or diluting the blood. The record of the cases affords no support to the hypothesis which attributes the collapse of cholera to the drain of the fluid from the blood. There was not that direct relation between collapse and the drain of liquid which this hypothesis implies; often an inverse relation. In many of the fatal cases it was impossible to excite either vomiting or purging after the patients came under treatment; whereas in all the instances of recovery from collapse the discharges continued until reaction was fully established. Death may take place without discharges; recovery never, according to the authors' experience. May not, then, the discharges be looked upon as salutary—as the agents by which nature frees the system from a deadly poison? The authors believe so; and with this belief can no longer retain the hypothesis which demands their arrest.

Mr. French held that the recognition of the value of Dr. Snow's researches as to the origin of cholera was one of the most important points brought out in Dr. Johnson's paper. These labours entitled Dr. Snow to be considered alongside of Jenner as one of the great benefactors of mankind. He thought that too much weight was given to the question of the circulation of the blood through the lungs; for, seeing that the blood was poisoned, it might be better if it did not pass through. He then referred to some experiments on rabbits, in which the heart was found contracting, and yet the lungs were empty. The real test of the amount of poison contained in the system was the character of the attempt at elimination. If there be not too much poison, elimination is sure to go on safely. Prevision he considered, with Dr. R. Reynolds, to be the real test of the existence of a science, and this prevision, he maintained, could be exercised with regard to cholera, for he had made out distinctly enough that cholera never killed people aged 14, 16, or 17. In Broad-street there had been one exception to this rule, but the patient was phthisical.

Dr. A. W. Barclay stated that he had been one of the first to object to Dr. Johnson's views, and therefore, as well as on the ground of experience, claimed the right to speak, although he feared no harmony of views would be attained. He was surprised, and yet not, to find Dr. Johnson's views and arguments remain the same after the strictures he had passed on them. The paper was disappointing in as far as it contained no grounds for the statements therein advanced. As for himself, his own post-mortem examinations completely contradicted those of Dr. Johnson, and he missed from the paper any allusion to the extraordinary views recently advanced by that gentleman in a discussion with Dr. Owen Rees—viz., that congestion of the lungs was a post-mortem result produced by contraction of the heart after death. When a man was driven to such statements, his arguments must be bad. In reality, both lungs and right side of the heart were gorged. He could not pretend to go through such a perplexing paper, but one point was especially noticeable—namely, Dr. Johnson's talking of a distinct cholera poison in the blood, and his likening this to sugar in the same situation. One might take other poisons: they were the same in the blood and out of it. Blood poisons were altogether different. Thus the poison of small-pox was only produced by the vesicles, and when one wanted to vaccinate a child he only selected the lymph which had been removed from vesicles of a certain age. In neither case would the blood propagate the disease. Thus the poison was different as it existed in the blood and in the excretions. The arrest of the blood in the lungs was simply owing to its thick and treacly condition, not to any irritative action it exercised on the capillaries.

Dr. Copland said that much of what he had heard had been familiar to him for thirty-five years, and that the asphyxia of cholera had been well known in 1832, when he had proposed for the disease the name of "asphyxia cholerica." Various points, however, deserved elucidation. There might be a considerable amount of truth in the elimination theory, but in India the reverse was the case among the natives. He considered that elimination by the discharges was not proved, and treatment by purgatives and emetics was not always to be trusted. In all cases selection was important, though both varieties of medicines might be of use. Turpentine and castor oil often did good in collapse, as turpentine often did alone in yellow fever. In cholera he looked upon the discharges as being a serous hæmorrhage. They were indebted to all gentlemen for an expression of their views, however much they might differ from them.

Dr. Sanderson observed that the corner-stone of the physiological basis on which Dr. Johnson's theory of cholera is founded lies in the assumption—he would not use this term disparagingly, but as expressing the peculiarity of Dr. Johnson's method, which was that recommended by the late Archbishop of Dublin—of first stating his conclusion and then reasoning back to it—in the assumption that in cholera the contractile power of the heart is not impaired. Now, at first sight, this view appeared somewhat difficult to reconcile with obvious facts in cholera—the imperceptible radial pulse and the feeble præcordial impulse. But without reference to these *primâ facie* objections, he, for one, could not agree to it on other grounds. The ordinary explanation given of collapse was this: that the pallor and shrinking of the features are due to diminution of the quantity and temperature of the circulating blood; and these last are to be referred to the diminished efficiency of the contractions of the heart. Dr. Sanderson was unable to see any reason for doubting the adequacy of the generally received explanation, so far as relates to the condition of the circulation in cholera. Again, he thought that the results of the very numerous and exact experiments made by Virchow and Panum, as to the effects of artificially produced obstruction of the arteries, had an important bearing on the question, as showing that the phenomena of collapse could not be referred to obstruction of the pulmonary circulation. From these experiments it appeared that when the pulmonary artery is suddenly obstructed the pallor which is produced is immediately followed by a convulsive struggle; the animal dies in the same way as in apnœa, but with greater rapidity. On the other hand, when the obstruction is partial the contractions of the heart become more frequent, the arteries throb, the eyeballs project, and other phenomena are produced which have no resemblance whatever to collapse, and, indeed, are of an opposite nature. Dr. Sanderson confessed himself unable to see why, if the collapse of cholera originates, as supposed by Dr. Johnson, in pulmonary ischæmia, its phenomena should be so entirely different from—nay, opposite, to—those accompanying pulmonary obstruction. Finally, Dr. Sanderson expressed the opinion that no weight could be attached to a comparison of the phenomena of asphyxia with those of collapse, for the very theories on which the author of the paper mainly depended were false. The old notion taught by Dr. Alison, of Edinburgh, that engorgement of the capillaries of the lungs is the essential condition of asphyxia, had been long disproved by observation, the contrary having been for many years publicly taught by Professor Sharpey, and, he believed, by other phy-

siologists; and the old theory adopted by Dr. John Reid, that the increased pressure observed before death in suffocated animals is due to obstruction of the systemic capillaries, had been proved to be a mistake by still later experiments.

Mr. SIBLEY said that, from the records of Middlesex Hospital in 1854, it was evident that there was a distinct relation between the discharges and collapse, although there might be exceptions. Dry cholera had occurred but in one or two cases, and in these the bowels were full. At Middlesex the mortality was 43 per cent., although treated on many different principles. The conclusion was, that treatment had little influence on collapse. Castor-oil was tried, when the mortality amounted to about 50 per cent.

Dr. WARING had seen many cases in India where cholera was endemic, appearing twice a year. His observations on the use of astringents in choleraic diarrhœa were altogether opposed to Dr. Johnson's theory. They were of the most signal benefit in India. He considered that a man would be guilty of great negligence if he failed to make use of them.

Dr. DOUGLAS considered that the poison acted as other irritants, and that the best remedies were opium and carbonate of soda.

Dr. DRYSDALE asked Dr. Johnson as to the certainty of there being a cholera poison. Most Parisian Physicians thought the disease contagious; many of ours, as Dr. Greenhow, did not. Prevention was the most important thing, for the mortality was high in all cases.

Mr. HAVILAND remarked that in Somersetshire there were two classes, the beer-drinkers and the cider-drinkers; the former had a tendency to loose bowels, and were always sources of anxiety in an epidemic of cholera, being much more liable to depression than the cider-drinkers, whose bowels were more regular.

The discussion, which was not of a very lively character, was almost entirely confined to Dr. Johnson's paper, who, in reply, after thanking the Society for the attention with which his paper had been listened to, expressed his regret that the authors of the second able and interesting paper were not present. Dr. M'Cloy was, unhappily, ill, and in consequence absent on a sea-voyage; and Dr. Robertson had been unable to come up from Liverpool. Mr. French had stated that a large dose of the cholera poison simply destroys life as all other poisons do; but Dr. Johnson remarked that each poison destroys life in its own peculiar way, and the way in which the cholera poison commonly destroys life is by arresting the pulmonary circulation. Mr. French had expressed an opinion that it is better for the patient that morbid blood should be stopped in its course; but obviously an arrest of the circulation exceeding a certain degree must be fatal. Again, Mr. French asserted that elimination is completely effected by the unaided powers of nature. This might be true in most instances; but there were many cases in which the morbid secretions tend to accumulate in the bowel, and in such cases artificial evacuants were useful. Dr. Barclay had expressed surprise that Dr. Johnson continued a method of reasoning to which he (Dr. Barclay) had been the first to object; and Dr. Johnson, in reply, expressed his regret that he had been able to profit so little by Dr. Barclay's logical teaching. His denial that the morbific influence in cholera is a *poison* was merely a dispute about a word, and therefore unworthy the time and attention of the Society. In reply to Dr. Barclay's expression of astonishment that Dr. Johnson should attach importance to the post-mortem examinations being made as soon as possible after death, Dr. Johnson maintained that of necessity the interval which elapsed between death and the post-mortem examination must exert great influence on the distribution of blood in the heart, lungs, and great vessels. Dr. Barclay, admitting that there is obstructed circulation during collapse, explained this by the thickened condition of the blood. Would he then explain why this thickened blood should stagnate in the minute arteries and not in the smaller vessels, the capillaries? The arrest of blood in the minute pulmonary arteries was a great demonstrated fact. Would Dr. Barclay, or any one else, give a more probable explanation of that stoppage than that the muscular walls of the minute arteries contract upon their morbid contents? Dr. Copland, while using some approving expressions with reference to the two papers, doubted whether the intestinal discharges could be considered curative; but inasmuch as recovery is always associated with these discharges, Dr. Johnson argued that they appear to constitute an essential part of the natural process of cure. Dr. Copland considered a combination of castor-oil with oil of turpentine very useful; in this he agreed with the authors of the second paper. Dr. Sanderson had expressed his opinion that the defective circulation in cholera was explained by an enfeebled condition of the heart. But surely undoubted facts were opposed to this view; in particular the absence of syncope, and the considerable power of muscular exertion, although the patient be pulseless; the acknowledged inefficacy of alcoholic stimulants to improve the pulse in collapse, and the disproportionate amount of blood in the two sides of the heart. Dr. Johnson did not deny that the muscular power of the heart was diminished during collapse, but this he believed to be a result of the scanty stream of blood passing through the coronary arteries, and obviously this was a secondary result, and not a cause of the defective circulation through the systemic arteries. To Dr. Sanderson's objection that embolism of the pulmonary artery did not resemble in its effects the symptoms of cholera, Dr. Johnson replied that in some respects the symptoms were strikingly similar, but that there could be only certain points of contact between conditions so essentially diverse. Dr. Johnson expressed surprise that Dr. Sanderson should so confidently maintain that all, or nearly all, Dr. John Reid's experiments upon the subject of asphyxia were fallacious in their results. Dr. Reid's experiments were performed with extraordinary care and accuracy, and much more than ordinary care and accuracy would be required to upset his conclusions. Dr. Johnson observed that in Dr. Sanderson's recently delivered Croonian lecture he had related an experiment by which he attempted to prove that the circulation of black, unaërated blood through the systemic arteries is not attended with those signs of an impeded transit through the small vessels which Dr. Reid's experiments had been thought to prove. The experiment was this—in a dog poisoned by woorara the heart continued to beat and the blood to circulate for some time after the respiratory movements had ceased. Yet the circulation of black, unaërated blood through the systemic arteries was not attended with any evidence of increased pressure upon the arterial walls consequent upon an impeded passage of black blood through the small vessels. Now, in this experiment, Dr. Sanderson appeared to have overlooked a fact of essential importance—namely, that the woorara poison, as shown by Bernard, annihilates the function of every motor nerve, not merely those which supply the muscles, but also the vaso-motor branches of the sympathetic. Dr. Sanderson, therefore, having paralysed the muscular walls of the minute arteries, did not, of course, observe those phenomena which result from the contraction of those vessels upon their contents. It was not by such experiments as this that the results of Dr. Reid's labours were to be swept away. Mr. Lilley had stated that, as a rule, he had observed a direct relation between the degree of collapse and the amount of discharges. Upon this point Dr. Johnson remarked it was difficult to make any general statement which was not liable to be misunderstood. In asserting that there was often an inverse ratio between collapse and discharges, he was mainly referring to fatal cases, with respect to many of which the proposition was most unquestionably true; but, with regard to cases of recovery from collapse, he admitted that, as a rule, the discharges were copious in proportion to the severity of the attack. He would put it thus:—The severity of the disease depends upon the dose or the intensity of the poison. When a case passes into collapse it is probable that the dose of poison has been greater than when it stops short of collapse, and before recovery can take place a greater drain of liquid will have been required to eliminate the poison and its products than in a milder case where the dose of poison had been insufficient to arrest or greatly retard the pulmonary circulation. Dr. Johnson disputed Dr. Waring's statement that the opiate treatment in the diarrhœa stage tended to prevent collapse. His own experience had convinced him that an indiscriminate opiate treatment of choleraic diarrhœa was unsuccessful and dangerous. The tendency of the opium was to retain within the system a self-multiplying morbid poison, by which the diarrhœa was prolonged, or even collapse induced. The experience of the military authorities in Malta, as recorded in the recently published Medical Blue Book, was entirely in accordance with his own upon this point. Those who treat diarrhœa with opiates take the credit of a cure when the disease stops short of collapse; but when collapse follows, as he had seen it, on the abrupt arrest of a diarrhœa by opium, ought not the opium to have the discredit of that unfavourable result? This was a most serious practical question. In reply to Dr. Drysdale's inquiry whether there is a cholera virus, Dr.

Johnson said that if any one present doubted the existence of a cholera virus, he would not be likely to be convinced by any arguments that he (Dr. Johnson) could adduce; and at that late hour [it was nearly eleven o'clock] he would not incur the risk of wearying those who had so patiently listened to him by an attempt to convince such sceptics, but, thanking the Society for the kind attention he had received, would sit down.

NEW BOOKS, WITH SHORT CRITIQUES.

On Diseases of the Skin: a System of Cutaneous Medicine. By Erasmus Wilson, F.R.S. 6th Edition. London: John Churchill and Sons. Pp. 931.

*** This, by far the most successful of the many works on skin diseases in our language, has now, in an enlarged form, reached its sixth edition. As before, the plates may be had either separately or bound up with the text, which is now increased from 784 to 931 pages. This enlargement is in great measure due to the addition of a glossary of dermatological terms, which, considering their number and *outré* character, cannot fail to be useful. The number of formulæ has also been very greatly increased. One very important change which should not be overlooked is the substitution of a classification more clinical in its character than the one formerly adopted, which was rather too pathological for convenient use. We need hardly say that the other additions are of an equally judicious character, and that the present edition will certainly not derogate from Mr. Wilson's well-won reputation.

Conservative Surgery. By H. G. Davis, M.D. New York: Appleton and Co. Pp. 314.

*** The correct title of this book would have been "Elastic Extension as applied to Surgical Diseases," for such, in reality, is the sum and substance of Dr. Davis's work. Nor do we consider this any dispraise, looking at Dr. Davis's results, dislocations of fourteen years' standing, and club-foot of a still more distant date, being rendered quite reducible without any cutting operation by the aid of elastic extension alone. A weight running over a pulley and attached to a piece of india-rubber webbing, which in turn is attached to the limb by strapping, with or without a splint, is the apparatus required. The numberless modifications will be best learnt from the work itself. His plan of treating lateral curvature of the spine is equally rational. He ascertains exactly what muscles seem most to counteract the tendency to curvature. These he directs the patient to exercise assiduously. The result is extremely satisfactory. We hope to see Dr. Davis's plan of treatment more extensively adopted.

Life Insurance Offices and Suicide. By J. G. Davey, M.D., M.R.C.P., etc.

*** Of late years no one has set himself more determinedly against the present law with regard to suicide than Dr. Davey. In this, as in many other tracts of a similar character, Dr. Davey has insisted on a proper recognition on the part of the law of the condition of moral insanity hitherto ignored by it.

The Pavilion Hospital at the Chorlton Union Workhouse, near Manchester. By Thomas Worthington. Reprint.

*** It is pleasant to observe that all boards of guardians are not so obstructive as some of our metropolitan bodies. Mr. Worthington's excellent account shows that at Chorlton a Hospital for paupers has been constructed replete with every convenience, and according to the latest scientific notions.

Sixteenth Annual Report of the Wilts County Asylum for the year 1866.

Eleventh Annual Report of the United Lunatic Asylum, Nottingham. 1866.

Second Annual Report of the Glamorgan County Lunatic Asylum. 1866.

Cumberland and Westmorland Lunatic Asylum Annual Report. 1866.

*** Such a heading as that just given cannot fail to cause reflections both pleasant and unpleasant—agreeable when we think how much care is now expended on our afflicted fellows, and disagreeable as suggesting the frequency with which such diseases prevail. Still more gratifying is it to read from these reports the anxiety displayed by the various Medical officers to promote the welfare, mental and bodily, of the inmates of our asylums, altogether apart from what we know of their endeavours to foster our knowledge of insanity viewed as a scientific question. To many of our readers the names of Dr. Thurnam, of the Wilts Asylum, Phillimore Stiff, of the Nottingham Asylum, Yellowlees, of the Glamorgan Asylum, and Clouston, of the Cumberland and Westmorland Asylum, are already well known as alienists or scientific inquirers.

Photographs of Eminent Medical Men. Edited by Tindall Robertson, M.D. Photographs by E. Edwards, B.A. No. 2, vol. ii. London: John Churchill and Sons.

*** The present number contains portraits of Dr. Carpenter, N. B. Ward, F.R.S., and Dr. R. Uvedale West, with sketches of their life and works. We are sorry that we cannot speak quite so highly of the photographs on this occasion as when the former number came before us, yet to say that they are bad would be too much.

A Dictionary of Science, Literature, and Art. Fourth Edition. By the late W. T. Brande, D.C.L., etc., and the Rev. G. W. Cox, M.A. Part XII. Si—Z. London: Longmans.

*** The concluding volume of Brande's useful dictionary unfortunately the author did not live to see completed. We need hardly say that all the information given is down to the latest date, and that this edition will not derogate either from the merits of former ones or from the reputation of its authors.

THE ORDER OF THE BATH.—At a private investiture of the Most Honourable Order of the Bath, held by Her Majesty at Windsor Castle on April 27, Inspector-General of Hospitals and Fleets David Deas received the honour of Knighthood, and was invested by her Majesty with the insignia of the Second Class of the Order.

MEDICAL NEWS.

UNIVERSITY OF ST. ANDREW'S.—The following gentlemen passed their Examinations for, and obtained, the Degree of M.D. on April 25:—

Thomas J. Blake, L.S.A. Lond., L.R.C.P. Edin.; William H. Brace, M.R.C.P. Edin., F.R.C.S. Edin.; William Elliott, L.F.P. and S. Glasg., L.S.A. Lond.; John R. Fothergill, L.R.C.S. Edin.; George Aug. Jeffery, M.R.C.S. Eng., L.S.A. Lond.; Alexander Johnston, M.R.C.S. Eng., L.S.A. Lond.; James Lilburne, L. and F.R.C.S.E., Surg. R.N.; Thomas Lloyd, F.R.C.S.E., L.S.A. Lond.; John Denis Macdonald, M.R.C.S. Eng., Staff-Surg. R.N.; Edward Richardson, M.R.C.S. Eng., L.S.A. Lond.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the Diploma were admitted Members of the College at a meeting of the Court of Examiners on the 25th ult., viz.:—

James Wood Cooke, Barnstaple, Devon; Joshua William Morison, Pembroke; William Calvert Toulmin, Lower Clapton; Arthur Bowes Elliott, Richmond, Yorkshire; Benjamin Duke, Kennington-park-road; Charles Munden, Ilminster; Edward Sunderland, Thornton, Yorkshire; William Jebson Stothard, Withington, near Manchester; and Charles John Walford Meadows, L.S.A., Otley, near Ipswich (students of Guy's Hospital); Alfred Henry Newth, Albert-street, Newington; Nelson Congreve Dobson, L.S.A., Holbeach; Alfred Pern, L.S.A., Winchester; and William Anderson, L.S.A., Stockwell (of St. Thomas's Hospital); Frederick Augustus Alfred Smith, Cheltenham; William Henry Causton, Woodbridge, Suffolk; and Richard Careless Sanders, L.S.A., Moulton, Northampton (of the London Hospital); George Percival Hadley, Birmingham; Henry Flamank Marshall, Birmingham; and John Orton, Foleshill, near Coventry (of the Birmingham School); Walter Smith, Hampton-court, and Octavius Twigge Molecey, Stamford (of King's College); Richard Augustus Rouse, Great Torrington, North Devon (of University College); Christopher William Calthrop, Withern Alford, Lincolnshire (of the Charing-cross Hospital); Frederick William Newcombe, Newcastle-on-Tyne; John George Nevitt, Leeds; and Thomas Bartholomew Tracy, M.D. Queen's University, Canada, Kingston, Canada.

The following gentlemen were admitted Members of the College on the 26th ult., viz.:—

Thomas Andrew Roberts, Shaftesbury; James Goodridge Anderson, L.R.C.P. Lond. and Edinb., L.M., and L.S.A., Theddlethorpe, Lincolnshire; William Henry Wood, Woodhouse Eaves, Leicestershire; and Henry Franklin Parsons, L.S.A., Beckington, Somerset (students of St. Mary's Hospital); Alfred Henry Buck, Camden-town; William Powell, L.S.A., Shirley, Southampton; Adam Wilkinson, L.S.A., Shaftesbury; and John Levitt Davis, Euston-road (of the Charing-cross Hospital); Edmund Wollaston Parkinson, Shere, near Guildford; Philip Henry Mules, Chedder, Somerset; Frederic Richard Fisher, Salisbury; and William Bruorton, Paignton, Devon (of St. George's Hospital); Alexander Fox, Stoke Newington; Robert Walter Ceely, Poplar; and Septimus Evans, Devonport (of the London Hospital); Samuel John Truman, Nottingham; William Percival Magor Boyle, Penryn, Cornwall; and Arthur Horatio Morrill, Richmond, Surrey (of Guy's Hospital); Henry Bland, L.S.A., Bradford, Yorkshire, and Daniel King, L.S.A., Stretton, Cornwall (of King's College); Charles Henry Hines, Sunderland (of University College); George Wilks, Ashford, Kent (of St. Bartholomew's Hospital); John James Fraser, Manchester, and William Frederick Taylor, M.D. Queen's College, Canada, Kingston, Canada.

It is stated that out of the 100 candidates who offered themselves for the Pass Examinations only eight failed to acquit themselves to the satisfaction of the Court, and were consequently referred to their Hospital studies for a further period of six months.

The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Court of Examiners on the 30th ult., and, when eligible, will be admitted to the Pass Examination:—

J. Ryall Rouch, W. Day Lovell, Robert Alcock, W. Howell Lloyd, H. Mason Jay, R. Garton Coombe, L. Fyson Cogan, Herbert Boyd, C. D. H. Drury, E. H. Downing, James Bilham, William Claridge, Bernard Duke, C. Hinds Lawrence, John T. Darby, A. E. B. Love, Charles Wood, J. Spottiswoode Cameron, W. R. Cheyne, J. E. Ward, Reginald Taylor, John Stride, E. Roger Rowland, T. Llewellyn Browne, Charles J. Oldham, E. Josephus Green, William Milligan, Owen Roberts, A. Shuter Duncan, John H. Morton, T. Lambert Lack, and H. Ensworth Jackson.

The following passed on the 1st inst.:—

Robert E. Grigson, J. Ashburton Thomson, John Hasard, Frederick Wicks, Edward Greaves, S. Stainton Brown, and E. Lorton Collins, students of Guy's Hospital; E. C. A. Esnouf, Edwin Rickards, and William Hardman, of University College; David W. Morris, John Adams, and Armand Leslie, of the Middlesex Hospital; George Birt and W. Blakley Cochrane, of the Birmingham School; H. Schofield Baldwin and W. Bowen Davies, of St. Bartholomew's Hospital; Owen Williams and J. Gerson da Cunha, of St. Mary's Hospital; Charles J. Rix and T. Carleton Railton, of Manchester; W. Augustus Hewett, of King's College; Charles H. Wainwright, of Leeds; J. Waters Harrison, of Sheffield; and William A. I'Anson, of Newcastle.

The following passed on the 2nd inst.:—

C. Wait Smith, Ernest G. Archer, Albert F. Field, and Barnfield Dayman, students of St. Bartholomew's Hospital; W. Horne Bailes, Adam J. Whitefoord, J. Lawrence Bullock, and L. Victor Dubois, of University College; A. Milwood Sculthorpe, J. Lloyd Roberts, Thomas Standish, and William Morris, of the Birmingham School; James Dunne and H. Widenham Maunsell, of Dublin; R. Hodgens Lloyd and Frederick Morgan, of

the Westminster Hospital; John Porter and Samuel Buckley, of the Manchester School; W. L'Heureux Blenkarne and J. Dungey Roberts, of Guy's Hospital; William Hughes and Robert Griffiths, of Glasgow; J. Herbert Wade, of St. George's Hospital; Alfred Kelly, of King's College; W. Derrickson Beard, of St. Mary's Hospital; W. J. C. Ward, of Edinburgh; W. T. G. Leapingwell, of the London Hospital; and W. Poulton Lee, of the Middlesex Hospital.

It is stated that 23 candidates out of the 108 who offered themselves for this Primary Examination failed to acquit themselves to the satisfaction of the Court, and were consequently referred to their anatomical studies for a period of three months.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 25, 1867:—

Robert King, Alfred-place, Bedford-square: William James Todd, King's College Hospital; Daniel King, Stratton, Cornwall; Arthur Eisdell Fluder, Lymington, Hants; Henry Child Buckley, Llanelly, Carmarthenshire; Hugh James Lloyd, Dolgelly, North Wales; William Joseph Marsh, Nottingham.

The following gentleman also, on the same day, passed his First Examination:—

William Croudson Barnish, Manchester Hospital.

At the Preliminary Examination in Arts, held at the Apothecaries' Hall, London, on April 26 and 27, 1867, 69 gentlemen presented themselves, of whom 22 were rejected, and the following 47 passed, and received Certificates of Proficiency in General Education. Mr. A. J. M. Walker received a Certificate of Special Proficiency.

Messrs. C. E. Adams, E. L. Archer, E. O. Bark, W. T. Benham, R. Bower, J. P. Cartwright, G. C. Cheyne, J. Couldrey, Cecil Drake, R. W. Edginton, E. W. Freeman, M. C. Hallowes, W. Hanson, P. T. J. Head, W. C. Head, A. M. Hynes, C. G. Jones, Alfred Kay, J. N. Kiddle, J. C. Kirby, W. T. Law, J. A. T. Lang, G. T. Langridge, H. A. Lawton, John Litt, W. L. Mayer, C. J. C. Mitchell, E. W. Moore, P. W. G. Nunn, J. H. Osborne, E. J. Parrott, G. R. Priddle, A. C. Raine, O. R. Richmond, P. J. Robey, Walter Shaw, John Spear, F. Stedman, E. F. Thomas, W. Tomlinson, E. B. Trotter, J. S. Trousdale, H. Waldo, A. J. M. Walker, W. J. Walsham, J. F. Weatherhead, Richard Williams.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

DAVIES, A., M.D., has been elected Physician to the West Kent General Hospital, Maidstone.

DAVY, R., M.R.C.S., has been elected Surgeon to the St. Marylebone General Dispensary.

NORRISH, J., M.R.C.S.E., has been elected Resident Medical Officer to the Islington and North London Provident Dispensary.

STEVENSON, THOMAS, M.D., M.R.C.P., to an Examinership in Forensic Medicine in the University of London.

WATHEN, J. H., L.R.C.P. Edin., has been appointed Assistant House-Surgeon to the General Hospital, Bristol.

WELCH, T. D., M.A., M.D. Cantab., has been appointed Physician to the Kent and Canterbury Hospital.

BIRTHS.

DAVIES.—On April 23, at 23, Finsbury-square, the wife of H. Davies, M.D., of a daughter.

DAY.—On April 29, at 10, Manchester-square, the wife of W. H. Day, M.D., of a son, who survived his birth but a few hours.

GILBERT.—On April 24, at Grosvenor-park, S., the wife of Dr. B. Gilbert, of a son.

LYLE.—On April 23, at 2, Marlborough-terrace, Harrow-road, the wife of Dr. Lyle, of a daughter.

PALFREY.—On May 1, at 25, Finsbury-place, E.C., the wife of Dr. Palfrey, of a daughter.

PEARSE.—On April 29, at Botesdale, the wife of A. Pearse, M.D., of a daughter.

REID.—On April 24, at Raglan-house, Southsea, the wife of Dr. Reid, Staff-Surgeon H.M.S. *Victory*, of a son.

THOMPSON.—On April 24, at Droxford, Hants, the wife of J. Thompson, M.B., late Army Medical Staff, of a son, stillborn.

MARRIAGES.

AUSTEN—MANN.—On April 25, at St. Matthew's, Croydon, J. Austen, Surgeon R.N., Ramsgate, to Fanny, third daughter of the late J. Mann, Esq., and adopted daughter of the late W. R. White, Esq., Croydon.

DUFF—BONAR.—On April 23, at 16, Rutland-street, A. G. Duff, M.D., late of Her Majesty's Bengal Army, to Maria Theresa, daughter of A. Bonar, Esq. No cards.

HOFFMEISTER—BROWNE.—On April 23, at Trinity Church, Cowes, Dr. W. Hoffmeister to Marion Emily Linzee, only daughter of Captain W. C. Browne, N.N.

HUNTER—COOPER.—On April 30, at St. Thomas's Church, Portman-square, W. Frith Hunter, M.R.C.S., to Jane, eldest daughter of H. Cooper, Esq. No cards.

RAY—RAMMELL.—On April 24, at St. Paul's Church, Canterbury, S. K. Ray, Staff Assistant-Surgeon, to Marian, third surviving daughter of the late T. Rammell, Esq., Sturry Court, Kent.

DEATHS.

BURDETT, W., M.R.C.S.E., of Tinwell, formerly of Stamford, on April 11.

COLLINS, J., M.D., at Macroom, Co. Cork, on April 18, aged 74.

GAIRDNER, W., M.D. Edin. (late of Bolton-street, Piccadilly), at Avignon, on April 28, aged 73.

GATEHOUSE, C., M.R.C.S.E., L.S.A., at Bowlish Cottage, Shepton Mallet, on April 27, in his 72nd year.

SKEVINGTON, JOHN, F.R.C.S., of Ashbourne, on April 26, aged 60.

WHATELY, T., M.R.C.S.E., L.S.A., at Egerton-house, Great Berkhampstead, on April 28, in his 55th year.

WILSON, J. A., M.R.C.S.E., at Ipswich, Queensland, Australia, on February 6, in his 31st year.

VACANCIES.

ISLINGTON DISPENSARY.—Physician; Surgeon-Dentist.

KENT AND CANTERBURY HOSPITAL.—Assistant House-Surgeon and Dispenser.

ST. GEORGE'S AND ST. JAMES'S DISPENSARY.—Surgeon.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Bellingham Union.—Mr. E. C. Robertson has resigned the Third District; area 26,209; population 1052; salary £9 per annum.

Frome Union.—Mr. Carey P. Coombs has resigned the Second and Third Districts; area 11,199; population 3573; salary £90 5s. per annum.

Kingsbridge Union.—Mr. John Elliot has resigned the Ninth District; area 6636; population 2350; salary £30 per annum.

Pwllheli Union.—The Nevin District is vacant; area 20,200; population 4912; salary £70 per annum.

Ross Union.—Mr. W. H. Plaister has resigned the St. Weonard's District; area 15,110; population 3208; salary £75 per annum.

Scarborough Union.—Dr. Peirson has resigned the Shirburn District; area 10,606; population 1564; salary £30 per annum.

Stafford Union.—The Castlechurch District is vacant; area 17,813; population 6837; salary £45 per annum.

Tiverton Union.—Mr. Frederic E. Pearse has resigned the Sampford Peverell District; area 5430; population 1164; salary £24 per annum.

APPOINTMENTS.

Amersham Union.—Andrew Kirkland, M.D. Glas., M.C. Glas., to the Chalfont District.

Belper Union.—Josiah Allen, M.R.C.S.E., L.S.A., to the Ripley District.

Pateley Bridge Union.—Thomas Clarkson, M.R.C.S.E., L.S.A., to the Southern District.

Portsea Island Union.—Joseph F. Allnutt, M.R.C.S.E., L.S.A., to the Landport District.

Salford Union.—William F. P. Davis, L.R.C.P. Edin., M.R.C.S.E., to the Workhouse.

Ticehurst Union.—William Mackeith, L.R.C.P. Edin., M.C. Glas., to the Hurstgreen District.

THE LEVÉE.—At the Levée held on Wednesday, May 1, on behalf of her Majesty, at St. James's Palace, by his Royal Highness the Prince of Wales, the following members of our Profession were presented:—Assistant-Surgeon J. L. Curtis, 18th Royal Irish Regiment, by the Adjutant-General. Dr. Albert Davies, M.D., by Rear-Admiral Davies. Dr. Dyce Duckworth, by Mr. Dyce Nicol, M.P. Surgeon-Major E. Gilborne, Royal Horse Artillery, on appointment, by Colonel G. Gambier, C.B. Mr. Prescott Hewett, by Lord Penrhyn. Staff-Surgeon Leonard Kidd, by Dr. Logan, C.B. Dr. Logan, C.B., on appointment as Director-General of the Army Medical Department, by the Duke of Cambridge. Deputy-Inspector General of Hospitals, T. Longmore, C.B., on appointment as Companion of the Bath, by Dr. Logan, C.B. Staff Surgeon-Major W. A. Mackinnon, on appointment as Companion of the Bath, by Dr. Logan, C.B. The following gentlemen attended the Levée:—Sir Charles Locock, Sir David Deas, K.C.B., Drs. F. G. Reed, Breslin, F. Hawkins, Baines, J. B. Cockburn; Messrs. Du Pasquier, Cæsar Hawkins, Frank Simpson (Staff Assistant-Surgeon), James Paget, T. Spencer Wells, and Haynes Walton.

THE death of Mr. Maurice Worms, of cattle plague notoriety, is reported.

PATHOLOGICAL SOCIETY OF DUBLIN.—At the closing meeting of the twenty-eighth annual session of the above Society, held on the 27th ult. in the Anatomical Theatre of Trinity College, Professor Robert W. Smith, President, in the Chair, the Society's gold medal was presented to Mr. George E. Dobson for his essay on the subject announced at the first meeting of the Society—"The Diagnosis and Pathology of Injuries and Diseases of the Shoulder-joint."

University of London.—On Thursday, April 25, the Senate of the University of London elected the following gentlemen as examiners for the year 1867-68 :—Chemistry.—Henry Debus, Ph.D., F.R.S., and Professor A. W. Williamson, Ph.D., F.R.S. Botany and Vegetable Physiology.—Rev. M. J. Berkeley, M A., and Thomas Thomson, M.D., F.R.S. Geology and Palæontology.—Archibald Geikie, F.R.S., F.G.S., and Professor T. Rupert Jones, F.G.S. Law and Principles of Legislation.—Professor Mountague Bernard, B.C.L., M.A., and John Richard Quain, LL.B. Practice of Medicine.—Professor Edmund Alexander Parkes, M.D., F.R.S., and Samuel Wilks, M.D. Surgery.—Frederick Le Gros Clark and Professor John Erie Erichsen. Anatomy.—Professor George Viner Ellis, and Professor William Turner, M.B., F.R.S.E. Physiology, Comparative Anatomy, and Zoology.—Professor Thomas H. Huxley, Ph.D., F.R.S., and William Scovell Savory, M.B., F.R.S. Midwifery.—John Braxton Hicks, M.D., F.R.S., and William Overend Priestley, M.D. Materia Medica and Pharmaceutical Chemistry.—Frederick J. Farre, M.D., and Samuel Osborne Habershon, M.D. Forensic Medicine.—E. Headlam Greenhow, M.D., and Thomas Stevenson, M.D.

Westminster Hospital School of Medicine.—The distribution of prizes will be held in the Board-room of the Westminster Hospital, on Monday, May 6, at three o'clock. John M. Clabon, Esq., in the chair.

The International Ophthalmological Congress.—This body, which was to have held its meeting this year at Vienna, will meet at Paris instead, just before the meeting of the International Medical Congress, which is to commence on August 16. The Congress will first meet, August 11, at 8 p.m., at the house of M. Sichel, 50 Chaussée St. Antin, when the arrangements for the next three days will be announced. Members intending to bring communications under the notice of the Congress are requested to communicate with one of the secretaries—M. Giraud-Teulon, 17, Rue du Helder, or M. Wecker, 7, Avenue d'Antin.

The Puff Oblique.—The *Cambridge Independent* says that a marriage took place on Tuesday at Aldeburgh, Suffolk, which will be regarded with special interest, inasmuch as it united in wedlock no less distinguished a personage than Henry Fawcett, Esq., M.P., Professor of Political Economy at Cambridge, and Miss Millicent Garrett, daughter of Newson Garrett, Esq., of Alde House, Aldeburgh, and sister to the gifted lady, Miss Elizabeth Garrett, L.S.A., who is general Medical attendant of the St. Mary's Dispensary for Women and Children in London, and one of the few ladies who have successfully undergone the study and toil necessary to gain a diploma as Medical Practitioner.

Alleged Poisoning by Copper. — Twelve soldiers belonging to the battalion of Chasseurs died on Wednesday last at Tivoli, and as many more are said to have been made dangerously ill, through the use of old copper cooking utensils.

Female Beneficence.—We have great pleasure in recording another act of great munificence on the part of a lady, in addition to those of last week. In the present case nearly all the fortune possessed by the late Miss Mary C. Dickson, of Denmark-place, Camberwell, has been distributed by the lady's executors to charitable institutions, amongst which the following Medical charities are enumerated—viz., the Royal Hospital for Incurables, £200 ; the British Home for Incurables, £200 ; the Paralytic and Epileptic Institution, £500 ; the North London Hospital, £200 ; the Metropolitan Free Hospital, £200 ; the Cancer Hospital, £200 ; the Small-pox Hospital, £200 ; the Royal London Ophthalmic Hospital, £500 ; the Sick Children's Hospital, £200 ; the Brompton Consumption Hospital, £200 ; and the London Hospital for Consumption, £200 ; making a total of £2800 to Medical institutions alone.

Society for Relief of Widows and Orphans of Medical Men.—At the annual general meeting, held on Wednesday, April 24, the following gentlemen were elected officers and directors for the ensuing year :—*President :* George Burrows, M.D. *Vice-Presidents :* Everard A. Brande, Esq., Peter Mere Latham, M.D., John Bacot, Esq., John Miles, Esq., Cæsar H. Hawkins, Esq., F.R.S., James Paget, Esq., F.R.S., Charles Hawkins, Esq., Thomas Hammerton, Esq., Sir Charles Locock, Bart., M.D., F.R.S., John Propert, Esq., Henry Alfred Pitman, M.D., John Clarke, M.D. *Treasurers :* James Thomas Ware, Esq., G. Hamilton Roe, M.D. (Acting), Richard Strong Eyles, Esq. *Directors :* John Love, Esq., H. W. Fuller, M.D., John Adams, Esq., Robert Druitt, M.R.C.P.L., J. C. Forster, Esq., Edward Tegart, Esq., John Scott, Esq., Henry Lee, Esq., C. Collambell, Esq., Richard Quain, M.D., George Johnson, M.D., C. F. Du Pasquier, Esq., E. U. Berry, Esq., Samuel Solly, Esq., John Morgan, Esq., Robert Barnes, M.D., George Budd, M.D., William Bowman, Esq., Prescott G. Hewett, Esq., W. Tiffin Iliff, Esq., M.D., Richard Partridge, Esq., G. Owen Rees, M.D., Francis Sibson, M.D., Edward Newton, Esq. The following members were elected trustees to act with James Thomas Ware, Esq., viz. :—George Burrows, M.D., the President, in the room of the late Thomas Arthur Stone, Esq., the former President ; G. Hamilton Roe, M.D., in the room of the late Alex. John Sutherland, M.D. ; and Richard Quain, M.D., in the room of Charles Hawkins, Esq., resigned.

Western Medical and Surgical Society of London.—At the meeting of this Society on Friday, February 1—the President, Dr. Fuller, in the chair—Dr. Martyn read a paper "On the Injection of Acetic Acid into an Epithelial Cancerous Tumour—Death of the Patient." Mrs. S., aged 41, had suffered from a warty growth on the upper and inner surface of the left great toe, and part of the second one, for many years. It had increased in size of late, and was often painful. Dr. Martyn had treated this growth for many weeks with a variety of caustics, chloride of zinc, etc., with the effect certainly of checking its superficial growth, but as it became raw on the surface, these caustics were intolerable to the patient. The operation by the knife being quite objected to, twenty to thirty minims of dilute acetic acid were injected on November 12 last into the centre of the growth. The patient screamed from the pain, and suffered much. On the 15th there was some inflammation of the foot, attended by great pain, which continued to increase. On the 19th the patient had severe shivering, and was very ill. Suppuration was then established around the part injected ; there was no tenderness up the limb, or swelling beyond the foot, but general fever with a quick pulse. 20th.—No improvement, but some discharge of pus on the surface of the growth. On the 21st, a little castor-oil having been taken, violent purging set in during the night, and the patient became so feeble that she passed her motions under her in bed ; in the morning she was breathing quickly and laboriously, was "coldish" in her extremities ; pulse very feeble ; had pains in her shoulders and chest, and could not bear to be touched. She no longer complained of her foot, which was now shrunken ; her features rapidly appeared pinched, her pulse became a mere thread, and in spite of abundant stimulants she rapidly grew worse, became dusky in appearance, and the same day died, being perfectly sensible to the last. The purging had ceased about twenty-four hours before she died ; there were no cramps, but sickness several times ; no line of inflammation of the veins or absorbents of the affected limbs. By the post-mortem no assignable cause of death could be discovered. There were no deposits of pus anywhere ; no plugging of the pulmonary artery ; only some old pleuritic adhesions. Dr. Martyn could not explain the cause of death. Was it pyæmia, or was it cholera?—Mr. Timothy Holmes observed that acetic acid, when injected into a cancerous tumour, acted simply as a caustic.—Dr. Marcet was of opinion that, in malignant growths generally, acetic acid did not, when injected, act as a caustic, but that it had a solvent or digestive action upon non-vascular animal growths ; also that, when vascular, the acid would produce irritation, as in Dr. Martyn's case ; that when blood was present it neutralised the acid at once, and so deprived it of its digestive action.

West Kent Medico-Chirurgical Society.—At the meeting of this Society, held at the Dispensary, Greenwich, on April 12—David Hope, Esq., President, in the chair—a paper was read by Dr. Thorowgood on "Prognosis in Chronic Affections of the Heart." The paper showed that the mere presence of an audible cardiac murmur was not, of itself, a certain cause for alarm and gloomy foreboding. Cases there were of individuals who had for years been living comfortably and earning their bread while carrying about in their chests cardiac murmurs. The general opinion of the writer of the paper was that aortic disease was borne better and longer than mitral disease, though in some forms of aortic valve disease sudden death might occur. The great thing was to observe the effect of the valve lesion on the ventricle, and see if this was becoming elongated (as often happens when there is regurgitation through the aortic orifice) or dilated and thinned. Dr. Thorowgood drew attention to the observations of the late Dr. Kirkes and of Dr. Andrews at St. Bartholomew's Hospital, which showed that of systolic murmurs

heard at the heart's apex only 34 per cent. were due to regurgitation through the mitral orifice, the others being of intra-ventricular origin and not so serious, prognostically, as the true regurgitant murmur. A paper on "Longevity," by the President, at the next meeting, May 10, was announced.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Aileen Aroon.—Apply to Messrs. Clowes, Charing-cross.

John Todd.—Dr. Fagge's translation of Hebra's Diseases of the Skin is published by the New Sydenham Society; Mr. Lewis, 136, Gower-street, is the Society's agent.

A. B. C.—Fees for death certificates are not usually *charged* in England; but they are sometimes given by executors as *honoraria*.

A Correspondent would feel greatly obliged to any of our readers who may have removed the lacrymal gland for the cure of lacrymal disease if they would furnish him with the results of that operation.

L. M. G., Bristol, will see that his request has been complied with in full. Space is too valuable to be devoted on every occasion to the publication in question.

L.S.A., Birmingham.—The founder of the Society of Apothecaries was Gideon de Laune, M.D., Apothecary to Anne of Denmark, the Queen of James I. There is a portrait of the gentleman in the possession of the Society, dated 1640, age 76.

Dr. Compton.—From a return made to Parliament it appears that the printing of the Medical Register cost £544 2s., and the receipts from the sale of the work amounted to £285 15s.

Mr. Jackson.—The new subjects for the Jacksonian prize have not yet been published. Write to the Secretary of the College of Surgeons.

A Fellow, Madras.—Messrs. Moira and Haigh have published portraits of the gentlemen named, and of most of the Fellows of the College of Surgeons. They can be obtained through your bookseller.

A Student.—The *L.S.A.* will exempt you from the proposed Medical examination.

Collegiate Examinations.—In reply to several metropolitan and provincial students, we have ascertained that the only alterations at present adopted in the examinations for Membership of the College of Surgeons consist in the application of bandages and splints. At the Pass Examinations during the present week, the knowledge of students in the use of chirurgical instruments has been tested. The proposed examinations in Medicine have not yet taken place. Plenty of time will be afforded to candidates before this new regulation will come into operation. Subjoined are copies of the last *Primary* and *Pass* Examination papers.

Primary Examination.

"1. Describe the course and relative situation of the external iliac artery in the male adult. Describe also the epigastric branch of this artery; its origin, course, and anastomotic communications; mention also its relative situation with respect to the internal and to the external abdominal rings, and to the inguinal canal.

"2. Describe the structure of the mucous membrane of the stomach, and of its glands. State the characters and composition of the gastric juice, and how far the stomach contributes to digestion.

"3. Describe the joint between the skull and the atlas, and between the atlas and the axis. Mention the movements possessed by each of them, their extent (range), and the means by which they are limited. Mention also the ligaments pertaining to each of these joints.

"4. Describe the structure of the kidney, the characters and chemical composition of healthy urine, and how this secretion contributes to maintain health.

"5. Describe the general structure of the tongue; its blood-vessels; its nerves, and their functions; mention the muscular fibres which influence its different movements and changes of form.

"6. Mention the various parts to which the pneumogastric nerves are distributed; and state what are the functions supposed to be conferred on each of these parts by this distribution."

Pass Examination.

"1. Describe the ophthalmia of new-born children; and mention the morbid changes of the eye which may result from the disease, if unchecked. State the proper treatment of the early and acute stages. Write, in full, any prescriptions that may be required.

"2. Describe the appearance and pathological condition of a 'varicose leg;' the causes which may have produced it; the consequences to which it may lead; the treatment for its relief or cure.

"3. Give the history of a carbuncle, stating its ordinary site, symptoms, pathology, and treatment.

"4. Mention the various fractures of the patella, and the mode in which they are produced. Mention and explain the symptoms which follow this accident; describe the Surgical treatment, and the method by which each variety of this injury is repaired.

"5. Give the symptoms and treatment, constitutional and local, of psoas abscess.

"6. Describe the early and acute stages of inflammation of the hip-joint in a child, and mention the constitutional and local treatment you would adopt."

Gilbert's Act and the Double Qualification.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Can you or any of your readers inform me if a M.R.C.S. Eng. can hold the appointment of Medical officer to a district of Union that is under Gilbert's Act, against a M.R.C.S. and L.S.A.? The single qualification got elected. Have the Poor-law Board any jurisdiction in the matter? Can the double qualification demand another election?

April 29. I am, &c. Inquirer.

*** The Poor-law Board have issued to some Unions under Gilbert's Act orders prescribing the qualifications of Medical officers. To others no such orders have been issued, and a single qualification suffices. Without the name of the place in question, we cannot give an authoritative answer.

Scottish Diet of Blood.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—May I take the liberty of asking, through the medium of your journal, "John Bull, M.D.," what he means us to understand by "an old-fashioned Scot?" Might I also ask him if the "hatred" which he has for this being, and "the kind of pity" he has for this being's "surroundings," were engendered by a residence in fair Caledonia? If "John Bull" ever set foot in my beloved country, which I am greatly inclined to question, I am afraid he must have got into some most extraordinary "hole and corner" of society, seeing he has such a "hatred for the mean ways which a probably high-minded people are led to adopt in consequence of their 'surroundings.'" "John Bull" might have left out the word "probably" with comfort. Scotchmen are not probably a high-minded people, but really a high-minded people—high minded enough, at all events, to feel their blood rise at such traductions as those advanced by "John Bull."

I am afraid my Professional brother cannot have taken accurate knowledge of the manner and customs of his own countrymen, or else he would have found out that "bleeding a poor beast by the lancet' and letting it live on" is not "a peculiarly miserable ultra-Scottish mode," but is practised in many districts in England where veal is used as an article of diet.

Do not, however, Sir, for one moment suppose that I would adopt such a practice as that described in Hugh Miller's book—a man and a book, by the way, of which all Scotchmen are proud. "John Bull" might have remembered, if he ever read that book, that it was written at a time when the science of physiology was crude in comparison to what it is now, and also that the noble-minded author was merely describing what took place in a certain district of the Far North, and not what was a universal practice.

In conclusion, might I just propound one more question, and ask "John Bull" wherever he got the "gratifying" information that "wheaten bread is gradually displacing oatmeal, and that the food of the poor Scot is becoming really more human?" What an interesting deduction might be drawn from this! Scotchmen eat, and are fond of, oatmeal—*ergo*, they cannot be very "human!" Get them to eat "wheaten bread," and they will rapidly rise in the scale of civilisation!

Poor "John Bull!" I really have "a kind of pity" for him. I do sincerely hope he will take a trip to bonnie Scotland this summer, and I am sure he will soon find out that our "surroundings" are anything but "unfortunate," and our "ways" anything but "mean." I can also assure him he will get as good roast beef, as good wheaten bread, and—if he be not a "total abstainer"—as good ale—to say nothing of the whisky—as ever he got in England. If, however, he should prefer a nice "soft, subcrisp, vapid blood-clot," by all means let him ask for it.

I am, &c. Lic. Fac. Phys. Sur. Glas., &c.

Supposed Case of General Paralysis caused by the Application of a Blister to the Nape of the Neck.

By Richd. Ballota Taylor, L.R.C.P.

F. S., aged 36, farmer, nervous temperament, previously in good health. Whilst reaping in a corn-field last September an ear of corn struck his right eye, acute inflammation rapidly ensuing. A neighbouring Practitioner applied a blister to the nape of the neck, directing it to be dressed daily with yellow ointment. The blister produced no pain; but on the third day of the dressing the patient felt his whole body and limbs stiff and immovable, so much so as to oblige him to keep his bed for some days. In the meantime the blistered surface suppurated freely. The stiffness of his limbs gradually disappeared, the immobility being then principally limited to the neck. As the rigidity of the extremities wore off, partial paralysis supervened, not only in both upper and lower limbs, but also in the muscles of the pharynx. Matters not improving, the patient came under my care on December 4. His appearance and gait denoted incomplete but general paralysis. He could not stand unsupported, could make but little use of his hands and arms, and complained of numbness in upper and lower extremities. At times he said he felt as if he had spasms in the upper part of his throat. No thirst; appetite not much impaired, although, according to the statement of the patient and his relatives, he had lost much flesh; pulse moderately full and of average frequency; tongue normal; bowels torpid. On the lower and back part of the neck was a large, deep, and irregular-shaped suppurating ulcer, situated transversely, and measuring about 2¼ in. by 1¼. A little lower down, and on a level with the spinous process of the first dorsal vertebra, was the upper border of a still more extensive ulcer of a similar figure and direction as the former. Both were produced, as before stated, by the application of the dressing on the blistered surface. Between these ulcers was a bridge of non-ulcerated, but light purplish-coloured integument. Suppuration was neither very abundant nor fœtid. Here and there were springing up irregular-sized granulations; and adhering to the borders of the sores were several tenacious pseudo-membranous formations. The surrounding skin was slightly œdematous, and of a light purple colour; but neither the skin nor the suppurating surfaces were the seat of the slightest pain, even on moderate pressure.

I ordered the ulcers to be well washed three times a day with a decoction of gentian and flowers of camomile, then brushed with a solution of nitrate of silver, four grains to the ounce, and afterwards sprinkled with powdered cinchona and alum. For internal administration, extr. nucis vomicæ 3ss., extr. rhei ℈j., made into fifteen pills, one to be taken half an hour after each meal. This plan was followed up for three weeks, at the expiration of which period iron was given in full doses. The ulcerated surfaces soon narrowed their limits, and presented a more promising aspect; but the general state of the body remained the same. I continued with the same local means, discontinued the nux vomica, still gave iron, and ordered the legs to be well rubbed with strong brandy. Under this latter plan the rigidity of the extremities was renewed, the degree of paralysis remaining the same. I therefore gave up the frictions and left off the iron, administering in its stead, from January 4 until January 30, extract of belladonna in gradually increasing doses without the least beneficial effect on the paralysed extremities—in fact, the numbness of the hands seemed rather increased than diminished. In the meanwhile,

the ulcers produced by the blister were rapidly healing, the appetite had increased, the patient had gained flesh, and his bowels were more regular.

Seeing the inefficacy of the nux vomica, the increase of the muscular rigidity during the administration of iron, the persistence of the same degree of torpidity of the muscles of both upper and lower extremities after an uninterrupted course of belladonna, I was induced to give nitric acid a trial; I consequently ordered nitric acid ℥ij., water ℥xviij.; a wineglassful of the mixture to be taken in half a glassful of barley-water twice a day, gradually increasing the dose. This plan of treatment commenced on February 3, the ulcers at the time being almost completely healed. I now dismissed the patient for a month, and requested him to return at the expiration of that period. . . . On March 17 he threw away his crutches, and walked alone to my residence to present himself completely cured.

There are undoubtedly several interesting points in this case:—1st. The appearance of the general although incomplete paralysis, supervening rapidly after the application of a blister and its subsequent dressing to the back part of the neck. 2nd. The protracted duration of the ulcerated condition. 3rd. The disappearance of the paralysis, commencing shortly after the complete cicatrisation of the ulcer.

As regards the first point, I am of opinion that it is of rare occurrence to find a comparatively superficial local lesion as the one in question the factor of such an extensive and wide-spread derangement of the whole spinal nervous system. That this disorder was of a sthenic rather than of an asthenic character I think is evident from the practical fact of the morbid symptoms increasing during the internal administration of nux vomica and iron, and the employment of stimulating local applications, whilst the belladonna, although not positively of any real benefit, somewhat subdued the abnormal rigidity of the muscles of the lower extremities. Another motive for classifying as sthenic the type of the disorder may be adduced from the beneficial effects of the nitric acid. I am well aware that nitric acid is by many considered a tonic agent, notwithstanding which I have been long convinced (not from any chemical theory, but by clinical observation), that all the true inorganic oxygen acids, when diluted, act primarily as sedatives.

The second and third points, I think, may be explained by taking into account the manifest mutual dependence and reaction of the local affection with the derangement of the spinal nervous system. This is, I presume, indisputable, if we bear in mind that as long as the local disorder was not totally subdued, there was not the slightest improvement of the general state of paralysis. Although I have stated my opinion that the nitric acid appeared to be of some service in this case, I have no objection to throw aside all *post et propter* theory, and attribute the disappearance of the paralysis to a spontaneous cure effected by the cessation of those local causes which were instrumental in its production. In whatever light we view the case, its interesting peculiarities still remain.

San Felices, Spain.

COMMUNICATIONS have been received from—

Messrs. Asher and Co.; Mr. F. W. Clarke; Mr. Lydall; Aileen Aroon; Mr. James M'Craith; Secretaries of Agra Medical Missionary Association; Mr. J. Z. Laurence; Mr. L. Gentles; Dr. Fotherby; Mr. Dixon; Enquirer; Dr. J. D. Moore; Mr. Lara; Dr. Edwin Lee; Dr. A. Smith; Dr. Massy; Mr. Froup; Bristol; Dr. Sydney Ringer; Dr. Hughlings Jackson; Mr. J. Chatto.

BOOKS RECEIVED—

Meigs' System of Obstetrics—Hodges' Practical Dissections—Wood's Chemical Notes for the Lecture-room—The New York Medical Journal, March—American Journal of the Medical Sciences—Hake on Vital Force—Gant on the Irritable Bladder, second edition—Edinburgh Medical Journal.

NEWSPAPERS RECEIVED—

Gazette des Hôpitaux—L'Union Médicale—Gazette Médicale—Mouvement Médical—The Laboratory—Medical Press and Circular—The City Press.

VITAL STATISTICS OF LONDON.

Week ending Saturday, April 27, 1867.

BIRTHS.

Births of Boys, 1240; Girls, 1145; Total, 2385.
Average of 10 corresponding weeks, 1857-66, 1907·1.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	702	578	1280
Average of the ten years 1857-66	651·3	625·2	1276·5
Average corrected to increased population..	..	..	1404
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,388	..	3	1	2	7	7	2	..
North ..	618,210	5	2	5	1	12	10	1	..
Central	378,058	7	1	2	..	3	7	..	..
East ..	571,158	14	..	4	1	10	9	4	..
South ..	773,175	8	1	7	..	12	9	5	..
Total ..	2,803,989	34	10	19	4	44	42	12	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·523 in.
Mean temperature	48·7
Highest point of thermometer	64·8
Lowest point of thermometer	39·0
Mean dew-point temperature	43·0
General direction of wind	S.W.
Whole amount of rain in the week	0·80

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, April 27, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending April 27.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending April 27.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	2385	1421	1280	64·8	39·0	48·7	0·80	81
Bristol (City) .	165572	35·3	102	74	‡67	62·5	41·2	48·6	1·50	152
Birmingham (Boro')	343948	43·9	258	167	132	62·7	39·0	47·8	0·74	75
Liverpool (Borough)	492439	96·4	416	285	226	..	..	..	..	..
Manchester (City) .	362823	80·9	285	205	‡217	64·6	39·0	48 3	0·94	95
Salford (Borough) .	115013	22·2	110	58	48	62·4	38·0	46·1	1·04	105
Sheffield (Borough).	225199	9·9	156	119	105	64·5	35·5	46·2	1·28	129
Leeds (Borough) .	232428	10·8	171	118	87	..	..	..	..	..
Hull (Borough) .	106740	30·0	98	49	38	..	..	..	..	..
Nwestl-on-Tyne, do.	124960	23·4	100	66	76	59·0	37·0	45·6	0·63	64
Edinburgh (City) .	176081	39·8	125	85	84	54·7	37·0	45·2	1·40	141
Glasgow (City) .	440979	87·1	374	257	234	60·9	35·7	46·0	1·26	127
Dublin (City and some suburbs) .	319210	32·8	186	†157	174	63·3	29·8	48·4	0·91	92
Total of 13 large Towns . . .	6187764	34·8	4766	3061	2768	64·8	29·8	47·1	1·05	106
					Week ending April 20.	Week ending April 20.				
Vienna (City) . .	(1863) 560000	..	..	..	382	..	..	§50·7	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·523 in. The barometrical reading increased from 28·90 in. at the beginning of the week to 29·72 in. on Thursday, April 25. The general direction of the wind was S.W.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 50·9°.

APPOINTMENTS FOR THE WEEK.

May 4. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

Royal Institution, 3 p.m. Prof. Huxley, "On Ethnology."

6. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

Epidemiological Society, 8 p.m. Discussion "On the Propagation of Cholera by Water as a Medium."

Medical Society of London, 8½ p.m. Dr. Leared, "On the Sounds of the Heart in their Relation and Pathology."

Odontological Society, 8 p.m. Meeting.

Royal Institution, 2 p.m. General Monthly Meeting.

7. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

Ethnological Society of London, 8 p.m. Jon A. Hjultelin, "On the Civilisation of the First Icelandic Colonists, with a General View of their Manners and Customs." Dr. Lamprey, "Further Remarks on the Ethnology of the Chinese."

Pathological Society, 8 p.m. Meeting.

Royal Institution, 3 p.m. Prof. Blackie, "On Plato."

8. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 2 p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.

Hunterian Society (Council, 7½ p.m.), 8 p.m. Mr. De Berdt Hovell, "On Some Points connected with the Disease called Hysteria."

9. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

Royal Institution, 3 p.m. Prof. Huxley, "On Ethnology."

10. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.

Royal Institution, 8 p.m. Prof. Bain, "On Correlation of Force in Relation to Mind."

ORIGINAL LECTURES.

LECTURES ON EXPERIMENTAL AND PRACTICAL MEDICINE.

By BENJAMIN W. RICHARDSON, M.A., M.D., F.R.C.P.,
Senior Physician to the Royal Infirmary for Diseases of the Chest.

ON THE INFLUENCE OF EXTREME COLD ON NERVOUS FUNCTION.(a)

Gentlemen,—In the range of Medical science there is no subject of discovery so vital, so important, as discovery respecting the relations of heat and of cold to the animal organism. When the Medical physicist shall have unfolded the simple truths that have yet to be unfolded on this subject, Medicine will stand where she never before stood—a science in very truth; subject to none of those fluctuations of theory which indicate mere ignorance of first principles; subject to none of those doubts and hesitations which indicate that faith or belief means knowledge, and that tact or natural sagacity in speech and manner on things unknown means wisdom.

But to arrive at the height and simplicity of science to which I point, how must we simplify our present system of thought, our schooling in the translation of natural phenomena, our modes of expression, our impulses to action? From phenomena observed we must go back at once to causes with a certainty against which there can be no cavil, and what we can do and what we cannot do must come before us at once with such fulness of truth that when we can do anything it shall be done with unmistakable precision, and when we can do nothing we shall feel sure we have left nothing useful for the bare empiric, even by chance, to do.

The lecture I am about to deliver to you to-day is intended as a mere pioneering attempt towards the simple solution of one of the paths of Medical learning at present very obscure. The foundation of the lecture is experiment—experiment showing the effects produced by the exposure of parts of the nervous system to extreme cold. The inquiry, in the minuteness of detail in which I shall be able to place it before you, is new in Medical science. Heretefore, the phenomena produced on animal bodies by extreme cold were general in character. Now, by the process of freezing by means of volatile fluid in the form of spray, we can isolate phenomena. We can go to any part of the nervous tract, and, without even subjecting the animal body to pain, can descend upon that nervous tract and cut off all function as perfectly as if we removed the part operated upon. For minutes—and, indeed, I had almost said for hours—we can sustain this temporary death and observe all the attendant phenomena; then we can let the function be restored, quickly or slowly, as we may list, and, through every stage of observation, observe what takes place.

I feel unusually fortunate in this inquiry that I do not stand alone, nor trusting purely to my own individual observation. While I have been working in England one of the most distinguished of our brethren, Dr. Weir Mitchell, of Philadelphia, has been independently working on the other side of the Atlantic. Without concert—without either of us knowing that we were investigating the same truths—we have thus been labouring in the same direction; we have had similar objects before us; we have used similar instruments and means of research; and as we have both looked upon what has been presented to us without any bias, recording only what we have seen, we have on some points arrived at facts and conclusions which may be considered identical. Had we been two astronomers separated widely from each other, and observing, in our respective observatories, some one phenomenon of the heavenly bodies, we could not have observed more uniformly. I shall therefore venture not unfrequently, as I speak, to combine Dr. Mitchell's observations with my own; or, rather, with our own, because you will see with me on this occasion, and we will have before us little that is not directly demonstrable. We shall study our subject best, I think, by following it up thus:—

The influence of extreme cold—

1. On periphery of nerve.
2. On nerve-fibre.
3. On the cerebrum.
4. On the cerebellum.
5. On the medulla.
6. On the spinal cord.

Influence of Extreme Cold on Periphery of Nerve.

When a part of the living body in which nerves are ultimately distributed is subjected to cold up to the point of freezing of the tissue, the disturbance of functions varies according to the progress of the reduction of the temperature and the progress of recovery. As a rule, to which there are few exceptions, and those exceptions also limited in range, the degree of cold must be brought to 16° below freezing-point on Fahrenheit's scale before actual freezing takes place. By care in the process the reduction of temperature may be brought much lower, viz., to 10°, and even to 8°, without freezing, but in the act of freezing there is an instant rise in the thermometer to 16°. In this respect the phenomena are similar in character to those which occur in freezing water simply, for water can be brought 8° or 10°—nay, 15°—below freezing-point, and may yet be fluid, but when it solidifies it rises to the fixed degree, 32°. I am speaking in the above of the freezing of the human living body. In other animals there are differences of degree on which I do not at this moment venture to dwell. The phenomena objective and subjective which are presented during the application and after the application of extreme cold are well marked, and, if time be given for their steady development, are uniform.

As a first experiment, Dr. Sedgwick will demonstrate these phenomena slowly on a portion of my arm. For this purpose he will take ether of different boiling-points; one ether with a high boiling-point, and therefore slow power; and then one with a low boiling-point, and consequent quick action; thus we shall have all the shades of modified function slowly brought before us.

As the experiment progresses the first subjective sign is a sensation of coldness, while of objective signs there are none. The sense of coldness is due to the superficial abstraction of heat from the nervous network. In a little time there is an objective phenomenon, the part becomes vascular, and there is a new subjective phenomenon, the part feels hot. These phenomena are due to several causes; the blood traversing the part is less plastic; the tension derived from the nerves and exerted on the vessels is reduced; in the part there is increased vascularity, and around the part there is resistance, which gives pain. We change the ether and rapidly freeze. There are now two objective signs, as you will see—sudden blanching of tissue, and surrounding redness. There are also two subjective signs—in the blanched frozen part there is an utter absence of sensibility; in the vascular part around there is slight burning sensation and exalted sensibility. In the blanched part the nervous filaments are compressed by the solidification, and the vessels also compressed are without blood. In the reddened part the nerves and vessels are not yet subjected to compression, but the vessels are surcharged with blood, and the sensation is that of a burn or of acute inflammation. We now remove the ether and let the frozen part return to its natural state, and the result is a gradational change towards the natural condition by a series of steps as certain as those we have already studied. The white part becomes very vascular, it gives the sensation of heat, and it slowly returns to the natural functional state in which primarily we found it.

Let these phenomena, so simple, but so exact and decisive, remain, if you please, firmly fixed on your minds; they are typical phenomena, and are never disarranged when time is given for their development. These effects resulting from the action of extreme cold occur in common in the human subject and in many of the warm-blooded animals, but they are not manifested in the same distinct manner in every animal, because the time required for the development of the changes varies. In pigeons, from the greater natural heat of their bodies—viz., from eight to ten degrees above human blood heat—each step of the process is prolonged, while the returning action is specially rapid. In cold-blooded animals, on the other hand, every step towards freezing is so quick that the final stage may be reached before any preliminary stage can be detected. We will put this latter fact to the test. Here

(a) Delivered on Tuesday, May 7, 1867.

is a large active frog. Dr. Sedgwick will hold for me the foot, and I will direct upon the part the ether. Observe that hardly a second elapses before there is whiteness, and now the whole foot is a frozen, hard, and even brittle surface. The stage of excessive action was here passed over, or, at all events, if it did occur, we could not perceive it. So low, indeed, is the force of the frog that one or two blasts of the spray of this active compound ether directed on the body would destroy life altogether. The variations of phenomena of which I speak are due entirely to variations of natural heat in the body operated upon. Hence, again, they may be presented in some measure in the human subject, according to age and condition of health, and even according to the local condition of a part. In men in their prime, men whose nervous systems are well charged, the preliminary stage of vascularity, which I would call the stage of *preaction*, is prolonged; the part is hard to kill, while reaction is sharp, quick, and decisive. In the first stages of acute local inflammation, as in cases of whitlow, such is the manifestation of calorific force in the part that it becomes actually a difficult task to get beyond the stage of excitement or over-action, and the tendency to reaction is such that when the part has at last become frozen it can only be held in that state by the most vigorous efforts directed to keep down reaction.

On the other hand, in debilitated persons, in weak children, in those who are enfeebled by disease, and especially in aged people who have lost nervous power, and are in, or are nearly approaching, second childishness, the action of cold on the peripheral surface is so rapidly developed that freezing of structure is almost instantaneous. I have seen a man, in fact, whose resistance was not greater than the resistance of that frog upon which we have just experimented. In this case I was applying the ether spray to the gum for the extraction of a tooth. Within two seconds the gum was frozen at the point upon which the spray was directed, and the whitening so rapidly extended along the gum that I was actually startled by the extreme suddenness of the phenomenon. In this gentleman every part of the body seemed to be equally susceptible to the cold. In an important degree indeed the resistance of the body to the local influence of intense cold is a measure of the physical power of the organism, an excellent means of diagnosis, and a test of the value of life. I do not mean that a man who resists local cold beyond what is common is necessarily the healthiest man, because resistance may signify preternatural heat, frictionally developed in excess in some part of the machine. I mean only that a fair amount of peripheral resistance indicates a soundness of organism as compared with that feeble resistance which is typified in the aged. In respect to the local influence of cold on the periphery of nerve, I should add that in the same body the difference of resistance is well marked out in different parts. Thus there is always more resistance in parts which are naturally subjected to motion. There is more resistance in the hand than in the arm, and in the limbs than in the central portions of the back.

Before leaving this subject, let me refer once more to one of the phenomena to which I asked attention when my arm was under experiment. You saw that at the moment when the skin underwent blanching there was a peculiar and sudden increase of redness around the blanched part; there was a surrounding vascular line. In this line there was increased heat and exalted sensibility. The sensation in the line was that of burning, and, indeed, the sensation was the same as that produced by a heated substance. The surface of body in this case was in the same state as was the frozen surface previously to the moment of freezing, the stage of preaction; and it was in the same state as the frozen skin became during the stage of reaction. What is the cause of this phenomenon? The cause is simple. The blood, in the part subjected to cold, having been kept in a state of entire fluidity by the cold up to the point of freezing, was forced by the mechanical contraction of the unnerved vessels into the surrounding vessels, themselves weakened by the proximity of the cold. Thus the surrounding vessels became intensely congested; there was resistance in them, there was friction, and, as a result, there was actually an increased development of heat in them.

To place the effect of cold on the peripheral surface of nerve in a concise form, we may classify the changes which are developed by cold and during recovery in the following order:

1st Stage, or Starting-point.
Natural condition:—
Temperature 96° Fahr.
Sensibility perfect.

2nd Stage (Preaction).
Innervation; removal of nerve-force.
Increased vascularity.
Increased temperature.
Exalted sensibility.

3rd Stage.
Inertia.
No vascularity; no nerve-force; no blood.
Temperature 16° Fahr.
Perfect insensibility.
Solidification of water of tissues.

4th Stage (Reaction).
Returning vascularity of paralysed vessels.
Increased vascularity.
Increased temperature.
Exalted sensibility.
Re-solution of water of tissues.
Innervation continued.

5th Stage.
Return to natural state.
Nervation of vessel.
Reduction of vascularity.
Temperature 96°.
Natural sensibility.

(To be continued.)

ORIGINAL COMMUNICATIONS.

A SCIENTIFIC INQUIRY INTO SOME OF THE CAUSES ALLEGED TO PRODUCE ASIATIC CHOLERA.

By the Rev. SAMUEL HAUGHTON, M.D., F.R.S.,
Fellow of Trinity College, Dublin, and of the College of Physicians, Ireland.

(Continued from page 441.)

The Contact Theory of Cholera.

In an inquiry like the present, one or two *positive* facts are of more importance, in a logical point of view, than ten thousand *negative* facts; because, for one witness that sees a man killed, there are always thousands that did not witness his death. I feel myself, therefore, bound, while evidence is fresh and attainable, to lay before your readers such *positive* facts as a private person in my position can procure.

In my map of cholera for 1849 in Ireland, I directed attention to the importation of cholera from Balbriggan, in the county of Dublin, to Killoughter (or Loughey), in the county of Down. I have now the pleasure to place on record the careful observations made at Killoughter by the Dispensary Physician of the district, Dr. Filson, for which I am indebted to the courtesy of Dr. H. Head, of this city, who undertook to procure for me the authentic particulars of the *isolated* outbreak of cholera at Killoughter.

The farmers of Down, and of Ireland generally, had learned, by their experience of stamping-out the cattle-plague, that a severe quarantine could check the progress of a most infectious disease, and they were therefore prepared to treat cholera, on its arrival among them, in the same manner as they had treated cattle-plague, so far as *isolation* was concerned, but they prudently dispensed with the use of the pole-axe.

The interesting narrative of Dr. Filson speaks for itself, and I prefer offering it without comment to your readers, to making any inferences from it.

"Cholera was imported into Cloughey, a seaport village in Portaferry Dispensary district, on October 20, 1866, by members of the crew of a fishing-smack.

"*Case* 1.—A. Young, taken ill with purging and vomiting, followed by cramps, at Balbriggan, near Dublin, on Friday, October 19. At 9 p.m. he went on board his boat and lay down. They set sail at 6 a.m. the following morning, and arrived same day at Cloughey about 5 p.m. When I saw him, at 9 p.m., he presented the usual symptoms of true cholera collapse. He never rallied, and died the following day, Sunday, at 3 p.m. The body was immediately interred, and the house closed.

"*Case* 2.—J. Smith, another of the crew, was complaining of diarrhœa and cramping pains in the bowels on Saturday night and Sunday; whether before that or not I am unable positively to state. I prescribed an astringent mixture for

him, directing him to lie down and have a large sinapism to the belly. On Monday morning, at 6 a.m., I was called to see him; he was in collapse, purging, vomiting, fearful cramps, pulse intermitting, thermometer under the tongue 79° F. He made an ineffectual attempt to rally on Monday night, and died on Tuesday afternoon.

"*Case* 3.—Margaret Smith (daughter of the last, and in constant attendance on him), being left an orphan by the death of her father, was directed, on Wednesday night, to take her little child and go into the temporary Hospital provided. On Thursday I found she was suffering from diarrhœa, and had been for at least twenty-four hours, though the previous day she denied being unwell. The diarrhœa was for a time arrested, but after a few days it became worse; vomiting set in and cramps, and the further history of the case left no doubt as to its being true cholera. She recovered after a tedious illness and many relapses.

"*Case* 4.—P. M'G., aged 7 years, a child in a house adjoining Smith's, but, so far as I could learn after careful inquiries, he had no direct contact with any of the sick; it was vaguely reported he had carried some of Young's (Case 1) clothes from the boat, but I could find no trustworthy corroboration of this. He was taken ill on Thursday, and was removed to Hospital that night.

"*Case* 5.—M. E., aged 68 years. On Saturday morning (the 27th) I learned that an old woman living next door to Smith was ill; though her appearance was indicative of cholera collapse, she denied having been subject to either purging or vomiting. I examined the bed, and found it saturated with the discharges, and got her to swallow something, which she instantly vomited. I endeavoured to get her removed to the Hospital, and she promised to go after a few hours. It was not till the following (Sunday) morning that I got her removed, when she was almost moribund. Her removal was more for the sake of the living than in hopes of saving her life. (I found that this woman had been ill at least two days before I saw her, but there was no history of personal contact with the sick.)

"*Case* 6.—W. M'G., aged 3 years, brother to P. M'G. (Case 4), taken ill October 28.

"*Case* 7.—M. H., aged 1 year, grandchild to No. 5, and living in the same house. Attacked October 29.

"*Case* 8.—H. H., brother to No. 7, aged 3 years. Attacked October 30.

"*Case* 9.—W. M'G., father to Nos. 4 and 6, aged 50 years. Attacked October 31.

"*Case* 10.—E. H., mother to Nos. 7 and 8, and in constant attendance in Hospital on them. Attacked November 1.

"*Case* 11.—From this date we were without any new cases till November 13, when one of the nurses in Hospital was attacked. All the patients were now convalescent. The furniture and contents of the infected houses had been burned or disinfected. We had hope of soon being able to close the Hospital, when, to our disappointment, Jane Swaile, a nurse, who had been unwearied in her attentions to the sick, was struck down. The clothing which the patients had on when coming into Hospital had been ordered to be burned, but Margaret Smith managed to secrete a dress which she had worn when ill, and this was saturated with the evacuations. She produced it on the 13th, and Swaile at once perceived it, and ordered her to give it up to be burned. Smith would not do so, whereupon Swaile said she would wash it for her, and proceeded to do so without previously immersing it in the barrel of disinfectant kept for the purpose. In a few hours she complained of sickness, saying the hot steam from the washtub and the heavy smell from it had 'overpowered her.' She was purged, and vomited, and the disease soon became fully developed.

"*Case* 12.—A nurse (O'N.) was at once telegraphed for to Belfast. She arrived on Friday morning, November 15, and soon after her arrival proceeded to the ward where the soiled bedclothes lay, to have them disinfected and washed. In the course of a few hours, she was attacked with purging, vomiting, cramps, and collapse, and the symptoms of true cholera were soon apparent.

"The above comprise the twelve cases of unmistakable Asiatic cholera which occurred. There were other cases in which the disease seemed cut short in diarrhœa by treatment. These I did not classify as cholera. All the inhabitants (except one child) of the infected houses (save Young's) suffered from diarrhœa or fully developed Asiatic cholera. Young's house was in Cloughey, a clean village; the house was tolerably clean, and was shut up immediately after Young's death.

"The other cases (that is, all except Young and Smith, the two fishermen, and the two nurses, who were taken ill in the Hospital) occurred in a filthy hamlet, Calham, one-third of a mile out of Cloughey, where Smith's house was, and in houses immediately adjoining Smith's.

"So far as I can learn, the above were the only cases of cholera in this county last year, with the exception of one other fisherman brought from Balbriggan about the same time, and under similar circumstances, to a part of the coast a few miles north of Cloughey. He was, however, dead when brought ashore, or died soon after, and the body was immediately buried. "ALEXANDER FILSON."

CASES OF

TERTIARY SYPHILIS TREATED BY THE ZITTMAN METHOD,

FOLLOWED BY THE ADMINISTRATION OF LARGE DOSES OF IODIDE OF POTASSIUM.

By BUXTON SHILLITOE, F.R.C.S.,
Surgeon to the Great Northern and Lock Hospitals.

I WAS glad to see a communication in the *Medical Times and Gazette* of February 10, 1866, from Dr. Tilbury Fox on the Zittman treatment, and I think that an account of some cases in which I have tried it, with the results, will be interesting to some of your readers.

Three years ago I first made a trial of it for a patient of mine, a solicitor of strumous habit, who had some years before contracted syphilis, which had been rapidly followed by constitutional symptoms in various forms—viz., roseola, psoriasis, iritis, nodes, rupia, etc., etc. With great care he got tolerably well, and engaged himself to be married; but anxiety and close attention to his profession caused his health to give way, and superficial ulcerating ecthymatous patches occurred in various parts of the body. Several of these patches covered a space as large as the hand; the tongue was sore and fissured, the throat ulcerated, etc., etc., and the posterior cervical glands enlarged. All kinds of treatment were tried without success—arsenic, iodide of potassium in small doses, mineral acids, cod-liver oil, mercury in various forms, including fumigations. On February 21, 1864, I placed the patient under Zittman's treatment. After continuing this plan for some days, there was a marked improvement, which very decidedly increased day by day until at the end of the twelfth day most of the sores had healed. The mouth was comfortable; the general aspect of the skin was healthy, being white and clear; the stains of the old patches were getting fainter, and his general health much improved. Three weeks later all the sores had healed soundly, with three exceptions—one on the body, the others on the leg; these remained open for some time. He was so nearly well that three months after the treatment he married. He continued in good health for more than twelve months, when he again very much overworked himself in getting up a large public company: his health again broke down; he took cold and was attacked with nodes on the forehead, both clavicles, right humerus, and on one or two of the ribs. This was accompanied with great prostration, headaches, inability to fix his mind upon any subject, and general *malaise*, etc. I ordered entire rest and iodide of potassium in five-grain doses three times a day. As this produced, as it had done on former occasions, some coryza and sore throat, he begged to be allowed to discontinue it, instead of which I persuaded him to increase it to ten grains three times a day. To his surprise, he had less inconvenience from the larger dose, and in a few days he began to feel better. I then ordered him to increase the dose one grain every day until he reached twenty grains; at the same time he was to take one tablespoonful of cod-liver oil twice daily. From this time he quickly recovered his health, the nodes gradually disappearing, and all the old patches of ulceration healing soundly. He increased the dose of iodide of potassium to thirty grains, and then reduced it at the rate of five grains per week.

His wife was confined in 1865 of a large healthy child, which, he tells me, weighed eleven pounds. Up to this time it is free from spot or blemish, and is unusually strong and forward. Conception must have taken place early in July, or four months after leaving off Zittman's treatment,

and when my patient was apparently in good health. It will be very interesting to watch the future history of this child; I quite hope he will escape all taint.

The second case was that of a woollendraper, near Tottenham-court-road, who for several years had suffered from tertiary syphilitic ulcerations. His treatment had comprised all ordinary methods. Many of his ulcerations healed up when he was taking a mixture of iron and iodide of potassium in five-grain doses, but there remained one extensive circular ulceration on the crown of the head, which resisted alike both local and general treatment. I advised him to try the Zittman treatment. This he did for fourteen days without any alteration in the condition of the ulcer. His tongue, too, which was thickened and fissured, did not improve, but the general aspect of the skin was clean and healthy-looking. On first getting up he complained of feeling weak, and looked a trifle thinner, but his appetite was excellent, and he rapidly recovered. Still the ulcer remained unhealed. At the end of a month he went to the sea-side for two weeks, but returned without any improvement in the ulcer—in fact, it was still slowly spreading. I then commenced giving him large doses of iodide of potassium, beginning with ten grains, which I increased to twenty-five grains three times a day within a fortnight. The ulcer was simply dressed with a solution of Condy's fluid, which had been used without success before; now it not only ceased spreading, but soon cicatrised throughout.

My third case was that of a lady at Salisbury, whom I was requested to see by my friend Dr. Young. She had been infected by her husband, and up to the time of my first seeing her, three years ago, she had been treated without mercury. She was then suffering from a very aggravated form of tubercular ulceration of the face, chiefly in the neighbourhood of the mouth and nose. This soon improved under a course of protoiodide of mercury, which was continued for some months, varied at times with iodide of potassium. A mixed skin eruption proved very stubborn, and I advised Dr. Young to try the Zittman treatment. The effect of this was very beneficial; her general health improved, her skin became much clearer, and without other treatment her eruption almost entirely disappeared. To the Zittman method this result seemed wholly attributable.

In some other cases I have been fully convinced of its value, not merely from its effect on the syphilitic taint, but from the marked improvement of the general health following its use.

I believe that most cases of chronic constitutional syphilis would be benefited by this treatment. Some, as in my second case, do not appear to gain so much from it as others; but even in this case, although it did not heal the large ulcer, his general health improved: this the patient often told me. At last the large doses of iodide of potassium rapidly cured him. But it sometimes fails, as in a case that I am treating at the present time, where for a destructive ulceration of the nose a gentleman has been taking thirty grains three times a day for some weeks without inconvenience; but although it is reduced to a small portion of one ala, it will not heal up entirely, and if the remedy is left off the ulceration commences to spread. I am anxious to try the Zittman remedy here, as I think it will be of great service, if only in clearing his system of the remedies he has previously taken.

Remarks.—We have in Zittman's plan a remedy of undoubted value. The dieting, combined with the sweating, purging, and diuresis, promote the action of the secreting and excreting organs. It is essentially eliminative, and would, no doubt, be found useful in many other diseases. In tertiary syphilis, where the system is often saturated with the remedies that have been ineffectually given for the cure of the disease, I believe it will be found to be of great value. The almost immediate action that it has upon the general aspect of the patient is surprising. My first patient had marked syphilitic cachexia, but by the end of the fortnight his skin became as clear and white as a child's. The urgency of his symptoms on his relapse, and the great inconvenience attending a fortnight's absence from business, prevented my trying the same remedy again.

34, Finsbury-circus.

Pharmaceutical Society. — The President, Vice-President, and Council have issued cards of invitation to a *conversazione* to be held on Tuesday, May 14.

SULPHUROUS MEDICATION.

By JAMES DEWAR, M.D.

An attempt to combat "cattle plague" by means of the frequent exposure of the animals to the fumes of sulphur was the immediate occasion of some very striking results being developed, not only as regards the influence of this system upon the ailments to which oxen are subject, but more particularly in regard to the salutary power which it was found to exercise over diseases which affect the human species.

The experiments were at first instituted in accordance with the theory that many diseases, especially those recognised as epidemics, are of parasitic origin, and are disseminated by the diffusion of their germs through the atmosphere, and it was consequently thought that it was not unreasonable to assume that much mischief might be anticipated by their seasonable destruction. Of all agents for such a purpose, the one in question was admittedly the most efficient; but as the weight of authority portentously warned us against its use, the proposal to test its dangerous proclivities was looked upon with suspicion. One trial, however, proved that the experiment was a perfectly safe one, and this by-and-by led to its being extensively practised, with the view of staying the pestilence. The general results of the system proved satisfactory in the extreme, for not only was it found that no epidemic whatever attacked the animals, but that they very speedily got rid of some familiar minor complaints, such as mange, lice, ringworm, and angle-berries.

Meantime, unexpected revelations of the healthful effects of unintentional exposure to the medicated atmosphere declared themselves in the sudden disappearance of annoying, although comparatively unimportant, ailments, in the experience of those who conducted the process of fumigation, and gradually testimony enough was received, from different parts of the kingdom, to establish the system as a familiar domestic remedy for the cure of recent colds, quinsies, chilblains, etc., in the relief of which it acts as an immediate and invariable specific.

In an endeavour to intensify and the better fit this agent for the "disinfection" of "inanimate objects," I hit upon the expedient of simultaneously introducing "steam" into the apartment; and this step, while it very thoroughly answered the purpose for which it was devised, was the occasion, I believe, of giving me instruction as to the benefit which could be obtained by the human subject from inhalation of the conjoined vapours.

My groom, who merely superintended the process as performed by other men upon some young cattle which I had got for experiment from a farm where the disease was raging, was at the time in advanced phthisis, yet he very shortly began to improve, and within three months he had increased in weight from eight to eleven imperial stones, his efficiency for ordinary duty, barring that he was necessarily short of wind, being gradually regained. Several other patients in very similar circumstances tried the fumigation in their room several times a day with unquestionably beneficial results; but as this man's case was the only one in which the malady was decidedly arrested, and a return to comparatively vigorous health attained, I was led to believe that his accidental exposure to sulphurous acid gas condensed in the steam might account for, or at least have contributed to, his improvement; the natural conclusion from which inference led to the direct topical application of sulphurous acid, at first diluted, but ultimately of the strength as indicated in the British Pharmacopœia. Used as a gargle, in the proportion of 1 to 3 of water, this agent very soon becomes a favourite both with the patient and the Physician, and five minims of this mixture may be safely administered every hour to an infant suffering from aphtha with the best possible effects. When the process of "gargling" is impracticable, its application by a camel-hair brush, as in cases of diphtheria, gives relief to, and its frequent repetition is eagerly demanded by, the patient; and I have known more than one instance in which as much as six ounces of the acid was expended (and, of course, a great part of it swallowed) within a space of thirty hours (during the critical time of their attack) without the slightest inconvenience having resulted from its having been retained in the system.

At this stage of progress, Sir J. Y. Simpson paid me the friendly compliment of asking me to see a lady who had for eighteen months laboured under "laryngeal disease," which had defied the skill of several reputed "experts." I men-

tioned to him that, as far as my experience carried me, not only would the patient be benefited, but that the fact of her feeling immediate relief might be ascertained, *sur le champ*, by his asking her how she felt immediately after the application. The pure acid was applied by means of a large camel-hair brush, and she was encouraged to endeavour to inhale what she could of "what was going," when an astute observer suggested the employment of the (toy) "odorateur" in the application, which was accordingly done, with good effects, as may be judged of by what follows. The issue was such as to impress every one who witnessed it with a conviction of the value of the remedy, which the lady said was not only efficient, but an "agreeable" one, an expression which elicited from Professor Simpson the remark that he had never before heard of any Medical appliance which could bear to be spoken of with sentiments dissociated from aversion or disgust.

The transition now to the adoption of the more powerful "spray-producer" was of course easy, and for the last eight months I have used it daily, with the most gratifying and wonderful success; for while I have not seen a single case out of the great number to whom I have applied it suffer the slightest inconvenience, it has been the means of effecting cures in circumstances where such was little hoped for. A few "whiffs" directed towards the nostrils opens a "stuffed nose" within a couple of minutes, and its application to the throat is pronounced to be in no case disagreeable, but is frequently compared to the refreshing effect produced by having the head shampooed. My experience of its curative influence over disease of the pharyngo-laryngeal mucous membrane may be judged of from perusal of the following notes of cases; and from what is from time to time communicated to me by friends and correspondents, this mode of treatment is not less successful in their hands than my own.

The simple operation is thus conducted:—I hold the nozzle of the instrument about six inches from the patient's mouth, and administer three or four "whiffs" to begin with; then, after a corresponding interval, during which a cough or two is given, the thing is repeated, about twenty squeezes in all, which represents the injection of from forty to sixty minims of acid.(a)

In some instances a single trial suffices for a cure; in others, and those of a more acute character, its hourly repetition is not only safe, but highly serviceable; while in diphtheria I have known cases wherein a renewed application every fifteen minutes was exacted with impatient punctuality.

Richardson's instrument and the ordinary glass one answer the purpose sufficiently well, but the former is open to the objection of soon getting corroded, the latter to being very liable to accident, even in the most careful hands; and accordingly I contrived to have one made of "vulcanite," which works excellently well, and combines the advantages of being suited to the utilisation of any kind of liquid.

The process of fumigation is a simple and homely one, but it can, nevertheless, be implicitly relied on for the gaining of many healthful and sanitary ends. Its daily use has proved it, in the case of hundreds, to be possessed of important alterative, tonic, and sedative properties, by virtue of which it has been the means of rescuing numbers from the dangers of otherwise irremediable cachexy and other intractable ailments. Many have regular recourse to it for the sake of its general exhilarating effects, some even preferring it to the use of stimulants for the relief of a feeling of fatigue.

The system can be conveniently practised as follows:—Take a few red cinders on a kitchen shovel, and set this upon a stool in the middle of the room, then sprinkle "flour of sulphur" in successive small quantities upon them until the atmosphere is filled with fumes, but that not disagreeably. The process can at once be interrupted by putting the shovel under the grate; and should any inconvenience be felt, this can easily be modified by opening the door or window.

The operation may be repeated as often as is thought requisite; but my experience would lead me to prefer a constant taint of it in the sick room, as being the most probable method of securing its full therapeutic effects.

Its influence upon the febriculæ of puerperal cases is of the most blessed description; for, besides cutting short the attack, it confers an important boon upon both mother and child by the destruction of the odours characteristic of the lying-in chamber.

(a) I may mention that the acid, as judged of by the odour, is not of very uniform strength, but practically this is not important.

Another important mode of utilising it is by exposing the bedclothes, hung upon a screen, to very strong fumigation in a small—of course separate—apartment for an hour or two, and then spreading them over the patient. The soothing effect of this contrivance is very satisfactory, and in bronchitis, asthma, rheumatism, etc., its benefits are readily appreciated.

Kirkcaldy.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

MIDDLESEX HOSPITAL.

CASES OF TYPHUS FEVER—CLINICAL REMARKS.

(Under the care of Dr. MURCHISON, F.R.S.)

The first of these two cases, Dr. Murchison observed, illustrated the important differences between the eruptions of typhus and enteric fever. Notwithstanding the persistent diarrhœa and tympanitis, the eruption alone was sufficient to determine that the case was typhus and not enteric fever. In some epidemics of typhus, dysentery had been found to be a very common complication. The case further illustrated the uræmic origin of the convulsions which occur occasionally in the course of typhus. From numerous observations Dr. Murchison was satisfied that this was their real pathology. He was inclined to go even further than this, and expressed the opinion that the cerebral symptoms of ordinary cases of typhus, and indeed of the "typhoid state" generally in all diseases, resulted from the non-elimination of the products of increased metamorphisis of tissue. In the second case, for instance, urea had also been found in the cerebral fluid, although there had been no convulsions.

1. *Typhus Fever—Dysentery—Parotid Bubo—Albuminuria—Convulsions—Urea in Cerebral Fluid.*

William D., aged 23, was admitted into the Middlesex Hospital, on October 26, 1866, with the phenomena of typhus fever of a severe form, including a copious petechial eruption. The tongue was dry and brown, the face dusky, the conjunctivæ injected, the hearing very obtuse, and there was much delirium and restlessness, especially at night, with evidence of pulmonary congestion. From the first, however, there were certain peculiarities in the case. The patient was very emaciated; the abdomen was greatly distended and tympanitic, and evidently tender; and at the same time the bowels were relaxed five or six times in the course of the day, and the stools were light and powdery. On inquiry from the friends it was further ascertained that the patient had been taken ill about six days before admission with diarrhœa, and that, up to admission, the prominent symptoms had been diarrhœa and delirium. So far the case more resembled enteric fever. For several months before the attack, the patient had been ailing from the effects of an abscess in the right arm.

The patient was treated with mineral acids, astringents, and small doses of opium, and took also milk, beef-tea, brandy, etc. On November 3, or the fifteenth day, there was a marked improvement in the symptoms, and the eruption was fading. For some days the improvement continued, and on November 5 the pulse had fallen to 104, and the temperature to 99·8° Fahr.; but the diarrhœa and tympanitis continued.

On November 6 the patient was worse again; the pulse had risen to 140, and the temperature to 103·2°. An inflammatory swelling was observed over the left parotid, and the urine, which had been examined daily since admission, for the first time contained a trace of albumen. The swelling in the face and the quantity of albumen in the urine continued to increase. On November 7, frequent convulsive movements of the head and face set in, and there was difficulty in swallowing, so that the patient had to be nourished by the rectum. The diarrhœa and tympanitis were still present. The convulsive movements continued until the patient's death in the evening of November 8, or the twentieth day of his illness.

On post-mortem examination, the blood was found to be dark and fluid, the kidneys were large, smooth, and congested, and the tubes gorged with granular epithelium. There was a large quantity of clear serum in the lateral ventricles of the brain, and also at the base of the brain, and beneath the arachnoid over the hemispheres. In this fluid Dr. Cayley

detected a considerable amount of urea. There were numerous small sub-pleural ecchymoses, and much hypostatic congestion and œdema of both lungs. The liver was congested, and the spleen large and soft. The peritoneal surface of the descending colon was coated with flakes of recent lymph, and on opening this portion of the bowel the mucous membrane was found to be in a mass of ulceration, the ulcers at many places almost perforating the entire coats of the gut. The ulceration gradually diminished towards the ileo-colic valve, and the cæcum was entirely free. There was again slight ulceration at the lower end of the ileum, but Peyer's patches and the solitary glands were perfectly healthy.

2. *Typhus Fever—Albuminuria and Pulmonary Congestion—Violent Delirium, but no Convulsions—Urea in Cerebral Fluid.*

John F., aged 27, was admitted into the Middlesex Hospital, on December 3, 1866, suffering from an attack of typhus fever of eight days' duration. The eruption was well marked; and from the first the urine was found to contain a small quantity of albumen, and there were all the signs of extreme pulmonary congestion, the respirations being 56 and very embarrassed.

On December 7 the patient became violently delirious; on the 8th this delirium was followed by stupor, picking of the bed-clothes, and involuntary evacuations, which continued until death, on December 11, or the seventeenth day of his illness. Death was not preceded by convulsions. It is worthy of notice that the temperature, which on the twelfth day was as high as 104°, fell between the fourteenth and fifteenth days to 98·2°, but gradually rose again until the evening before death, when it was again 104°.

On post-mortem examination the veins on the surface of the brain were full of dark blood, and there was upwards of an ounce of clear serum at the base of the brain, and a small quantity in the lateral ventricles. In this fluid Dr. Cayley found a considerable quantity of urea. The blood was dark and fluid. There was extreme hypostatic congestion of both lungs, some portions sinking in water; the right weighing 30 ounces, and the left 38½ ounces. Both kidneys were large and congested; the left weighed 8 ounces and the right 7½ ounces; but there was no evidence of old disease. The spleen weighed 9½ ounces. The intestinal glands were healthy.

LEEDS GENERAL INFIRMARY.

THE OPHTHALMOSCOPE IN PHYSICIANS' PRACTICE.

(Cases under the care of Dr. CLIFFORD ALLBUTT.)

In a recent article we alluded to the systematic use of the ophthalmoscope at the Leeds General Infirmary. Dr. Allbutt and Mr. Teale, jun., by working together at affections of the eye, the former from the more general, the latter from the more special side of the study, so bring under observation a great number of important cases of the coincidence of eye affections with other diseases which would otherwise have been overlooked. In the practice of the oculist the ophthalmoscope is, of course, in constant use, and we hope to see it soon used more frequently by Physicians also. Dr. Allbutt tells us that as the coexistence of change in the inner eye with disease of other organs is certainly common, but the laws of its concurrence unknown, he therefore examines the eye as a matter of routine in the majority of his Hospital patients. He adds that such examinations cost but little trouble. A thick green blind is drawn down in the retiring-room, and a gas-lamp placed on the chimney-piece. Along the same side of the room a dozen or more patients may be set in a row, and their eyes readily inspected in turn. The cases which present any optic change are then drafted out, examined under atropine, and, if necessary, noted for future watching. The large majority of cases need no re-examination.

One collateral advantage of this system is that thus the pupils are soon taught the use of the instrument, and are made familiar with the many possible varieties of the healthy optic nerve.

A most useful record of the state and progress of the various cases is made by means of a diagrammatic outline of the retina supplied by Messrs. Harrison and Sons, of St. Martin's-lane. Upon this a fairly accurate representation of the state of any particular disc or retina is rapidly sketched in with a little red water-colour. Mr. Teale has also obtained (from Mr. Goodall, printer, Leeds) forms upon which the (reduced) field of vision is readily mapped out. He tells us that such maps, taken at various periods of the same case, often present very curious changes. We report a few cases from the practice of Dr. Allbutt and Mr. Teale in which changes within the eye have accompanied disease of other parts of the body, of the central nervous system more particularly. We are much indebted to Mr. Oglesby, of Leeds, who has assisted us in selecting and reporting the cases. The two first which we give are cases of

LOCOMOTOR ATAXY.

Case 1.—W. A., aged 50, admitted into the Leeds Infirmary under the care of Dr. Allbutt in October, 1866. Three years ago fell, and struck the back of his head, and remained insensible for some hours. Apparent recovery in a few days. Within the few weeks following began to lose power over the lower extremities. In six months was unable to walk, and was admitted in this state. Family history good as far as it goes. On admission, states that he has never had syphilis or any previous illness. Cannot support himself on his legs, but the muscular force of them is intact. Has suffered much, and still occasionally suffers, from severe shooting pains in the limbs. General health at present fairly good. No paralysis of bladder or rectum. Is quite blind. On ophthalmoscopic examination, the optic discs both present most striking examples of primary atrophy, being silvery white, even at their edges, and presenting no capillary circulation; the artery and vein a little smaller than natural. There is no deafness nor any well-marked cutaneous anæsthesia. No paralysis of any facial nerve. This patient improved very decidedly under the use of steel and quinine. Iodide of potassium exercised no especial power over him. When he went out of the house he could balance himself with much difficulty when his feet were put close together, or he could walk with help of a stick. His sight improved so far as to enable him to avoid obstacles, but no apparent change could be seen in the optic discs. Once or twice he became able to count fingers, but this state was transient.

Case 2.—E. F., married woman, aged 50, came under the care of Mr. Teale, jun., in November, 1866. She came on account of sudden impairment of vision. Married at 25; never pregnant. Three or four years after marriage took syphilis from her husband. Seven years ago nursed her mother through a long illness. Ever since has suffered from shooting pains in the back and legs. She describes the pains as "jumping," and says they prevent her sleeping at night. Sensation in feet numb, and feels as if walking "on cockle shells." Her gait is unsteady, and she has difficulty in balancing herself when her feet are put close together; muscular power unimpaired. Ten days ago she awoke with dimness of sight and double vision. There is now ptosis of the left eyelid, and paralysis of the internal rectus of the same eye. Ophthalmoscopic examination: Both optic discs white, and present appearance of simple atrophy. A large blister ordered to back of neck.

December 15.—Optic discs redder. ℞ Ammon.-citr. of iron.

January, 1867.—No improvement; discs very white; left eye cannot read 20 Jäger; right eye reads 16 Jäger.

March 5.—℞ Iodide of potassium. Under this treatment she rapidly improved.

16th.—Left eye reads 20 Jäger; right eye 4 Jäger.

April 9.—Reads 4 Jäger with either eye. Ophthalmoscopic examination: Optic discs appear almost natural. The general health is also much improved; she walks with more steadiness; double vision has disappeared, but ptosis and strabismus remain.

The above case is one of remarkable interest. Locomotive ataxy is uncommon in women. It presented here the recognised complication of paralysis of the third nerve. It was probably syphilitic, and was markedly relieved by iodide of potassium, the retinal disorder being, in fact, cured.

The next two cases we shall publish are of

EPILEPSY, WITH DISEASE OF THE OPTIC NERVE.

E. H., aged 17, under the care of Dr. Allbutt. Epileptic fits appeared on May 21, 1866, at a catamenial period, and have occurred chiefly about those periods up to the present time. Constantly complains of intense pain in the head. The fits are complete and affect both sides. No permanent paralysis.

October 4.—Reads No. 6 Jäger right eye, and No. 4 Jäger left eye; vessels of right eye tortuous; right optic disc partially obscured by swollen retina; left retina not obviously affected.

January 10, 1867.—Can only read No. 8 Jäger with either

eye or both; both discs now whiter than natural, and somewhat silvery.

April 4.—Now complains of failing sight for the first time; still can read with difficulty No. 8 Jäger; optic discs now both silvery grey; edges even.

This case is an interesting example of primary atrophy accompanying epilepsy, and watched almost weekly from the commencement. It is worthy of note that this patient did not complain of loss of sight until the discs were very decidedly wasted. Dr. Allbutt states that he finds constant and intense pain in the brow or temple to be frequently connected with disease of the optic nerve.

The following case is interesting, as it shows how change of the optic nerve can often be known only by the use of the ophthalmoscope.

T. J., aged 13, admitted under Dr. Allbutt as out-patient of the Leeds Infirmary on August 16, 1866. Family and personal history scrofulous; epileptic fits commenced seven months ago, and have been frequent since; loss of consciousness complete; fits bilateral. On admission reads No. 1 Jäger easily; optic discs of natural appearance.

November 22.—On examination with ophthalmoscope, some pinkness of the discs, and vessels tortuous. Reads No. 1 with either eye. Fits still frequent.

December 6.—Ophthalmoscope: Papillæ swollen, and edges indistinct; vessels tortuous, and discs deeply congested; vision as before.

January 2.—Right optic discs as before; edges very indistinct, the papillæ being found only by convergence of vessels. Left optic disc whitening, and white spots around its margin.

March 7.—Optic discs both becoming white; edges irregular. Still, as always, can read No. 1 with either eye.

The above was a case of atrophy following neuritis, not of primary atrophy, as in the previous case. Bromide of potassium, cod oil, belladonna, and sulphate of zinc all failed to give any relief.

ATROPHY OF OPTIC NERVE DEPENDENT ON ORBITAL DISEASE.

(Under the care of Mr. TEALE, Jun.)

Mr. C., aged 31, had scarlet fever at Christmas, 1860, followed by peritonitis; a week after recovery, periostitis of the right orbit, with suppuration, exophthalmos, and numbness of frontal nerve. The right eye became suddenly blind.

April 24, 1861.—Frontal nerve recovered its sensibility; slight inversion of eye; blindness complete.

Ophthalmoscope: Right retina normal in appearance, except that no vessels are to be seen. Right optic disc quite white; edges regular, and contrasting with red of retina. No vessels to be seen.

RETINAL AFFECTION WITH DISEASE OF THE KIDNEY.

(Under the care of Dr. ALLBUTT.)

Dr. Allbutt states that it is an error to suppose that retinal affections coexist only with that form of Bright's disease known as the small contracted kidney. He has met with retinal degeneration in other forms of kidney disease, and mentions the following case as an example:—

J. M., aged 56, suffered under symptoms of Bright's disease for two or three years; now presents (November, 1866) all the symptoms of "large mottled" kidney; is extensively anasarcous and somewhat ascitic; water not abundant, very albuminous, and of low specific gravity. On examination with the microscope, contains casts, fatty and transparent, compound cells, and oil globules.

Ophthalmoscope: Tint of the retina in both eyes not clear, whitish streaks and patches; hæmorrhages both punctiform and in the course of the vessels.

On post-mortem examination the kidneys were found to be the large mottled kind, passing into the stage of fatty degeneration.

The last case we shall report at present is one of

ATROPHY OF THE OPTIC NERVE FOLLOWING TYPHUS FEVER.

(Under the care of Mr. TEALE, jun.)

J. D., aged 24, began in typhus, November 4, 1865. One month after, during convalescence, noticed a gradual failure of sight. Consulted Mr. Teale, jun., on February 17, 1866, when the right eye, which began first, is quite dark; the left eye sees shadows, nearly counts fingers.

Ophthalmoscope: Fundus not very distinct; both papillæ red, not very distinguishable, and surrounded by a dirty streaky condition of choroid; retinal veins tortuous, almost varicose.

March 3.—Blood in veins black, as if stagnant.

24th.—Discs more distinct.

May 19.—Discs distinct, and very white; sees a glimmer, but no object.

CENTRAL LONDON OPHTHALMIC HOSPITAL.

Case 1.—*Extensive Lacerated Wound of the Eyelid, with Rupture of the Globe; Extirpation.*

(Under the care of Mr. HULME.)

J. R., aged 53, in December last was watching his son explode a fog signal, by striking it with a heavy stone, when he himself was struck on his right eye by a portion of it rebounding violently, the upper lid being completely cut through. He applied at once for Surgical aid, and the lid was stitched up, but considerable swelling and great pain being still experienced, he applied at the Hospital about three weeks after the accident. The stitches which had been left in were at once removed, and, on obtaining an imperfect glance at the eye, vision, apparently, was quite gone. Cold and anodyne applications were ordered, but as, at the next visit, only partial relief had been obtained by these means, the patient was put under chloroform. The globe was found to have collapsed, and was adherent to the inside of the wound of the upper lid by a thick cicatricial band, round which a hook could be passed. This was divided; much relief was experienced, and the patient left the Hospital three days afterwards. In about six weeks he returned again, having had frequent attacks of severe pain, and the left eye showing symptoms of sympathetic irritation. He was at once placed under chloroform, and the globe removed. The muscles and optic nerve having been divided, it was evident the globe was retained in the orbit by some other adhesions, and the scissors had to be used freely in dividing tough bands along the roof of the orbit. The globe, on examination, showed an extensive rupture of the sclerotic along the upper surface, extending from the cornea posteriorly to within a quarter of an inch of the optic nerve entrance. The contraction of the dense and thickened cicatrices, formed by the folding in of the sclerotic, had involved the superior rectus with the ciliary nerves, dragging the optic nerve upwards, and fixing the globe to the roof of the orbit. The interior of the eye was filled with a bloody fluid, the retina being completely detached from around the optic nerve entrance. The lens lay, in its capsule, opaque at the bottom of the globe. No foreign metallic body could be found, either in the globe or in the orbit, but a small accumulation of black gritty substance, apparently a portion of the contents of the explosive apparatus, was found folded up in the centre of the cicatrix. It would appear, from the absence of any sharp cutting material, that this extensive injury was caused by direct violence rupturing the globe, and that the pain experienced was chiefly due to the unnaturally fixed condition of the eye to the roof of the orbit. The man left the Hospital at the end of the week completely relieved of all his symptoms.

Case 2.—*Extraction of Cataract, followed by Hæmorrhage.*

(Under the care of Mr. HULME.)

M. M'C., aged 63, admitted January 19, with double cataract. To external appearance the globes were healthy; iris active to light, and of healthy lustre; tension normal; perception of light very fair; and everything promised a successful result to the proposed operation by flap extraction in the right eye. She was, however, sallow, thin-skinned, and a spirit-drinker, but with no manifest organic disease about her.

On the 21st, operation was performed by the superior flap; a good section of the cornea was obtained. It was noticed that the lens, in its capsule, rose up rather quickly through the flap, bulging into the incision. A touch with the curette freed it from its capsule, and, the flap being readjusted, the lid was closed. More watery fluid continuing to flow than usual, an examination was made, and a drop of blood was observed in the lower part of the anterior chamber, the patient at the same time complaining of much pain. The cause of this was soon made manifest by the sudden and profuse hæmorrhage which immediately followed, and which,

from its persistence and extent, showed that the eye was destroyed. The patient was therefore put under chloroform, and the globe at once extirpated.

Hæmorrhage into the eye is, fortunately, a rare sequence to the operation of extraction of the lens, but such cases do occasionally occur, and are reported by most experienced operators. The difficulty of the diagnosis of the liability to such an occurrence must always remain great, inasmuch as the eye itself, neither by the objective or subjective symptoms, gives us no means of judging. A good perception of light, a healthy and active iris, a globe of normal tension, which had not been subject to any previous active disease, would not seem sufficient, in themselves, to avert an accident as the above. The profusion of the bleeding, and its ceasing on division of the ciliary vessels, when removing the globe, as well as examination after removal, show the hæmorrhage to arise from the choroidal vessels. Here the vitreous had completely lost its consistency, manipulation between the fingers not showing the slightest viscidity; hence its rapid escape, removing the support from the choroidal vessels, and their consequent rupture. The cataractous lenses here were probably the secondary result of the disorganised vitreous.

Case 3.—A Case of Traumatic Cataract—Treatment by Scoop Extraction.

(Under the care of Mr. SPENCER WATSON.)

Geo. F., aged 24 years, a brass-finisher, came under Mr. Watson's care on May 9, 1866, having been struck in the left eye by a chip of brass from his lathe on the previous day.

On examination, there was a wound of the cornea near the centre one-tenth of an inch broad. The iris had fallen forward, and the lens had already become cloudy. He had great pain and intolerance of light. Atropine drops and an opiate were prescribed.

May 10.—Still in great pain; two leeches applied to the temple.

11th.—Some relief followed the application of the leeches, but the pain soon returned.

17th.—During the last two nights the pain has been so severe as to prevent sleep. The lens tissue has swollen up, and there is increased tension of the eyeball, with great congestion of all the vessels of the sclerotic and conjunctiva. Iridectomy upwards and a little outwards. The lens matter escaped partly, and was partly removed by the scoop, leaving a clear pupil. No foreign body was seen.

18th.—Passed a good night, and is now in no pain.

20th.—Slight iritis, but vision improving.

July 6.—The eye is now free from pain and vascularity, but there is a false membrane across the pupil. Vision is not improved.

September 22.—Two needles were passed through the pupil, and the false membrane torn through by them.

The result of this operation has been that on January 4, 1867, his eye was quite free from irritation, and he had a good clear pupil. With the aid of a biconvex lens of 3-inch focal length he could read Jäger 12, and distinguish many other objects about him. There was no symptom of any sympathetic inflammation of the sound eye.

Case 4.—A Case of Injury of the Eyeball, in which Remarkable Appearances in the Choroid were seen on Ophthalmoscopic Examination.

(Under the care of Mr. SPENCER WATSON.)

William B., aged 10 years, was brought by his father to the Hospital on November 7, 1866, suffering from the effects of a blow on the left eye which he had received on November 1. He could not tell what was the nature of the missile or instrument with which the blow was inflicted, nor whether it had been given accidentally or otherwise. He was struck quite suddenly while going along the street. When examined on November 7 there was no external wound, but the iris was wanting at the outer and lower part to the extent of about one-fifth of its whole circumference, and had entirely disappeared at this point, so that at first sight the appearance was as if a piece of the iris had been torn away. The lens tissue was swollen up and opaque, and pressing forwards through the pupil. There was great pain and great sclerotic vascularity. One leech was applied to the temple, and belladonna fomentations and belladonna lotion used.

After the application of these and similar remedies the pain gradually left him, but the tension remained for a fortnight or more above the normal standard.

December 7.—Eye quite free from irritation and vascularity; tension still increased; opaque membrane across the centre of the pupil; vision: counts fingers held to the outer side of the field.

14th.—Vision improved somewhat by a biconvex glass of 2-inch focal length.

Examined by the ophthalmoscope, the part of the pupil corresponding to the cleft in the iris is perfectly clear, and the optic disc can be distinctly seen through it. Opaque lens capsule occupies the central part. At that part of the fundus which corresponds to the yellow spot of Sömmering there is an irregular slate-grey patch, of about four times the size of the disc, lying beneath the retina, the vessels of which are seen passing over it, and not very much raised above the general surface of the retina itself.

January 25, 1867.—The patch remains almost unaltered, either in colour, shape, or general appearance. The probable explanation of this is that in the injury sustained the choroid was lacerated at this spot by a sort of *contre-coup;* blood was poured out, and the pigment becoming mingled with the fibrine of the clot, has left the dull grey colour of the patch as seen at present. No trace of the missing portion of iris could be discovered by the most careful ophthalmoscopic examination. It is probable that in the accident the lens and vitreous were tilted forward in front of this part of the iris, which became folded back on to the ciliary processes, where it may have formed adhesions and subsequently atrophied, and so escaped observation in the ophthalmoscopic examination.

It becomes a question whether the opaque capsule should be removed from the centre of the pupil, but Mr. Watson has decided not to interfere with this by any operation until the appearances in the fundus of the eye indicate that the effused blood or lymph has become reabsorbed, and there is, consequently, a better chance of useful vision resulting.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0

Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

Terms of Subscription for India, £1 15*s. per annum.*

The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6*s. per Annum.*

Post-office Orders and Drafts on Army or Navy Agents, should be made in favour of Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d. | A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d. | A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, MAY 11, 1867.

THE VACCINATION BILL.

Lord Robert Montagu has been content to follow in the steps of Mr. Bruce as regards the provisions of the Bill to consolidate and amend the laws relating to vaccination which is now before the House of Commons; the Bills of 1866 and 1867 appear to be identical in every respect, so that the objections raised last year against certain of the clauses cannot have had much weight at the Council office. The Vaccination Extension Act of 1853 (16 and 17 Vict. c. 100) contained thirteen clauses; and as, in some respects, after nearly fourteen years' trial, it has failed to answer the purpose of its designers, the conclusion has been arrived at that a further extension of the compulsory system is now necessary, and the result is a proposed measure of thirty-six clauses, which undoubtedly do not err on the side of deficient stringency.

We subjoin, in juxtaposition, an epitome of the clauses of the Act of 1853 and the Bill of 1867, so as to show clearly the nature and extent of the contemplated alterations in the law and practice of vaccination.

Vaccination Extension Act, 1853, 17 *and* 18 *Vict. c.* 100.	*Vaccination Bill*, 1867.
Clause 1. Relates to the formation of vaccination districts and stations.	Clauses 2 and 3. Relate to the formation of vaccination districts.
	4. Public vaccinator to possess the qualifications prescribed by the Privy Council.
	5. Privy Council may, on report of the number and quality of the vaccinations performed in the several districts, authorise the payment to public vaccinators of a gratuity of 1s. for each child successfully vaccinated within a given time.
6. Successful vaccination fees to be 1s. 6d. and 2s. 6d., according to distance.	6. Successful vaccination fees to be 1s. 6d., 2s., and 3s., according to distance.
	11. No public vaccinator to be paid for vaccination out of his district.
	12. Provision for districts in particular places of scanty population.
11. Registrar-General to provide books and forms.	14. The Registrar-General to provide books and forms.
9. Registrar to give a notice of vaccination to parent or guardian on or within seven days after registering a birth; penalty of 20s. on parent for non-compliance with requirements of notice.	15. Registrar of Births to give a notice of vaccination to parent, or other person, on or within seven days after registering a birth, together with three forms of certificate for subsequent use.
2. Parents or guardians to have children vaccinated within three or four months after birth.	16. Parents to procure the vaccination of their children within three months.
3. Children to be taken for inspection on eighth day after the operation.	17. Provision for inspection of vaccination, "*upon the same day in the following week*," after the first vaccination.
5 and 7. Provision for successive certificates.	18, 19, and 20. Provision for successive and final certificates.
4. Certificate of successful vaccination to be delivered to parent, and a duplicate to be transmitted to Registrar.	21. Certificate of successful vaccination by public vaccinators to be transmitted by them within twenty-one days, "by post or otherwise," to the Registrar, and a duplicate given to the parent.
	22. No fee to be charged for certificate.
	23. Parent to transmit to Registrar certificate of successful vaccination by a private Medical Practitioner.
8. Registrar to keep a register of successful cases of vaccination, from which searches (at 1s. fee) and extracts (fee 6d.) may be made.	24. Registrar to keep books and registers of vaccination, to be open to searches at a fee of 6d. for each search and 3d. for each copy of entry. Registrar to receive 1d. for every birth, and 3d. for each registration of successful certificates.
10. Fee of 3d. to Registrar for each child vaccinated in respect of which he shall have performed the duties required in this Act.	25. Registrar to be paid fees by Board of Guardians.
	26. Vaccination declared to be not parochial relief, so as to disqualify.
	27. Guardians may appoint and pay an officer charged with enforcing the provisions of this Act, and may pay all reasonable expenses out of their funds.
See Clause 9.	28. Parent neglecting to procure vaccination of child liable to a penalty of 20s. on summary process.
	29. Vaccinator and parent neglecting to transmit certificate, and persons sending false certificates, liable to a penalty of 20s.
	30. Justices may make an order for the vaccination of any child under 13 years.
	31. Penalty upon persons inoculating with small-pox.
	32. Penalty for wilfully exposing small-pox patients, or carelessly conveying them in public conveyances.
	34. Notice not to be proved by prosecutors. Certificates to be defence.
12 and 13. Relate to the recovery and aplication of penalties.	

The prophylactic efficacy of vaccination depends very materially on the amount of zeal and skill displayed by the operator, on the quality of the lymph, and on the state of health of the vaccinees. Bad lymph may do infinite mischief; good lymph carelessly or unskilfully applied will hardly produce satisfactory results; while as regards a large proportion of the rickety and stunted children who are brought to the vaccinator, good vesicles can never be produced.

It will be evident from Clauses 5 and 6 that the intention of the new Bill is to augment the emoluments of the vaccinators, who, it is hoped and believed, will thereby be induced to give increased attention to the performance of the operation. But, as was shown by Dr. Gibbon in this journal (August 11, 1866), the additional pay will not compensate for the trouble of the several certificates to be given by the vaccinator, nor for the contingent annoyance of being liable to a penalty for not registering every case within twenty-one days of the operation.

It is, in fact, by the useless, unnecessary, and costly *registration* clauses of the Bill, that what otherwise might be made a useful measure is encumbered with a dead weight, which, it is to be feared, will add another to our many futile attempts at legislation on matters connected with the prevention of disease.

As the law at present directs, the registrar of births and deaths is furnished with a form of notice for delivery by himself to parents or guardians, and with three forms of certificate which he has to deliver to the public vaccinators and other legally qualified Medical Practitioners in his district for their use. By Clause 14 of the new bill the registrar is to distribute these forms to the public vaccinators only; and by Clause 15 —so far as its meaning is at all clear—every parent or guardian on registering the birth of a child is to receive the notice *and a copy of each of the three forms of certificate in addition*. From subsequent clauses it appears that when the operation is performed by a public vaccinator he has to provide the certificates (if more than one be necessary), and to transmit the final successful certificate to the registrar; but (Clause 23) when the operator is not a public vaccinator, "the parent or other person causing the child to be vaccinated shall submit a certificate . . . to such Medical Practitioner to be filled up and signed by him," such certificate to be transmitted by the parent or guardian to the registrar.

We have no hesitation in saying that this change of practice in distributing the forms of certificate is most unwise and unjustifiable. The new system would, in the first place, entail an enormous waste of forms, as every parent who takes his child to the public vaccinator will have no use for the certificates which he received with his notice from the registrar; and there is, moreover, the risk of forged certificates from putting the blank forms into the hands of people who might, in many cases, with impunity adopt that mode of evading vaccination

altogether. If any certificate is necessary at all—which we do not admit—the forms should only be accessible to the vaccinators or other legally qualified Medical Practitioners.

As regards the transmission of the certificates of successful vaccination to the registrars to be entered in a book, so that, on search, it can be ascertained if vaccination has been performed, we are justified in deferring to the opinion of the Registrar-General, whose thirteen years' experience has, it is said, convinced him of the inutility of this kind of registration. Medical men know the worthlessness of these certificates, and they will not send them to the registrars; but supposing all were transmitted and duly registered, it is just trouble and expense incurred for no practical good. The register of vaccination is never referred to by anybody now, nor would it be, if it were perfect, so long as the best vaccination certificate possible is written indelibly on the arm of all in whom the operation has succeeded.

It is absurd to suppose that even among the higher and middle, let alone the lower classes, the certificate of insusceptibility (Clause 20), or the duplicate successful certificate which is required by Clause 21 to be given to parents or guardians, will be so preserved as to be available for protection at a moment's notice against the provisions of Clause 30, which enacts that magistrates may, on information, summon any parent or guardian before them to show cause why a child at any age under thirteen years should not at their discretion be vaccinated. So stringent and despotic a clause as this ought to be very seriously considered before it is allowed to become law.

It appears to us that the bill evidences in no inconsiderable measure the want of careful preparation; the wording of some of the clauses is excessively vague. If it be true, as is alleged, that the registration clauses have been maintained in disregard of the deliberate opinion of the Registrar-General, one of two things is clear—either the confidence which that officer's long and eminent service has earned from the public is in this instance misplaced, or else the advisers of the Privy Council are wantonly bent on showing that they will have their own way, come what will.

It seems then highly necessary to urge that as this Bill undoubtedly arms the Privy Council with great additional powers over the community, and as some of the clauses might easily become, in the hands of over-zealous administrators, the means of exciting grave social disquiet, it should receive the fullest consideration in the Legislature, and from the Medical Profession.

RENEWAL OF CATTLE PLAGUE IN THE METROPOLIS.

There is no doubt that cattle plague has again made its appearance in London. It was stated in the House of Commons on Monday that cows had recently died of the disease at Limehouse, and that thirty-nine had been killed. On Thursday last a fresh case appeared in the shed of Mr. Rance at Islington. We have been able to obtain some information about the disease in this establishment, which is not devoid of interest. The shed is situated at the corner of a wide street turning out of the New North-road, in the direct cattle-driving route from the landing port of foreign beasts to the Metropolitan Cattle Market. The owner of the cattle says that it is a constant practice when droves meet to divert one of them up this turning, where they stand uncertain which way to go, and sniffing about the large ventilating openings from the head of the stalls of his shed into the street, which they also soil with their dung. The cattle in the shed on the Wednesday last week were nineteen in number, arranged in stalls on two sides of the shed, those on the south side having the ventilating openings at the head mentioned above. Sundays and Wednesdays are the days or evenings on which cattle pass along the road to market. The cows attacked were, with one exception, English cows, and the last purchase of new stock was four weeks prior to the outbreak, when two English cows, which were purchased outside the market, were brought in. The first two cows, seized on Thursday, stood together in a stall at the end of the shed, on the side of the ventilating openings into the street. On Friday two more, standing on opposite sides, were attacked. On Saturday two more, one on each side; and on this day and Sunday the whole six were slaughtered. On Tuesday a seventh cow was found to be ill, and then this and ten more cows which were healthy were slaughtered. Two were left which had the disease in 1865 and recovered. They remain still perfectly well. Of the two cows brought in four weeks previously, one was attacked on the second day of the outbreak; the other was healthy when slaughtered. It appears that the owner of the cows is convinced that the outbreak originated in some way from communication with the beasts passing to the market, and the origin on the side next the ventilating openings gives some colour to this opinion. He is strengthened in it by the fact that on several occasions he has had lung disease and foot and mouth disease in his shed when all his neighbours away from the cattle route have been free. Still, we lay little stress upon the particular medium of communication supposed, inasmuch as cattle on both sides of the shed were attacked so nearly together that they could not very well be supposed to have taken the disease from one another. It is just as likely that the manure from diseased beasts travelling along the road was brought in upon the boots of the men, or that in some similar manner the virus got access to the interior, and affected all the first six attacked about the same time. We see that it was stated in the House by Lord R. Montagu that the outbreak had been traced to a cargo of white cattle from Austria, but no further particulars have transpired.

The owner of the cows in the New North-road lost his stock from cattle plague in 1865. Another point of some interest has been observed here. Mr. Rance had last week four calves in a shed at a little distance away from the road. They had not much apparently amiss with them on Sunday last, but the men from the diseased shed had frequently been in and out. On Monday three of the calves were taken ill with cattle plague. The remaining calf is still quite well, although standing in the same place. We are informed that this calf was born of a cow which had cattle plague when five months gone in pregnancy, but which did not miscarry. This is the second time the young beast has been exposed to contagion with immunity. Shortly after its birth it was placed with seven Dutch cows, who were attacked with plague, and sucked them, but did not catch it; and now it has escaped again.

It is reported, but we do not know on what authority, that other cases have appeared in Islington, and that one large cowkeeper has been compelled to dispose of his stock for the second time.

THE PRESENT EPIDEMIC OF SMALL-POX.(a)

The report published by the Medical Officers of the Small-pox Hospital for the year 1866 is a document of considerable interest. The fulness or emptiness of the wards of that Hospital is, perhaps, a surer gauge of the degree of prevalence of variola in the metropolis, than is, in these days of vaccination, even the death-rate. In a recent number of this journal, we drew attention to the fact that we are at the present time passing through an epidemic of small-pox which might seem to have succeeded, in the march of epidemiological phenomena, to the cholera of last summer. If, however, we take the number of receptions at the Small-pox Hospital as a probably true index, it would appear that the present period of epidemic prevalence of the disease began in 1863, that its severity declined in the following year,

(a) "Small-pox and Vaccination Hospital Medical Report" for 1866.

redoubled in 1865, and reached even a still higher point in 1866. The Medical officers of the Hospital have furnished the means of comparing the present with recent epidemics of the disease, at least as far as the records of their Hospital furnish reliable data, by publishing the following table of the number of admissions during the past sixteen years. The epidemic periods are bracketed, to mark their date and duration:—

1851	682	1482
1852	800	
1853	143	
1854	714	2321
1855	972	
1856	635	
1857	212	
1858	368	
1859	1185	2060
1860	875	
1861	289	
1862	417	
1863	1537	5691
1864	836	
1865	1249	
1866	2069	

Of the four epidemics thus marked out, it is evident that the last shows at present but little symptom of mitigation. Since our article of February 2 appeared, the Registrar-General's reports show that 511 persons have died of small-pox in London, and that over that period of twelve weeks the mortality has been thus distributed:—

In the week ending Saturday, February	2	55
,, ,, ,, ,,	9	47
,, ,, ,, ,,	16	27
,, ,, ,, ,,	23	33
,, ,, ,, March	2	49
,, ,, ,, ,,	9	32
,, ,, ,, ,,	16	35
,, ,, ,, ,,	23	40
,, ,, ,, ,,	30	38
,, ,, ,, April	6	38
,, ,, ,, ,,	13	45
,, ,, ,, ,,	20	38
,, ,, ,, ,,	27	34

According to Dr. Munk and Mr. Marson, the epidemic began about November, 1862, and reached a high degree of intensity in May and June, 1863. It then declined, and the admissions into the Hospital continued to lessen until the middle of 1864; but in the winter 1864-65 the disease acquired increased activity, which, although it diminished in the autumn months, was again renewed in, and has continued through the whole of, the past year.

Of the 2069 patients admitted into the Hospital, 32 were suffering from various forms of disease not small-pox. Of the 2037 cases of small-pox, 425 occurred in unvaccinated persons, and 1605 in persons who had been vaccinated. In three instances there had been previous attacks of natural small-pox; in two the disease occurred after inoculation, and in two after vaccination and small-pox. With regard to the mortality: of the 425 unvaccinated cases, 152 died, or 35·7 per cent.; whilst of the 1605 vaccinated, 118 died, from which number must be deducted, however, 10 who appear to have succumbed to previous or superadded disease, reducing the percentage of deaths amongst the vaccinated to 6·5. These figures closely correspond with the average death-rate of the two classes in the Hospital during sixteen years. There has been, however, a decrease in the mortality, as compared with 1863, the first year of the present epidemic, when the death-rate for the whole Hospital was 17 per cent. In 1866 it was 13 per cent.

"The ratio of vaccinated cases to the whole admissions of small-pox patients, as calculated from a series of sixteen years, ending with 1851, was 53 per cent., a proportion which has gone on progressively increasing. In the epidemic of 1851 and 1852 it was 66·7 per cent.; in that of 1854, 1855, and 1856, 71·2 per cent.; in 1859 and 1860, 78 per cent.; and for the four years of the present epidemic it has been 81·1 per cent." What are the deductions to be drawn from this statement? We believe, simply, that the increase in the percentage of vaccinated persons attacked by small-pox is to be accounted for by the more general performance of vaccination. No one believes now-a-days, we suppose, that vaccination is a perfect prophylactic. A certain percentage of the vaccinated, even if the operation be most completely performed, will contract small-pox if exposed to its contagium. The more extensively, therefore, vaccination is practised amongst a population, the larger will be the percentage of vaccinated persons amongst those attacked in an epidemic. The fact brought out by these figures affords, we believe, no support to the chimera that vaccination is diminishing in efficacy. Now, as from the period of its first introduction, its preservative powers are not universal. In the vast majority of constitutions, if it be well performed, it no doubt confers immunity; but even amongst those who after it may be attacked by small-pox the chances of death will be reduced about 80 per cent.; and therefore an increase of the vaccinated cases attacked in any epidemic will be accompanied by a proportionate decrease of the mortality. It may be doubted whether, amongst a vast, closely packed, and stirring population, such as that of London, small-pox will ever be completely extinguished by vaccination. In a less crowded and more settled state experience has proved that it may be; but this not because the vaccine disease is a universal preservative, but because the percentage of those on whom immunity is conferred is so very great, that practically it is complete, where the population is scattered and there are but few chances of fresh introduction of the disease.

THE WEEK.

DR. RICHARDSON'S LECTURES.

It is quite unnecessary that we should call the attention of our readers to the important series of lectures which Dr. Richardson is now delivering in the laboratory attached to his private residence, and which are published in our Journal. From many parts of England we have received testimony to the interest they have excited, and to the practical results of the first lecture in inducing Surgeons to aim at primary union and to avoid suppuration. Dr. Richardson is thus an ally of Professor Sir J. Y. Simpson, who is working in the same direction by the substitution of the needle for the seton-ligature in the suppression of arterial hæmorrhage; and it is a promising feature of his styptic-colloid process that it carries out with the fulness of scientific knowledge what our forefathers empirically attempted by means of the friar's balsam and similar antiseptic and agglutinative applications to wounds. Now, however, let us call attention to one or two remarks suggested by these lectures.

Our leading articles this year have forcibly called attention to the fetters which are imposed on Medical teachers by the regulations of the licensing bodies. We have shown that the number of lecturers and lectures on elementary and theoretical subjects—such as "Theory and Practice of Medicine," etc. etc.—is far too great, and that clinical teaching is neglected. Good Surgeons and Physicians waste their time in dryly lecturing on "theory" or "institutes" in a class-room, for which, perhaps, they have neither taste nor the necessary *facundia*, while the clinical practice of the wards—the very highest branch of teaching—is meagrely and unsystematically handled. Worse still, whilst many men are compelled to lecture in order to fill up the chairs necessary to constitute a regular Medical School, other men, with the highest capacity for teaching the physiological basis or "institutes" of Medicine, are silenced if they do not belong to a "School." Whether it be Brown-Séquard or Richardson, no "certificate of attend-

ance" would be received from any lecturer "unattached" and unrecognised.

We need hardly remind our readers, however, that in the palmiest days of Medical teaching the Hunters, Clines, Coopers lectured either at their own private houses or at schools which were essentially private, voluntary, and unestablished and unfettered institutions. A teacher taught because he had something to say; students attended where they could learn.

It is, then, quite a revival of an old practice to find a Doctor of Medicine teaching, simply because he can teach and others desire to be taught. At present a "Doctor," one to whom has been conceded the privilege of "teaching," cannot teach actually—finds his certificate rejected by the licensing bodies —unless he also belong to a school. We hope that Dr. Richardson's example will break the ice.

One other remark we would make is this—how much more "concrete" and "positive" our knowledge has become within the present generation. Where our fathers spoke of "sympathy" with a wounded part, we speak of absorption of decomposing fluid from a wound. What they called "suppurative inflammation" we may fairly translate into mechanical disturbance or chemical change of the plasma by which a wound ought to be united.

THE QUEEN *v.* JANE MAY.

We constantly read in books of travel of the extraordinary ease with which the act of parturition is performed by the human female when unspoilt by civilisation. But a story has lately been investigated before Chief Baron Kelly and other of the judges, in the Court for the Consideration of Cases Reserved, which quite matches any of the relations we have seen of the easy terms imposed by Nature on Indian squaws, Bushwomen, and other interesting savages, when becoming mothers. Jane May was a female servant. She had frequently been charged by her mistress with pregnancy, but had systematically denied it. On October 25 she was sent to market with some poultry. Returning home in a cart, she asked the boy who drove her to stop and allow her to get out. She did so, and went into a recess in the hedge. In five minutes afterwards she was seen to follow the cart, and she walked home the distance of a mile and a half, and the following day went about her work as usual. A boy passed the hedge soon after the girl left it, and, hearing something cry, found a newly born child in the recess. He was frightened, and told the next passer-by. However, when found a second time, the child was dead. The prisoner was taken into custody the next day. She said she was suddenly delivered, and did not see the child, nor hear it cry, and she did not know whether it was dead or alive. At her trial at Bodmin she was convicted of concealing the birth. But the conviction is now quashed, on the ground that the case does not come within the provisions of the statute 24th and 25th Victoria, cap. 100, sec. 60.

FROM ABROAD. — ANNIVERSARY OF THE FRENCH MEDICAL ASSOCIATION—BARON LARREY ON MILITARY APTITUDE IN FRANCE.

Last week the ninth anniversary of the French General Medical Association was celebrated with much enthusiasm, the Secretaries having this year only to report a continuous course of prosperity unchequered by any untoward event. It is true M. Rayer, the founder and President of the Association, has suffered from a prolonged and painful illness, but he has now the satisfaction, by the enthusiasm which his presence called forth, of experiencing how much have been valued the very great services which he has had the will and the power of rendering to his Medical brethren. During the year the Association lost 136 members by death, and enrolled 220 new names, the number of members now amounting to 6293. This is independently of various local societies having analogous objects in view, some of which—as, for example, that of the Department of the Seine—are of considerable magnitude. The General Association possesses a capital of 471,535 fr. The donations and legacies for the year have amounted to 13,112 fr., and the sums distributed to 27,452 fr. Nearly 100,000 fr. have been so employed since the foundation of the Association. One pleasant feature in these annual meetings is the energy with which the two prominent French Medical critics, MM. Jules Guérin, of the *Gazette Médicale*, and M. Amedeé Latour, of the *Union Médicale*, co-operate in forwarding the interests of the institution. Engaged in many a wordy war with each other, and which is not always exempt from some bitterness, on this occasion they lay down their arms and devote all their energies to promoting the common interests of the Profession as mirrored in the Association. Indeed, to the eloquent advocacy and enthusiastic support of its Secretary, M. Latour, the Association in a great measure owes its success.

One subject brought before the Association was the statue to be erected to Laennec. Although the subscriptions actually received exceed 20,000 fr., and will be sufficient to defray the expenses, the feeling of the Association is, that foreign members of the Profession have scarcely come forward in sufficient numbers to represent the cosmopolitan spirit in which a commemoration of the immortal author of the "Traité de l'Auscultation" should be undertaken. Therefore, although, as a mere business matter, such aid can be dispensed with, it has been resolved to bring the matter once more under the notice of the Physicians of Britain and Germany. The statue, which is represented as being a fine one, is now exhibiting at the annual Exposition at the Champs-Elyseés, and will be erected with ceremony at Quimper in May, 1868.

Continuing the discussion at the Academy of Medicine on the assumed degeneracy of race in France, Baron Larrey, following M. Broca, declared that the fears on this head are quite groundless. He entered into a detailed examination of the conclusions to be drawn from the official statistics on the recruital of the army. These, he acknowledged, were very defective, and even liable to mislead when not sufficiently analysed by those having a full cognisance of their bases. One point brought out is, that we cannot speak in this way of France as a whole, but must examine her condition by departments or even by cantons, so greatly does the condition of the inhabitants of various portions of the country vary. In some districts the exemptions from deficiency of height are greater, not because these are absolutely more numerous, but because the population there is slower in developing its complete height. In this way the recruiting impoverishes such localities by drafting off all their most robust subjects. The reasons for exemption, whether from defective stature, congenital defect, or disease, are so imperfectly set forth in the returns, that conclusions of utility for Medical statistics can hardly be drawn. The corelationship of low stature and infirmities, formerly so readily accredited, has been in later times effectually disproved; and it is even now admitted that recruits surpassing the average stature are, not infrequently, however well they may look to the military eye, of far less robust constitution than those exempted from deficiency of size. It seems to result from an examination of the figures that both extremes of height are on the decrease, and that there is a greater tendency to uniformity of stature, while, as an ultimate result, the general standard is rising. M. Larrey is of opinion that the standard for recruits should be lowered, many men, he says, being now exempted who would make admirable soldiers. It has been fixed at 1·56 m. since 1832, and would well bear to be lowered by 2 centimetres. Moreover, many recruits enlisted at 20 continue to grow until 22. He contrasts the superior health and military aptitude of the *chasseurs à pied*, measuring 1·56 m., with those of the artillery, of not less than 1·70 m.; and he says that the less fitness of men of high stature to undergo the fatigues and privations of a campaign and the

vicissitudes of war has been amply demonstrated. Finally, he suggests that the Academy should constitute a permanent committee for Medical statistics in which all these questions may be thoroughly considered.

PARLIAMENTARY.—VACCINATION—METROPOLITAN GAS BILL—PUBLIC HEALTH (SCOTLAND) BILL—FACTORY ACTS EXTENSION AND HOURS OF LABOUR BILLS—CONTAGIOUS AND INFECTIOUS DISEASES—THE OUTBREAK OF CATTLE-PLAGUE.

On Tuesday, April 30, Lord R. Montagu obtained leave to bring in a bill to consolidate and amend the laws of vaccination.

On Thursday, May 2, in the House of Commons,

On the order of the day for the renewal of the debate on the Metropolis Gas Bill being read, Mr. Ayrton moved a further adjournment until Monday; to which

Sir Stafford Northcote, after alluding shortly to the circumstances under which the Government had taken charge of the Bill, replied that he had that afternoon come to an arrangement with the gas companies by which they had agreed to withdraw their opposition to the second reading on the understanding that before the Select Committee he would consent to amendments omitting all reference to the appropriation of profits, and the clauses relating to compulsory purchase, but he added that if the second reading were now further adjourned the Government would take that as an intimation that the House did not wish to go on with the Bill, and they would therefore withdraw it.

Mr. Milner Gibson assented to this course, but Mr. Ayrton, on behalf of the metropolitan ratepayers, disclaimed being bound by any arrangement with the companies, and Mr. Henley suggested that the Bill should be withdrawn and the whole subject referred to a Select Committee. After some debate, the Bill was read a second time and committed *pro forma*, that Sir S. Northcote's amendments agreed to by the gas companies may be inserted in it, on the understanding that it will be referred to a Select Committee.

The Public Health Bill (Scotland) was read a second time.

The Factory Acts Extension and Hours of Labour Regulation Bills were referred to a Select Committee.

On Friday, Sir J. C. Jervoise rose, according to notice, to move "that an humble address be presented to her Majesty praying that her Majesty will be graciously pleased to cause such inquiry to be instituted as may lead to the better distinction between contagious diseases and such as are termed infectious, so as to obviate, as far as possible, the loss, alarm, and injustice consequent on the theory of the infectious nature of certain diseases when unsupported by demonstration." The subject of the conveyance of disorders by some mysterious agency from one person to another in our state of society must, he thought, be regarded as one of the most important matters which could engage their attention. It affected people in every position in life, every association, and every meeting of persons in every capacity, whether at home, abroad, or in the colonies; and it might be viewed in its bearing not only on persons who were at liberty, but on a class of persons whose case had been under discussion that evening—viz., those who were placed in confinement. Nothing could be more shocking, if the theory alluded to in his notice of motion were true, than the idea that persons locked up in gaols should find themselves subject to the influence of infectious disorders. The hon. member referred to a tale written by a French author about a poor leper and his sister, who were shut up in a tower and condemned to a miserable life of seclusion on account of their fearful malady. Their only companion was a little cur dog, and the sister having died the brother was left alone with the pet dog, which, however, the authorities ordered to be destroyed, in order to prevent the infection from being carried elsewhere; and the wretched man at last committed suicide to relieve himself from an insupportable existence. That tale was founded so much upon fact that it might be said to be almost a true representation of the state of things in certain eastern countries. The infectious nature of leprosy was believed in in many parts of India, where great cruelties were inflicted in connexion with the precautions adopted in regard to those who suffered from that malady. The hon. baronet, who addressed the House a considerable time, and was almost inaudible, avowed himself a disbeliever in infection, and was understood to depreciate specifics prescribed and recommended to protect persons supposed to be especially exposed to it. He derided precautions that were too complicated or costly for general adoption by those upon whom they were urged, and asked, for instance, what was the use of urging that no water should be drunk that had not been boiled if people were destitute of the means of boiling it. He also referred to the outbreaks of scarlet fever at Southampton, Aldershott Camp, and elsewhere, with the view of showing that Medical men, trained nurses, and others in immediate contact with patients, escaped the communication of the disease; and noticing the supposition that Medical men carried it to their own children, remarked that if such communication were probable, the patients of Medical men were exposed to danger quite as much as the members of their own families.

Lord R. Montagu said that a commissioner had been sent to Russia to inquire into "the black disease," and this gentleman reported that the disease was not infectious, so that it did come under the motion of the hon. member. It was true that in the other House Earl Granville said a great many persons had died from it; but this was a mistake. Earl Granville was alluding to another disease, which also existed in Russia, and which was highly infectious. This disease broke out among cattle, and was communicated to human beings; and, according to the last reports, upwards of 70,000 cattle were killed by it during the year and 30,000 men. As to the cattle plague, this was not the time for a cattle plague debate, the proper occasion for which would be when a Bill was introduced on the subject. He was sorry to say, however, that there had been recently a fresh outbreak of cattle plague in London. The existence of the disease here was suspected for some little time, owing to the removal of cattle from some dairies. At last it was discovered that the disease existed in one London dairy, where there were thirty-nine cows, which all had the disease, and all of which were killed. This happened in the preceding week, and he trusted that the slaughter of these cattle had prevented the further spread of the disease. With regard to contagious and infectious diseases, the two terms were treated pretty much as convertible; but infection was the larger term, being, in fact, the genus, while contagion was the species. Infectious diseases were those which were communicated from man to man, or were generated in the air, or by means external to man. Yellow fever was not contagious, though it was infectious; and what possible harm, therefore, was there in Dr. Seaton's visit to the ship at the Motherbank? The disease was communicated by the air, and not by contact with persons. Perhaps the hon. member would say, "Why, then, impose any quarantine?" The answer was that it was not a Medical, but a commercial quarantine; it was imposed not through fear of the spread of yellow fever, but in order that our ships and merchandise should not be exposed to quarantine abroad, and subjected to the loss which that would entail. The laws connected with the communication of diseases were pretty well known by this time. There might be some few special diseases upon which additional knowledge was required. But surely the Health Office, in which there were two or three Medical men of great scientific attainments, afforded a better means of investigation than that proposed by the hon. member—a commission composed of a chemist and a lawyer. (A laugh.) He did not know what would be the business of the lawyer, except, he supposed, to impose the restrictions of law upon the spread of disease. But the hon. gentleman would see that with men who had spent all their lives in the investigation of the subject, and with all the appliances at their command, the Privy Council had means at their disposal much better than the commission which the hon. baronet recommended. The hon. baronet had alluded to the cholera. He was happy to say that upon this important subject most careful and accurate investigations had been carried on, the results had been tabulated, and in a few days a voluminous report would appear, which, he trusted, would be satisfactory to the hon. baronet. There were other points to which the hon. baronet had called attention, but, as he had considerable difficulty in hearing the hon. gentleman's remarks, he trusted that would be sufficient excuse if he desisted from pursuing the subject further.

The motion for an address was then withdrawn.

On Monday, in answer to a question by Lord Galway, Lord R. Montagu said that he was sorry to say that there was truth in the report that the cattle-plague had broken out in London. The attention of Government was first called to the matter by hearing that a number of cows were being quietly removed in Limehouse. Measures were taken to discover whether there was cattle-plague, which is always very difficult, as the utmost secresy is maintained. At last the inspector discovered a dairy in which the cows were dying of cattle-plague, and

39 were killed. It had also broken out in Islington, New North-road; also in Shepperton-street, which is in the same vicinity. He might also mention that a heifer died of cattle-plague last night and another this morning at Ashby Parva, in Leicestershire.

On Tuesday,

Lord Dunkellin asked the Vice-President of the Committee of Council of Education whether it was true that the cattle disease still existed to a considerable degree in Belgium, Holland, and other parts of the Continent whence cattle were imported to our coasts, and sent up to London by railway; and whether, if such were the case, it would not be advisable to order such animals for the present to be slaughtered at the ports at which they arrived.

Lord R. Montagu said he thought it would be well, perhaps, to answer at the same time a question of which the hon. member for Norfolk had given notice. The cattle-plague did exist in Friesland, Franconia, Belgium, and Switzerland. The late outbreak in London had been attributed to a cargo of white cattle from Austria, but as there was great difficulty in obtaining evidence, the inspectors had not satisfied themselves as to the source. Foreign cattle were slaughtered at the ports of arrival. The only exception was for the supply of the metropolis. Cattle might be sent straight from Southampton, Harwich, and the port of London to the metropolis; but, on the other hand, no cattle might leave London.

The Metropolis Gas Bill was referred to a Select Committee.

BATHS OF REICHENHALL.

In the end of last year some account was given in this journal of the arrangements at Reichenhall, near Salzburg, of its salt baths, and of the inhalation of salt spray and of vapour impregnated with various products of the neighbouring pine forests; also of the pneumatic apparatus. From a recent number of the *Ärtzliche Intelligenz Blatt*, it appears that Dr. G. von Liebig has corrected various defects in the apparatus, which is on a very considerable scale, and can receive at one time from nine to twelve patients.

Improvements have been made by providing means for determining accurately the degree of atmospheric pressure, by remedying the disturbance of temperature caused by the air getting heated by the increase of pressure, and cooled by its diminution (the cooling being often accompanied by the deposition of moisture), by attending to the purity of the air, for which purpose small quantities of air are taken from time to time, and examined according to Von Pettenkofer's mode for the amount of carbonic acid present, and also by preventing the disagreeable noise of the pumping in of the air being heard.

The patients remain from one hour and thirty minutes to one hour and forty minutes in the apparatus, during one hour of which time they are exposed to the constant pressure of one and a half atmospheres. The remaining time is occupied in raising and in lowering the pressure.

Dr. von Liebig goes on to say that he believes the end proposed in this adaptation of the pneumatic apparatus—that is, of making the condition of the patient who uses it perfectly comfortable—has now been attained, and he cannot thank the brothers Mack sufficiently for the aid they have given him in perfecting the arrangements. He has employed the last few months in making observations, with the help of Mr. Joseph Mack, on the changes which the process of respiration undergoes in compressed air. As a first step towards this, the amount of the production of carbonic acid was examined on an extensive scale, and the mechanical alterations in the process of respiration were accurately observed. After the bath season is over, he hopes to be able to undertake the determination of the quantity of oxygen absorbed, a matter which will require somewhat greater preparation. In these experiments, he says, he has been frequently for considerable periods under increased atmospheric pressure, and it was pleasant to be able to observe in his own person both the suppression of fresh catarrh of the air tubes and also the agreeable and quickening effect of the pressure on his general feelings. The pressure was increased to one and three-quarter atmospheres, and he found his sensations still pleasanter than under the usual pressure of one and a half atmospheres.

An account of the more important cases that have been treated with compressed air will be published after a time Von Liebig's investigations respecting the physiological operation of compressed air on the respiration are, as already said, not yet completed. Meantime, those who are not acquainted with the physiological and therapeutic effects of compressed air may be referred to the writings of Von Vivenot, of the Langes, and of Von Elsässer.

MEDICAL AND SCIENTIFIC DICTIONARIES.

Many of our readers are probably unaware that at the present time two French Medical dictionaries are in the course of publication. These, in respect to size and to the extent of subjects embraced, completely overshadow all our English attempts at encyclopædic Medical literature, even if we include such works as "The Library of Medicine," Holmes's "System of Surgery," or Reynolds's "System of Medicine," now in course of publication;—works which do not strictly fall under the head of encyclopædias or dictionaries, although they are published with the view of supplying similar literary wants. The only English works of this nature to which we can refer with national pride are the following:—The "Cyclopædia of Practical Medicine," in four volumes—a work of variable merit, but containing many admirable articles (for many of its contributors were provincial Physicians, whose practical attainments were greater than their literary power, and who, moreover, had not the command of large libraries for reference);—the "Cyclopædia of Anatomy and Physiology," edited with admirable judgment by the late Dr. Todd, but unfortunately, from the length of time over which its publication was extended, representing two very different physiological epochs in its earlier and later pages;—Copland's "Medical Dictionary," which will long remain as a marvel of gigantic labour and profound knowledge; and Cooper's "Surgical Dictionary," a work of much humbler pretensions, but highly esteemed in the days of our studentship, more than some thirty years past. If to these we add Costello's "Cyclopædia of Surgery," a work which was laid down on the same plan and extent as Todd's "Cyclopædia of Anatomy and Physiology," but which came to a premature stoppage(a) before it was half completed, and a new edition of Cooper's "Surgical Dictionary" on an enlarged scale, under the able editorship of Mr. Lane, of which the first volume appeared some four or five years since, and which is not yet finished, we have completed our list. The largest of these works (Todd's "Cyclopædia") did not extend beyond four very bulky octavo volumes. The French works, to which we referred at the beginning of this article, are respectively entitled—(1) *Nouveau Dictionnaire de Médecine et de Chirurgie Pratiques*, and (2) *Dictionnaire Encyclopédique des Sciences Médicales*.(b) The *Nouveau Dictionnaire*, which commenced appearing in the year 1864, and is advertised to reach a length of twelve or fourteen volumes of about 800 pages each, but will probably considerably exceed these limits, includes the departments of—1. Anatomy and Physiology; 2. Medical Pathology and Therapeutics; 3. Midwifery; 4. Surgical Pathology and Therapeutics; 5. Hygiene, Medical Jurisprudence, and Toxicology; 6. Odontology (commonly called Dentistry); and 7. Medical Physics, Chemistry, and Natural History; and embraces amongst an editorial staff of nearly forty more or less distinguished names those of Bernutz, Desormeaux, Gosselin, Hardy, Laugier, Nélaton, Ricord, Tardieu, and Trousseau, the editor-in-chief being Dr. Jaccoud. The *Dictionnaire Encyclopédique* began to appear in 1865, and it is intended that it should, when completed, form from twenty to twenty-five volumes of about 800 pages each. It includes a wider range of subjects than the *Nouveau Dictionnaire*—Medical biographies, for example, being one of its prominent features. Its editors are Raige-Delorme and Dechambre, and a list of 123 contributors is given, amongst whom are included the well-known names of Baillarger, Balbiani, Broca, Brown-Séquard, Calmeil, Chassaignac, Daresberg, Davaine, Delpech,

(a) A year or two ago the completion of Costello's "Surgical Dictionary" was advertised in the Medical journals, but we have never seen either the completed edition or any review of it, nor have we heard of any one who has done so.

(b) The French publishers of the *Nouveau Dictionnaire* are J. B. Baillière and Sons, Paris, and those of the *Dictionnaire Encyclopédique* are Victor Masson and Sons. Such enterprising publishers as these deserve at least that their names should be recorded. For our own copies, and for those of the two other works subsequently noticed, we are indebted to Messrs. Williams and Norgate, 14, Henrietta-street, Covent-garden.

Diday, Follin, Gavarret, our learned countryman Dr. Greenhill, Grisolle, Michael Levy, Littre, Malaguti, Ollier, Pasteur, Rayer, Robin, Roger, Rouget, Ste-Claire Deville, Sedillot, Soubeiran, Velpeau, and Vulpian. To attempt to review such works as these would obviously lead us altogether beyond the limits within which we are obliged to restrict ourselves in these pages. We are contented with bringing them before the notice of our readers, and with assuring them that whether they invest about 150 francs in the former, or about double that sum in the latter work (which, as far as we can judge, will be the prices of the works when completed), they will in either case obtain far more for their money's worth than any English publisher could afford them. To give some idea of the relative fulness of the two works, we may add that the latest volume in our possession of the *Nouveau Dictionnaire*, bearing date 1867, extends to "Chaleur" inclusive, while the middle of the fifth volume of the *Dictionnaire Encyclopédique*, published in 1866, does not reach further than "Antimoine." The more important Medical and Surgical subjects are discussed with nearly equal completeness in both works, the greater bulk of the latter being mainly due to the introduction of articles accessory rather than essential to practical Medicine and Surgery. For example, "Abcès" is the first article in the former and the sixteenth in the latter.

Two other French dictionaries, of far smaller pretensions, are deserving of mention in this article. They are Nysten's *Dictionnaire de Médecine, de Chirurgie, de Pharmacie, &c.*, of which the twelfth edition appeared about a year ago, edited and so thoroughly rewritten by Messrs. Littre and Robin that the Widow Nysten brought a successful action against the publishers for damages caused by the mental distress which the present editors had inflicted on her by modifying her departed husband's views and mutilating his antiquated articles. In its present state it is an extremely useful work of reference both to the student and to the busy Practitioner. The other work is the *Dictionnaire Général des Sciences Théoriques et Appliquées*, edited by Professors Privat-Deschanel and Focillon. It embraces the various departments—1. Mathematics; 2. Physics and Chemistry; 3. Mechanics and Technology; 4. Natural History and Medicine; and 5. Agriculture. It is to be completed in two enormous volumes of upwards of 1000 pages each. The first, which appeared a few months ago, contains no less than 1151 pages and 1329 clearly engraved illustrations. To test its accuracy we selected at random and read twenty articles, and found them to contain quite as much sound useful matter as their necessary brevity admitted. Although, in a strictly Professional point of view, it affords little or nothing of great value to our readers, they will find it a highly useful book of general reference. It is the third of a series of corresponding works, the others being the *Dictionnaire Général de Biographie et d'Histoire*, comprising also mythology, geography, antiquities, and institutions, and the *Dictionnaire Général des Lettres, des Beaux-Arts et des Sciences Morales et Politiques.*

Although the *Dictionary of Science, Literature, and Art, edited by the late Professor W. T. Brande and the Rev. George Cox*, a new edition of which is just published by Messrs. Longmans, has no pretension to be expressly composed for any particular class or profession, we know of few more useful reference books for the study table of the Medical Practitioner, especially if he be one who is anxious to obtain all the light which modern science can throw upon the difficulties and uncertainties of his art. Many of the articles, such as those on Anatomy, Architecture, Chemistry, Commerce, exceed the ordinary limits assigned to those of dictionaries, and are fairly encyclopædic. Those on the Biological Sciences supplied by Professor Owen and Mr. C. Carter Blake, on Botany by the late Professor Lindley and Mr. T. Moore, on Chemistry and Physics by Brande, Frankland, and Attfield, on Geology and Mineralogy by Ansted and Bristowe, together afford not only a very complete series of explanations of the terms used in these sciences, but also an abstract of the principles established in each. The same is true of the other branches of knowledge. The three volumes are an encyclopædia without cumbersome size, and a dictionary without unsatisfactory curtness. A book of this kind, used perseveringly and diligently, is nowadays absolutely necessary to those who are determined to obtain that best kind of education—which a man gives himself. But such is the Babel of modern scientific nomenclature that, without a help of this kind, professorial or tutorial assistance becomes indispensable. This is, perhaps, especially true in certain departments of Biological Science—*e.g.*, Botany, Comparative Anatomy, Palæontology, and Zoology. The rapid increase of scientific terms has extended the present edition to three volumes, but we are certain that the value of the book as a work of reference has been enhanced threefold by its consequent completeness.

CENTRAL AFRICA IN ITS MEDICAL ASPECTS.—SUNSTROKE, FEVER, PLAGUE.

From the earliest times to the present day, the investigation of Central Africa in general, and the discovery of the sources of the Nile in particular, have been problems which have attracted the attention of the geographers of all civilised nations. The great African problem, which puzzled the minds of philosophers in the days of Herodotus, and defied the energies of a Roman expedition in the reign of Nero, has, as our readers know, been at length completely solved by our own countrymen. Nearly a century ago (in 1770), Bruce succeeded in tracing the Blue Nile to its sources in Abyssinia, but this was afterwards found to be only a large tributary of the true or White Nile, and it was reserved for Englishmen of the present day—Speke and Grant—to discover the most elevated and consequently the most remote source of the White Nile, in the great Victoria Nyanza Lake, and for Baker to complete the discovery by reaching, in association with his heroic wife, the great reservoir of the equatorial water, the Albert Nyanza Lake, from which the river issues as the entire White Nile.

It is needless to observe that these travellers, independently of their geographical discoveries, with which we have nothing to do in these pages, must have made many observations on the diseases, medicines, peculiar kinds of food, and general habits of life, which must be of interest to the Medical reader; and we trust that the following gleanings from some of the recent works on African travel—especially Baker's volumes—will be regarded as deserving of permanent record in the pages of the *Medical Times and Gazette.*

Before proceeding to notice the special subject of this article—namely, the diseases of Central Africa—we may mention, for the benefit of any of our younger readers whose tendencies towards a life of adventure might lead them to think of joining any African expedition, that more than ordinary personal strength would seem to be an essential qualification for a traveller amongst savages. Bruce was a man of gigantic size and extraordinary physical powers, and Baker is very explicit on this point. "I cannot," he observes, "agree with some writers in believing that personal strength is not necessary to a traveller," and various adventures recorded in his journal show that his combined strength and pugilistic skill were of immense service to him. Are our young travellers sufficiently versed in the art of boxing (a form of gymnastics too much neglected in our own day) to be able satisfactorily to enact such a scene as the following? "I looked at the mutinous rascal for a moment, and thundered 'Lay down your gun and load the camels!' 'I won't,' was his reply. 'Then stop here,' I answered, at the same time lashing out as quick as lightning with my right hand upon his jaw. He rolled over in a heap, and lay insensible amongst the luggage." (Baker, vol. i. p. 198.) If they are not, we should advise them to take Mr. (now Sir Samuel) Baker's advice to his mutineer and "stop here." The use of the umbrella as an instrument of offence should be also fully understood. Upon one occasion, when an Arab attacked Mr. Baker with a broadsword, the traveller parried a cut at his head with his sun umbrella, and returned with a quick thrust directly in the mouth, the peaceful weapon penetrating to his throat with such force that he fell upon his back. Next in importance to physical strength and an acquaintance with the art of self-defence in its varied forms is a knowledge of Medicine, and in this respect, of course, the members of our Profession are the best qualified of all travellers.

Sunstroke assumes so many forms in its mode of attack and

course of symptoms, that we are glad to record in our pages any well-marked case of this affection. Most of our readers are probably aware that Sir Samuel Baker in his search for the sources of the Nile was accompanied by his brave and devoted wife. When the travellers, already weakened by fever, had advanced to rather less than eighty miles of the equator, and, after several hours' exposure to a powerful sun, were crossing the Kafour River by a natural floating bridge composed of a thickly-netted carpet of weeds, "I looked back," says Mr. Baker, "to see if my wife followed close to me, when I was horrified to see her standing in one spot, and sinking gradually through the weeds, while her face was distorted and perfectly purple. Almost as soon as I perceived her, she fell as though shot dead." She was dragged like a corpse through the yielding vegetation, and her husband, thinking she had fainted, laid her under a tree and bathed her head and face with water, "but she lay perfectly insensible, as though dead, with teeth and hands firmly clenched, and her eyes open, but fixed. It was *coup de soleil*. It was in vain that I rubbed her heart and the black women rubbed her feet, to endeavour to restore animation. After changing her clothes she was carried mournfully forward as a corpse. Constantly we had to halt and support her head, as a painful rattling in the throat betokened suffocation. At length we reached a village, and halted for the night. I laid her carefully in a miserable hut, and watched beside her. I opened her clenched teeth with a small wooden wedge, and inserted a wet rag, upon which I dropped water to moisten her tongue, which was dry as fur. . . . Day broke, and there was nothing to eat in this spot. My wife had never stirred since she fell by the *coup de soleil*, and merely respired about five times in a minute. It was impossible to remain; the people would have starved. She was laid gently upon her litter, and we started forward on our funeral course. We halted at a village, and again the night was passed in watching. I was wet and coated with mud from the swampy marsh, and shivered with ague; but the cold within was greater than all. No change had taken place; she had never moved. In the drawn and distorted features that lay before me, I could hardly trace the same face that for years had been my comfort through all the difficulties and dangers of my path. Was she to die? . . . Again the night passed away. Once more on the march. Again we halted. The night came, and I sat by her side in a miserable hut. She had never moved a muscle since she fell. My people slept. I was alone, and no sound broke the stillness of the night, but the sudden wild cry of a hyena made me shudder. . . . The morning was not far distant. I had passed the night in replacing wet cloths upon her head, and moistening her lips as she lay apparently lifeless on her litter. I could do nothing more; in solitude and abject misery in that dark hour, in a country of savage heathen, thousands of miles away from a Christian land, I besought an aid above all human, trusting alone to Him. The morning broke, and seeing that she lay in the same unaltered state, I went to the door of the hut to breathe one gasp of the fresh morning air, when I was startled by the words 'Thank God,' faintly uttered behind me. Suddenly she had awoke from her torpor, and, with a heart overflowing, I went to her bedside. Her eyes were full of madness; she spoke, but the brain was gone! I will not inflict a description of the terrible trial of seven days of brain fever with its attendant horrors. For seven nights I had not slept, and, although as weak as a reed, I had marched by the side of her litter. Nature could resist no longer. We reached a village one evening; she had been in violent convulsions successively; it was all but over. I laid her down on her litter within a hut, and fell upon my mat insensible, worn out with sorrow and fatigue. My men put a new handle to the pickaxe that evening, and sought for a dry spot to dig her grave. . . . The sun had risen when I woke. She lay upon her bed pale as marble, and with that calm serenity that the features assume when the cares of life no longer act upon the mind, and the body rests in death. The dreadful thought bowed me down, but as I gazed upon her in fear, her chest gently heaved, not with the convulsive throbs of fever, but naturally. She was asleep; and when at a sudden noise she opened her eyes they were calm and clear. She was saved!"

The pathetic beauty of this history thus told by her despairing husband, cannot fail to strike the reader, while the value of the report is much increased by the fact that of necessity there was an entire absence of all the ordinary remedial agents. Sir Samuel Baker has, in short, given us a most graphic picture of the natural history of this terrible disease.

It is worthy of remark that the Livingstones in their recent volume, entitled "The Zambesi and its Tributaries" (1865), direct special attention to the fact that at Tetté, which lies far in the interior and 16° south of the equator, where the heat was intense, sunstroke is altogether unknown, its absence being attributed to the dryness of the atmosphere and to the peculiarly strong and overpowering inclination to sleep which too much sun sometimes causes, and which they regard as curative of what may be called incipient sunstroke.

African fever varies considerably in its symptoms and in its fatality in different parts of the continent. In many parts of their prolonged journey the Bakers suffered very severely from it. The following extract from his journal, written at Obbo, four degrees north of the equator, and dated October 17, 1863, contains an admirable sketch of the symptoms of this disease in that locality:—

"I expect an attack of fever to-morrow or next day, as I understand from constant and painful experience every step of this insidious disease. For some days one feels a certain uneasiness of spirits difficult to explain; no peculiar symptom is observed until a day or two before the attack, when great lassitude is felt, with a desire to sleep. Rheumatic pains in the loins, back, and joints of the limbs are accompanied by a sense of great weakness. A cold fit comes on very quickly; this is so severe that it almost immediately affects the stomach, producing painful vomiting, with severe retching. The eyes are heavy and painful, the head hot and aching, the extremities pale and cold, pulse very weak, and about fifty-six beats per minute, the action of the heart distressingly weak, with total prostration of strength. This shivering and vomiting continue for about two hours, attended with great difficulty of breathing. The hot stage then comes on, the retching still continuing, with the difficulty of breathing, intense weakness, and restlessness, for about an hour and a half, which, should the remedies be successful, terminate in profuse perspiration and sleep. The attack ends leaving the stomach in a dreadful state of weakness. The fever is remittent, the attack returning almost at the same hour every two days, and reducing the patient rapidly to a mere skeleton; the stomach refuses to act, and death ensues. Any severe action of the mind, such as grief or anger, is almost certain to be succeeded by fever in this country."

Mr. and Mrs. Baker suffered repeatedly from this form of fever during their prolonged travels, and as at the time he wrote the above quotation their stock of quinine was reduced to a few grains, it is easy to conceive that their sufferings from later attacks (often referred to) must have been extreme. The threatened attack of which he spoke on October 17 laid him up until December 31. On the first day of January he reports himself as "hardly able to stand," and yet only three days later, having taken his last ten grains of quinine, we find him proceeding on his journey. In the middle of February he "had fever daily at about 3 p.m., and lay perfectly helpless for five or six hours until the attack passed off," and his wife suffered quite as acutely. On the morning of March 16, the day following his arrival at the shores of the great lake, which was the goal of his wishes, "not one of our party could rise from the ground—thirteen men, the boy Saat, four women, and we ourselves were all down with fever. The air was hot and close, and the country frightfully unhealthy. The natives assured us that all strangers suffered in a similar manner, and that no one could live at Vacovia without repeated attacks of fever." The natives of these unhealthy districts do not appear to suffer from the fever, nor did they seem able to suggest any remedy; but two or three months after the last date, when comfortably settled at Kisoona and enjoying plenty of good food, he records that he was again (or still) a martyr to fever. "Being without quinine, I tried vapour baths, and, by the recommendation of one of the Turks, I pounded and boiled a quantity of the leaves of the castor-oil plant in a large pot containing about four gallons. Every morning I arranged a bath by sitting in a blanket, thus forming a kind of tent, with the pot of boiling water beneath my stool. Half an hour passed in this intense heat produced a most profuse perspiration, and from the commencement of the vapour system the attacks of fever moderated both in violence and frequency. In about a fortnight the complaint had so much abated that my spirits rose in equal proportion, and, although weak, I had no mortal fear of my old enemy." His cure, however, seems to have been incomplete, for we find that towards the end of September, after having successfully established a whisky manufactory from sweet potatoes, he took to drinking hot toddy. The result was that (in his own words) "I became

strong, and from that time to the present day my fever left me, occurring only once or twice during the first six months, and then quitting me entirely." We commend this passage to the teetotallers.

The Livingstones, in the volume already referred to, give some very interesting details regarding the symptoms of African fever as it occurs at Tetté (S. lat. 16°) and the appropriate treatment. It is of a far milder type than at the low sea-coast, and throughout this district is of as common occurrence as a cold in the head is in England. As a general rule, strangers on the coast should, on the first threatening of an attack, at once hasten to higher land, where the disease assumes a milder type. They found that quinine had no power in *preventing* the attack, and it was abandoned as a prophylactic. "The best preventive against fever," they observe, "is plenty of interesting work to do and abundance of wholesome food to eat. To a man well housed and clothed, who enjoys these advantages, the fever at Tetté will not prove a more formidable enemy than a cold in England;" but under other conditions it is a more serious matter. Quinine, although not a preventive, was invaluable in the cure of the complaint "as soon as pains in the back, sore bones, headache, yawning, quick pulse, marked pulsation of jugulars, with suffused eyes, hot skin, and foul tongue, began." The general treatment consisted in the administration of pills, which, from their efficacy in rousing up the most prostrated patients, received the striking name of ROUSERS. They are composed of six or eight grains both of resin of jalap and of powdered rhubarb, and three grains both of calomel and of quinine, made into four pills with tincture of cardamoms. A man may take all four at once, while one is usually sufficient for a woman. Epsom salts must be given if necessary, and after the operation of the pills quinine in large doses must be given every two or three hours, till deafness or cinchonism ensues, which completes the cure. Warburgh's drops were freely tried, but were found useless except in causing warmth in the shivering stage. It is worthy of remark that extreme irritability of temper was often the first symptom. Mosquitoes appear so commonly at malarious spots that their presence should be taken as a hint to move to a more healthy locality; and the presence of the *fever-plant* (*Pœdevia fœtida*), which when smelt actually gives rise to headache and fever, is equally significant.

On their homeward voyage down the Nile, between Gondokoro and Khartoum, in a vessel in which some weeks previously many persons had died from *plague*, but which had been purified as far as was possible under the circumstances, this disease broke out in their crew. The symptoms described by Baker differ in some important points from those given in our standard works on this disease. "For some days two or three of our men had been complaining of severe headache, giddiness, and violent pains in the spine and between the shoulders. The men assured me that the most fatal symptom was violent bleeding from the nose; in such cases no one had been known to recover." Three cases are given which turned out fatal, and in which epistaxis had occurred. On this symptom, which is totally passed over by many writers, Dr. Craigie remarks that "bleeding at the nose on the first or second day, in small quantity, is of no great moment, but if copious and repeated, and accompanied with violet-coloured *petechiæ* and *vibices*, it is generally a fatal symptom." ("Practice of Physic," vol. i. p. 354.) In one, at least, of Baker's fatal cases, the bleeding occurred in the afternoon of the first day, and, so far as we can learn, none of the cases that occurred, except one, which will be immediately noticed, presented petechiæ, vibices, buboes, or carbuncles. The most marked symptoms, independently of the epistaxis, were an orange-yellowness of the eyes (the yellowness being sometimes as deep as the yolk of an egg), muttering, and delirium. In the case of Saat, his faithful servant, which is the most fully noticed, it is recorded that "he never slept, but night and day he muttered in delirium, breaking the monotony of his malady by occasional howling, like a wild animal. The night passed, and I expected that all would be over before sunrise, but as morning dawned the burning fever left him, and although raised blotches had broken out upon his chest and various parts of his body, he appeared much better." His pulse, however, was very weak, and his skin cold, and, although stimulants were freely given, he died in a few hours.

In a future number we shall extract from Sir Samuel Baker's volumes a few more gleanings regarding the natural history of the regions explored by these adventurous travellers, the food of the various negro races, &c., &c.

REVIEWS.

Transactions of the Ethnological Society of London. Vol. V. Murray and Co.

THE Ethnological Society of London have just published a bulky volume, which contains the papers read before that body up to the end of the past year. The list of authors who appear as the contributors of these several papers is such as to induce every student of comparative anthropology to take up the work with the belief that he shall acquire new and interesting facts.

It is difficult to select from the work those especial gems of composition which adorn the science with lustre equal to that with which the ingenious M. Bonté has illumined the labours of a sister society in Paris. We can, therefore, only pursue the order in which the separate papers are bound in the book, whilst we regret that much interesting matter must be passed over in silence.

The first paper, by Mr. J. Fred. Campbell, of Islay, is entitled "Notes on the Stature of Lapps." The author states that his "notes contain little information on ethnology," which is an unquestionable fact. He further appears to have forgotten the Lapp salutation to a stranger between the compilation of his first and his eleventh page, as in the former it is "Bourist," and in the latter "Puarist." Half the paper (*i. e.*, six-twelfths) has been published in the author's "Frost and Fire," vol. i. p. 312.

Mr. Campbell considers that "the tribes who made kitchen-middens and lake-dwellings in Scotland were allied to Lapps." He gives no reason for this supposition, nor does he say what lake-dwellings those are to which he alludes. We presume that, to carry out his argument logically, he considers the periwinkle and "buckie"-eating natives of the Scotch coast at the present day to be also allied to Lapps. It is a pity that the facts contradict Mr. Campbell.

Lieutenant-Colonel Phayre gives a most interesting paper on the History of the Burmah Race. As the gallant author is the Chief Commissioner of British Burmah, peculiar advantages are enjoyed by him of spreading reliable information. Many new facts illustrative of the cosmogony and literature of the Burmese are given in this most valuable and interesting paper.

Lieutenant S. A. St. John and Colonel Albert Fytche give us papers on the Inhabitants of the Andaman Islands. The account of the former merely describes the natives as "very ugly, not unlike Hottentots;" that of the latter is of great interest and value. It adds much important information to the imperfect and badly recorded facts we had already acquired at the hands of Pihan-Dufeillay and Mouat. Colonel Fytche describes the Andamanese thus:—

"Their reputed similarity to the true African negro appears to have been greatly exaggerated. The forehead is well formed, and not retreating, neither are the lips coarse and projecting, and the nostrils are by no means broad; the ear is small and well formed; the hair unlike the so-called woolly hair of a negro, and growing conspicuously in separate detached tufts. They have absolutely no trace of whiskers, beard, or moustache, and have been long enough in captivity for the growth of such were it (*sic in orig.*) existent. The hair of the head also shows little disposition to elongate; it continues very short and crisped. The complexion is not a deep black, but rather of a sooty hue. Hands and feet small, the latter not exhibiting the projecting heel of the true negro." These facts are, indeed, of the highest interest.

Mr. T. Valentine Robins contributes a gossiping account of his "Sketches on the Niger," which our readers may recollect were exhibited at the *soirées* of the Royal Society last year. This accomplished artist was for a short time Assistant-Governor of Lukoja, on the Niger, and had especial facilities for describing the tribal distinctions of the numerous African tribes of the interior. We can vouch, of our own personal knowledge, to the great dissimilarity presented between such tribes—*e. g.*, as the Bunu and the West-Coast African negro. They are of the same nature, although a little greater in degree, as those between the Haussa tribes, to which the intelligent Bishop Crowther appertains, and the true negroes.

Colonel Rigby describes the Somauli (misspelt by him "Somali") race of North-eastern Africa, and points out the similarity between head-dresses of their males and those of the fashionable European female. A Somauli beau "frequently changes the colour of the hair by applying a prepara-

tion of quicklime. They have also a custom of shaving their own hair off and substituting a large, bushy sheepskin wig, dyed a bright red colour." He considers that "the Somauli are an original unmixed African race"—a generalisation which, although not new, is one which is most probably well-founded.

Sir John Lubbock, the accomplished Vice-President of the Society, contributes an elegantly written controversial note in reply to the Secretary, Mr. Thomas Wright. The latter had attempted to identify the remains of the "bronze age" with those of the ancient Romans; whilst Sir John Lubbock, who is a strenuous advocate for the extreme antiquity of man, throws the "bronze age" back to a period indefinitely ancient. It may be imagined that a controversy of this sort may, if decided in favour of Mr. Wright's hypothesis, invalidate the assumptions of the Danish archæologists, whose chronological division into "stone," "bronze," and "iron" ages is, perhaps, more concise than accurate; and the facts of the case seem to be on Mr. Wright's side. Yet we must admit that the great controversial skill of Sir John Lubbock has enabled him to make an excellent fight for a failing cause. The strongest argument on his side is, as is common, the traditional one. The testimony of Hesiod is very strong that the ancients used bronze, and were ignorant of iron; while that of Agatharchides, who lived in the reign of Ptolemy IV., is, no doubt, of greater weight than that of the poet. He gives an account of certain old and abandoned mines in Egypt in which bronze implements are occasionally found, "the use of iron being then unknown." In the Pentateuch copper is mentioned no less than forty times; iron, we believe, only twice. Mr. Wright's argument is further invalidated by the proof that bronze weapons are, perhaps, even more common in Scandinavia and in Ireland than in any other parts of Europe, and it is well known that the Romans did not occupy either of these countries.

Mr. Farrar's paper on the Aptitude of Races is in the well-known style of that acute reasoner and eloquent advocate. He points out that, with the exception of Madeira, the Azores, and a few other islands, there is hardly a single country which, when first discovered, was found destitute of inhabitants; and it is a very remarkable fact that every race, including even some of the semi-barbarous, tell us, in their far-reaching traditions, of other races who preceded them, and whom they found inhabiting the countries to which they came. The Greeks and the Romans never attempted to conceal that their lands were won by victorious immigration. The Egyptians spoke of the gigantic and shadowy races, the Νέκυες, as they called them, who preceded that line of demi-gods which reigned before the first Pharaoh. The Arabians regarded themselves as successors of the genii. The Canaanites, as we know from Scripture, ousted and almost exterminated the Nephilim, Rephaim, Anakim, and other antediluvian races. The Aryans confessedly won Hindostan by expelling from it those previous tribes which they contemptuously represent as monkeys, demons, or savages, with whom, however, they probably intermarried, and of whom traces are still to be found. According to Fa Hian, the Chinese traveller, the first people in Ceylon were demons and dragons, who are probably intended for the original Yakkahs. The North American Indians do not claim to have made the vast mound temples and tumuli which occur on many of their plains and river valleys, but attribute them to an antecedent race. The natives of New Zealand say that on arriving they found there an inferior people, whom they hunted down like wild beasts. Britain was once occupied by cannibal savages, who were ousted by the Kelt, and who appear in various early traditions as ghosts or giants. Mr. Farrar considers all these races, who appear in the traditions of all but the most barbarous nations, to have been the squalid primæval allophylians, whose relics, consisting of half-gnawed bones and coarse implements of flint, have been found so abundantly of late years in fluviatile deposits and stalactite flooring of deep caves, but respecting whose origin nothing is known, except that they lived on the earth with the mammoth and the elk, the cave hyæna and the cave bear, for long ages before the first civilised races had appeared upon the globe. Mr. Farrar proceeds in his argument, and points to many existing and surviving representatives of such tribes. "Such (he says) are the tallow-coloured Bosjesmen, who, when not living on worms and pismires, are glad to squabble for the putrid carcase of the hyæna and the antelope; the leather-skinned Hottentot, whose hair grows in short tufts like a worn-out shoebrush, with spaces of scalp between; the degraded, gibbering Yamparico, whose food consists of vermin; the aborigines of Victoria, among whom newborn babes are, when convenient, killed and eaten by their parents and brothers; the Alforese of Ceram, who live in families in the trees; the Banaks, who wear lumps of fat meat ornamentally in the cartilage of the nose; the forest tribes of Malacca; the wild people of Borneo, whom the Dayaks hunt as though they were monkeys; the hairy Aïnos of Yesso, who annually pay their tribute of fish and skin to the Japanese; the pigmy Dokos, south of Abyssinia, whose nails are grown long, like vulture's talons, that they may dig up ants and tear the skins of serpents, which they devour raw; the Veddahs of Ceylon, who have gutturals and grimaces instead of languages, who have no god, no notions of time or distance, no name for hours, days, and years, and who cannot count above five upon their fingers. Many tribes like these in the lowest mud of barbarism, so far from having traditions or traces of preceding tribes, attribute their origin directly to lions (like the Sahos), to goats (like the Dagalis), or with contented unanimity to the ape, on whose deformed resemblance to themselves they look without any particle of horror and repugnance as on a type to which they are assimilated by their own abject degradation, fierce squalor, and protuberant jaws." These races, without history, irreclaimable, and not merely having a horror for civilisation, but deliberately despising it, Mr. Farrar considers to be the primitive races of man, which are now fast disappearing before the advancing civilisation of the white races. If, however, we mount to a second stage or stratum of humanity, we again find that difference of aptitude which appears to prove a radical, permanent, and original difference of race. The Chinese are cited as an example by Mr. Farrar. In them it is indeed true that they invented writing, but they stopped at ideography and hieroglyphics; their art had no perspective and no ideality; their science no progressiveness; their religion no enthusiasm; their literature no warmth; their administration no vigour. "Everything in them is marked with the plague-spot of utilitarian mediocrity; they reduce everything to the dead level of vulgar practical advantage; and hence the inventions, which they possessed centuries before the Europeans, stop short at the lowest point." Mr. Farrar considers that, the endowments of men being unequal, a strong barrier of religion and right must be reared against the encroachments of the stronger upon their less privileged brethren. Believing, as he states he does, that all men are children of a common Father, and partakers of a common redemption, he does not require the notion of a physical or genetic unity as a motive to philanthropy.

Professor Dadabhai Naoroji, late of Bombay, at some length criticises Mr. Crawfurd's paper on the European and Asiatic races of man. The principle of "race-antagonism" which exists between the two combatants, respectively representing the Scotch and Parsee races, has led to the interchange of vigorous and forcible repartees, of a sort not usually encountered in scientific transactions.

Mr. Thrupp writes an amusing paper descriptive of British superstitions as to hares, geese, and poultry, and points out the reasons why these three animals were bred by the Britons, *animi voluptatisque causâ*, but on no occasion eaten by them. His paper will well repay perusal. Mr. Wright enters into a controversy with an anonymous writer in the *Anthropological Review*, who had asserted that there was no evidence of the Roman conquest of Ireland. Colonel Playfair, H.M. Consul at Zanzibar, affords a most interesting communication on a Himyaritic inscription lately discovered in Southern Arabia. This language, to which attention has not been directed so much as necessary, is the language which preceded the modern Arabic in that portion of the Arabian peninsula now known as Yemen, or Arabia Felix, and was used during a period estimated at twelve centuries, ending at the time of the Abyssinian conquest, A.D. 525. The character called by the Arabs *Musnud*, or upright, is closely allied to the Æthiopic; and it was by the assistance of the modern Amharic that the clue was discovered by the late M. Fresnel, the French Consul at Jedda.

Sir S. W. Baker's paper on the Races of the Nile Basin is one of great importance. We only regret that it is so brief, and that the minute analysis which M. Pruner-Bey has given of the races of Lower Egypt is not applied by Sir Samuel Baker to the natives of the district around the head-waters of the Nile. Still, the paper is one of the highest value, as throwing light upon man in a district of which we had previously so little knowledge. We cannot say the same of Dr. Mann's paper on the Kaffir Race of Natal, a collection of

excerpta from other writers. The author, who has been himself a resident in the colony, tells us nothing of value respecting the Kaffirs. The confused taxonomy which he employs, by which he confounds the Kaffir and Negro races together, is highly prejudicial to the progress of science. Mr. Dunn's paper, "Archæology and Ethnology," is also a collection of scraps from various writers, put together in a disorderly manner, and in some cases without a sufficient employment of the inverted comma. Such writers as "Lortet" are referred to more than once, and the author's acquaintance with Greek can be realised when we see that he speaks of "dolychocephalic" and "kumbocephalic" skulls. It is to be regretted that competent editorial care has not excised some passages which appear in this paper, and in other parts of the present volume.

Mr. Crawfurd is the author of nine out of the thirty papers in the present volume—nearly one-third of the whole. These papers all bear the marks of the peculiar style of their venerable author, and are nearly all dogmatic and controversial. It is not, however, necessary to give any analysis of their contents here, as there is nothing of scientific importance contained in them.

The present volume, on the whole, is, however, quite equal to any of its predecessors. There are many topics of scientific interest contained therein. But we are obliged to notice the remarkable list of members bound at the end of the volume. How the success of any body can be promoted by printing a list of names as honorary and corresponding fellows, some of whom have been dead for many years—Sir Robert Schomburgk, Professor Waitz, of Marburg, and Professor Giglioli (misprinted Giglio), of Pavia, being examples—we fail to see. Such a procedure leads to suspicion that other names may be also those of dead men. We remember that after the battle of Solferino it was found that some of the Austrian paymasters had been drawing pay on account of dead men who had ceased for years to be on the muster-roll. A London scientific Society should be cautious not to repeat the experiment. We shall look forward with anticipation to the appearance of Volume VI. of these remarkable *Transactions*.

FOREIGN CORRESPONDENCE.

FRANCE.

Paris, May 8.

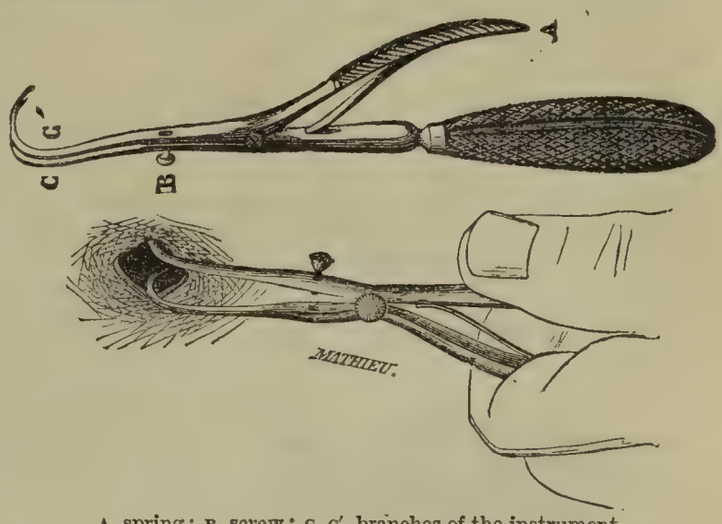
The splendid sunshine, which has suddenly succeeded to the miserable weather which had so long been weighing upon our spirits, has brought, of course, crowds of visitors to the Exhibition. It is confidently asserted that last Sunday upwards of 150,000 persons paid the admission fee, without speaking of those who entered with tickets. I cannot vouch, of course, for the authenticity of these figures; but I can assert that the crowd is enormous. There is unfortunately no reserved day for visitors of the upper classes; it is true that from 8 to 10 o'clock in the morning the entrance fee is doubled, but this is a mere trick, for those who attend the Exhibition at such early hours only enjoy the privilege of seeing the building swept, and swallowing the dust which results from the operation, while all the cases are covered up, and all the objects they contain hidden from sight. Having been caught once in this trap, I wish to caution your readers against it. The only proper time to select, for those who wish to see the sight with some degree of comfort, is between ten and twelve; at that moment the number of visitors is moderate, and the household arrangements are complete for the day.

Having already given a general sketch of the Exhibition, I will now enter into particulars, and give you a minute description of the principal objects which I consider as deserving some attention.

Charity begins at home, as the proverb says. Acting upon this principle, France has allowed herself two-fifths of the entire building, and the products of French industry are, in consequence, more fully represented than those of any other nation in the world. The Medical department forms no exception to this rule; and feeling, as I do, like the Roman Physician, that "*vivo et scribo in aëre Romano*," I will, like a true Parisian, begin by speaking of Paris.

The predominance of Surgery over the sister science, in an Exhibition like this, is natural enough. The fruits of Medical knowledge are less visible and palpable than the results of Surgical industry; and Surgical instruments almost form the chief part of what our Profession has to show. Penetrating, therefore, into the square room which is devoted to this section, in the French part of the building, we find ourselves at once in the midst of a complete arsenal, the sight of which is at first rather bewildering; but the only way to find an issue to this labyrinth is to fix upon one subject, and examine successively the various efforts of human ingenuity which have been brought to bear upon that point.

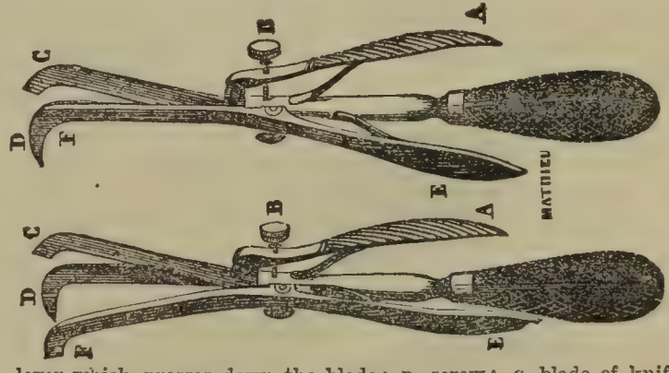
One of the operations which during the last ten years have given rise to the greatest number of Surgical inventions is tracheotomy. Few Surgeons on the Continent are content to open the windpipe with an ordinary bistoury—if we may judge, at least, from the vast number of appliances brought to bear upon this single operation. Among these various instruments I must confess that the most convenient, in my opinion, is that of Langenbeck, the celebrated Surgeon of Berlin. It consists in a sort of double hook, the two branches of which lie close together, but separate on pressing a spring. The trachea being caught by this instrument, the knife is passed between the two branches; and the incision being made, the operator touches the spring, parts the lips of the wound, and inserts the canula. The subjoined figures will enable your readers to understand the mechanism of this instrument.



A, spring; B, screw; C, C', branches of the instrument.

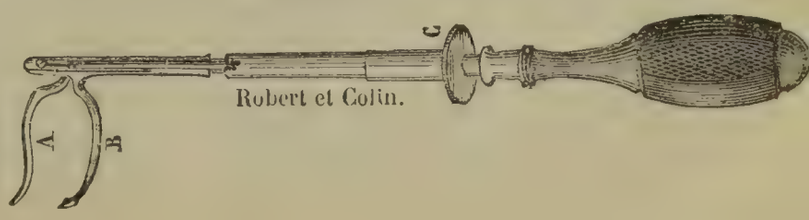
M. Lüer, the well-known Surgical instrument-maker, exhibits a cutting and dilating forceps, on the principle of Valentine's knife for making microscopical sections. When the operation has been made, the operator presses upon the handle, and the two blades of the knife part, leaving a sufficient space for inserting the tube. But although this pretty little instrument looks well enough, I doubt whether it answers in practice.

M. Sée, the cousin of the Professor, and one of our rising Surgeons, uses for this purpose dilating forceps, between the branches of which lies a knife.



A, lever which presses down the blade; B, screw; C, blade of knife: D, pointed extremity of forceps; F, blunt extremity; E, lever which opens the forceps.

A very clever little instrument for tracheotomy is that of the celebrated M. Maisonneuve. It consists of a curved knife,

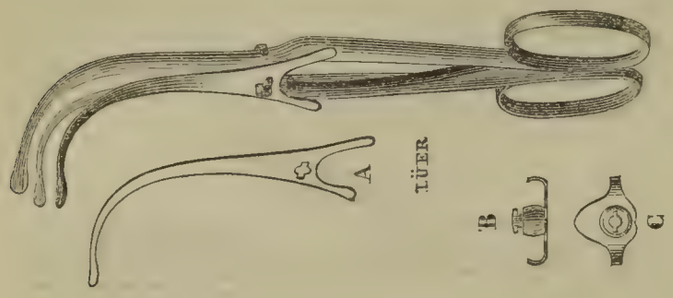


inserted perpendicularly to the handle which supports it. The operator plunges the point of the knife into the windpipe, gives it a turn, and brings it out, thus dividing the trachea from within, instead of opening it from without.

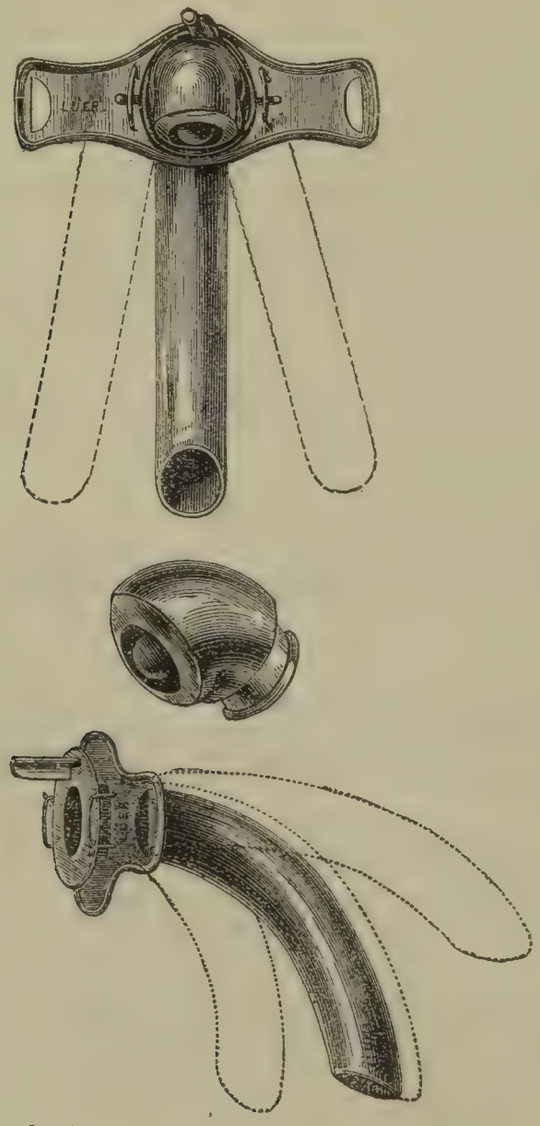
I think it my duty to inform your readers that I have seen the talented inventor himself open the œsophagus, instead of the windpipe, with his instrument. I am afraid that an inexperienced operator would stand little chance of doing better.

The conclusion which I should draw from the examination of these complicated instruments is, that an ordinary scalpel is by far the most convenient and safest of all for the purpose intended.

I must, however, recommend to your attention the three-branched forceps of Dr. Laborde, slightly modified by Lüer. It allows the Surgeon to dilate the opening of the windpipe with the greatest facility. The third branch may be dropped if necessary.



A great many different kinds of tracheotomy tubes have been invented of late, for the purpose of averting some of the principal inconveniences of the operation, and especially in order to avoid ulcerations of the trachea, which sometimes result from a prolonged insertion of the tube. The system generally employed in the Paris Hospitals is that invented by Lüer in 1857.

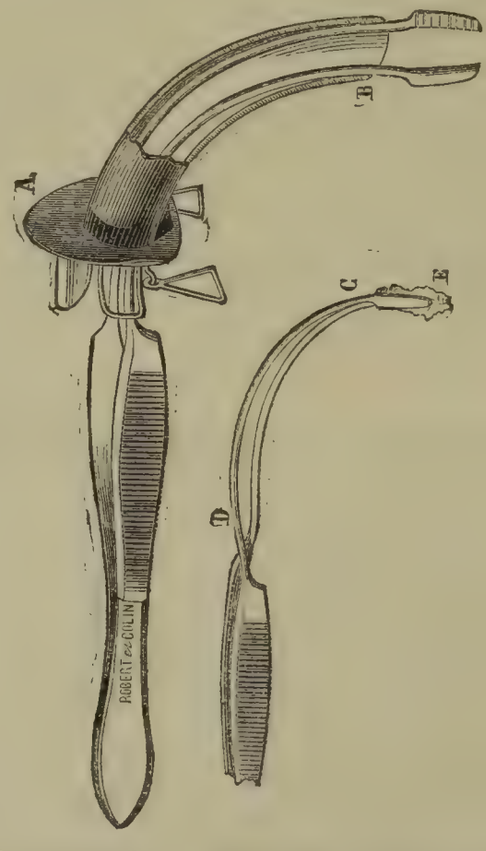


This tube is movable in all directions, as the figure shows, and, instead of being tied down in bed, as was formerly the case, a child which has been operated upon can be left without any restraint and allowed to play in the room. It is provided with a ball valve, which obliges the air to pass through the mouth in *expiration*, although it passes of course through the tube in *inspiration*.

Professor Broca, in order to accustom the patient by degrees to resume the ordinary manner of breathing when the air-passages have become free, uses a tube, the valve of which can be gradually screwed down, so as to diminish by degrees the quantity of air which passes through the artificial aperture.

A, screw which presses down B, the valve, by acting on D, lever fixed on C, the upper part of valve.

A variety of forceps for the extraction of membranes are, of course, collected here; the one which struck me the most is that invented by Dr. Meunier, of which I subjoin a figure.



A, tube; B, forceps opened; C, D, forceps closed, to seize E, the membrane.

A very ingenious trachcotomy tube, invented by Dr. Krishaber, is provided with three valves, and contrived so as to allow the patient to speak, to expectorate when necessary, and, in short, to make him as comfortable as a man can possibly be when he has got a tube sticking in his throat. But the description of the rather complicated apparatus would far exceed the proper bounds of an ordinary figure.

The library of the late Mr. Hewson, F.R.C.S., of Lincoln, is to be sold by auction, by Messrs. Puttick and Simpson, of 47, Leicester-square, on Tuesday, May 21. It is a marvellous and most creditable collection for any member of our Profession to have made, and includes the best editions of all the most costly modern works on natural history, especially the splendid plates of Gray, Gould, and Audubon, on ornithology.

GENERAL CORRESPONDENCE.

ON LOCAL ANÆSTHESIA.

Letter from Dr. James Arnott.

[To the Editor of the Medical Times and Gazette.]

Sir,—In a letter in your journal of March 30, alluded to by a correspondent in the present number, I spoke of the discovery made eighteen years ago that the animal tissues can be subjected to an intense degree of cold, or be "frozen," without injury, and that this freezing process may be applied with much benefit in producing anæsthesia in operations and in the treatment of disease. Your correspondent quotes a statement from a book published by Thomas Bartholinus two centuries ago that snow or a temperature of 32° Fahr. (which is 37° higher than that of the common and least powerful of the freezing mixtures now employed) had been applied for similar purposes. But a cold of only 32° would not freeze the flesh or produce anæsthesia under ordinary circumstances, and even this moderate degree of cold appears to have been applied with fear of gangrene, as is indicated by the elaborate contrivance recommended for preventing it. Nor is there a greater resemblance between the practice noticed by Bartholinus of sucking a piece of ice for the cure of an inflamed throat and the practice of freezing an inflamed joint. Moderate degrees of cold are coeval with the Medical art; the unfounded dread of gangrene or of inflammation from reaction prevented the employment of intense degrees until the middle of the nineteenth century. The following passage relating to this point occurs in a tract which I published ten years ago:—"It is a singular circumstance that both the general and local mode of preventing pain in operations should have been long and familiarly known as capable of producing insensibility, and both avoided on account of their supposed danger. I have already spoken of the mephitic vapour of the Grotto del Cane, near Naples. Still better known was the benumbing effect of intense cold on parts exposed to it. But while the fears of the inhalation of vapours have unhappily been verified, those respecting intense cold have been proved to be groundless." ("On the Expediency of Instituting an Academy of Medicine," etc., etc., page 12.)

I am, &c.

London, May 4. James Arnott.

LAXATIVES *v.* OPIATES AND ASTRINGENTS IN THE DIARRHŒA OF ENTERIC OR TYPHOID FEVER.

Letter from Dr. Downie.

[To the Editor of the Medical Times and Gazette.]

Sir,—I observed in last week's *Medical Times and Gazette* that two eminent London Physicians differ in their ideas with regard to the treatment of the diarrhœa of enteric fever—the one recommending laxatives, or that the diarrhœa should be left to itself; the other, on the contrary, recommending opiates and astringents. Now, there is seemingly a wide difference of opinion here; and yet I would say, from a considerable number of carefully observed cases, that, to a certain extent, both Physicians are right, and that they only fall into error when they carry out their ideas dogmatically; for if we carry out those systems of treatment to their full extent, both cannot be correct, seeing that they are diametrically opposed. Let me state, then, that I have found mild laxatives to be useful in the treatment of the diarrhœa of enteric fever so long as the strength kept up and the heart's action remained good, and I believe they may generally be given, not only with safety but with benefit, under these conditions. Take the following case:—Mr. C., aged 22, laboured under typhoid fever, had severe bowel complaint, and passed large quantities of dark blood with stools. Ordered a blue pill to be given twice daily, but after the first day ordered only one pill to be given in the day. The bowel complaint continued for about five days, and ended in a very satisfactory crisis. Had opiates and astringents been given in this case, they would have done evil, and the fever would, in all probability, have been prolonged.

But, *per contra*, astringents and opiates are useful, in certain states of the system, in the diarrhœa of enteric fever—nay, they are positively required, as in the following case:—Miss L., aged 18 years, a delicate young woman. This patient had a severe attack of gastro-enteric fever accompanied about the tenth day with severe diarrhœa, stools slightly tinged with blood. Gave mild laxatives for a day or two; strength began rapidly to fail; bowel complaint not improved. Gave chalk mixture with tincture of catechu, and a draught of morphia and hyoscyamus to procure sleep and rest during the night, with the best effect. Now, I believe, had I dogmatically continued with the laxative treatment, or had I let the bowel complaint alone, I should have lost my patient; as it was, it was with the greatest difficulty that her life was saved. In cases akin to this, I often give an alterative, combined with an astringent, with good effect—viz., a grain of hydr. c. cretâ, with ten or twelve grains of chalk, every four or six hours—and when the diarrhœa is accompanied with pain, I give Dover's powder with or without hydr. c. cretâ, and I apply warm fomentations to the bowels, and occasionally mustard poultices in ample proportions. I may mention, *en passant*, that I have treated between thirty and forty cases of gastric and gastro-enteric fever within the last six months, all of which have recovered, though some of them were of a very grave type.

I am, &c. J. Downie, M.D.

Blantyre, March 30.

THE SECOND CASE OF PLICA POLONICA OBSERVED IN ENGLAND.

Letter from Dr. H. Beigel.

[To the Editor of the Medical Times and Gazette.]

Sir,—The Physicians of those countries where Plica polonica is endemic have always admitted the existence of two kinds of the disease—viz., natural and artificial; the former being a pathological product accompanied by certain symptoms, the latter the product of uncleanliness and dirt. Nay, some Physicians have gone even so far as to deny altogether the existence of plica as a disease, and to consider every trichoma as artificial. This opinion is decidedly wrong, and betrays lack of observing power. What has been considered artificial plica is very rare, and though I have observed numerous examples of natural trichoma, I have never seen a case which could be styled artificial. Indeed, I do not know whether, in cases of long-lasting illnesses in which patients are prevented for months from combing, artificial plica has ever been observed.

At the meeting of the Pathological Society of April 17, 1866, when I exhibited a number of plicas, I endeavoured to show that the disease must in former times have been known in England; for Shakespeare writes in Romeo and Juliet (Act I. scene 4)—

> "This is that very Mab
> That plats the manes of horses in the night,
> And bakes the elf-locks in foul slattish hairs,
> Which, once entangled, much misfortune bodes."

But there is a letter published in the *Philosophical Transactions* of 1747 (vol. xliv. part ii. p. 556) containing positively a case of real plica observed in England.

The second case is that which I brought before the Pathological Society at the meeting of December 18 last.

In the daily papers of November 8, 1866, a "horrible disclosure of misery" was published concerning a woman, Jane Mitchell, 39 years old, of High-road Well, about a mile from Halifax, who had been discovered by the police. "The spectacle," says the report, "was most disgusting and appalling. Not an article of furniture was to be seen in the chamber, except a dark screen before one window. The floor was in some places more than an inch thick in dust, potato parings, animal refuse, woollen flocks, etc. He next proceeded to remove the screen, and was appalled to find a human being huddled up in a lump, upon an old bed laid upon a wooden trunk, the whole being with dirt as black as a chimney hole. Her hair was matted, and her whole appearance that of wretchedness and squalor. She was not lying, but rather reclining or huddled with her back against a pillow. The whole place she occupied behind the screen was only about three or four feet by half a yard broad. When the curtain was drawn aside she blasphemed, and wanted to know if the policeman had come to kill her. The sight was horrible. She refused to be removed or touched. At her right hand was a small darkened window, the recess of which was filled with vileness. Since the discovery, the sister Eliza has informed a neighbour that it is three years since her sister was washed, had combed her hair, or had had a chemise on. She had at present nothing on but a pair of old stockings, which had not been changed for years. Eliza states her sister to be suffering from bodily debility, not insanity."

Having read the report, I wrote to Dr. Alexander, in Halifax, asking him whether he knew anything about the case, as, if there exists anything like artificial plica, it should be found in the head of this unfortunate woman. My presumption was correct, and Dr. Alexander has been so kind as to send me two specimens of plica, the one being a real "elf-lock," the other a piece of "*plique ou queue.*" He writes:—

"Halifax, Sunday, 11th.

"Dear Sir,—I cut the hair from the head myself, and might have had any quantity, since I recommended the head to be shaved as the only means of operating upon the agglutinated mass and cleansing the scalp. The back hair was turned up into a knob as usual, and one sample sent you was at the end of it. It is evident, not being down in ringlets, that it could not separately be plaited in single plaits like the loose end. All was matted and incrusted.

"Yours very truly,

"Wm. Alexander, M.D., M.R.C.P.

"Dr. Beigel."

Dr. Lionel Beale was kind enough to lend me his valuable help in microscopically investigating the two specimens. They consisted of the same substances as those discovered in the specimens described in the last volume of the *Transactions* of the Pathological Society, with the only difference that in the Halifax specimens we found a very great amount of starch, which cannot be accounted for.

I am, &c.

H. Beigel, M.D., M.R.C.P.Lond.,
Assistant-Physician to the Metropolitan Free Hospital.

REPORTS OF SOCIETIES.

EPIDEMIOLOGICAL SOCIETY.

Monday, April 1.

Dr. Jenner, F.R.S., in the Chair.

A paper, by Dr. John Macpherson, was read on

THE EARLY SEATS OF CHOLERA IN INDIA AND IN THE EAST, WITH REFERENCE TO THE PAST AND PRESENT.

This was an elaborate and learned account, by the author of "Cholera in its Home," of the early history of cholera in India and the East, in the course of which much and most important light was thrown upon several questions earnestly discussed in the late International Sanitary Conference at Constantinople. The following is a summary of a few of the general conclusions insisted upon by Dr. Macpherson:—1. For notices of Indian cholera before the year 1756 authors have usually had to go to Java, whereas there have been constant notices of the disease in India from the date of Europeans beginning to write of the maladies of the country in 1563. 2. A statement of Zacutus, made about 1633, seems to have attracted little attention; but, taken in connexion with other accounts, it enables us to see that about that date Indian cholera was widely diffused in Java, in India, in Arabia, and in Morocco. 3. Extravagant importance has been attached to the Gangetic delta as a generator of cholera, whereas from the earliest times Indian cholera has existed in other parts of India quite independently, and Bengal is the part of India in which accounts of its very early prevalence have not been discovered. 4. In our present state of knowledge it may be affirmed provisionally that there was a period of quiescence of the disease in the early part of the 18th century; then a great outbreak after 1756, which lasted about thirty years, and was followed by a period of comparative quiescence until 1817. 5. Cholera prevails more or less at this day in all the districts in India in which we have the earliest accounts of it. 6. Since 1821, cholera has prevailed nearly every year in some part of Persia or the Persian Gulf, and very constantly in Arabia, and occasionally in the Red Sea. Any measure of quarantine applied to the Red Sea alone, not including the Arabian coast and the Persian Gulf, would be futile. 7. The absurdity is apparent of a French notion that cholera is the result of the neglect of public works by England, and which has been thus expressed under a philosophic form:—"Cholera has arisen from the social dissolution which has resulted from the transformation of the material and moral media of India, in consequence of centuries of war, and of the profound perturbation of the cerebral and organic existence of those ancient populations which have experienced the sad effects of mercantile improvements."

Dr. Ed. Goodeve, Mr. Rawlinson, C.E., and Mr. Radcliffe offered some remarks on Dr. Macpherson's paper.

Mr. Radcliffe read a paper

ON THE PROPAGATION OF CHOLERA BY WATER AS A MEDIUM, WITH SPECIAL REFERENCE TO THE OUTBREAK AT THEYDON BOIS (ESSEX), 1865.

The facts of the outbreak were briefly as follows:—Between September 28 and October 31, twelve individuals, nine residing at an isolated farm-house, were attacked with symptoms undistinguishable from epidemic cholera, and nine died. Ten of the attacks occurred within the first ten days; the eleventh attack on the 13th. Nine of the individuals seized drank habitually of the water of a well which was proved to have become accidentally polluted with diarrhœal discharges; of the remaining three, one was the Medical attendant upon the first two cases, one a woman who had assisted in laying out one of the corpses, and the third a grandchild of the latter. The pollution of the well had been brought about in the following fashion:—The proprietor of the isolated farm-house, Mr. G., and his wife had been sent to Weymouth by their Medical adviser, on account of persistent disorder of the digestive organs, which the latter attributed to an impure state of the water from the house well; and another member of the family also suffered from like symptoms. On September 23, while at Weymouth, Mr. G. suffered from a sharp attack of vomiting and purging, with cramps in the legs, but not so severely as to require Medical aid. On the 25th, the bowels being still somewhat disturbed, he returned home with his wife, travelling by way of Southampton. During the journey the wife complained of discomfort in the body, and on the 26th she suffered from sharp diarrhœa. Both husband and wife used frequently on the 26th and 27th a water-closet on the first floor of their house, between the soil-pipe of which and the house well a somewhat free communication was subsequently discovered to exist. This well also was polluted from a neighbouring badly constructed sink-drain. On September 28, Mrs. G. was seized with cholera; on the 30th, a young child, also a serving-boy, with diarrhœa, which became confirmed cholera on October 1. The dates of attack of the remaining cases of individuals using the polluted well-water were as follows:—October 2, one; October 5, two; October 6, three. The use of water from the polluted well was discontinued on October 4. The questions to which attention was chiefly directed were these:—1. The pollution of the well-water, doubtless from the sink-drain, and the consequence of this—namely, persistent derangement of the digestive organs from the outbreak. 2. The outbreak of choleraic disease following immediately upon the additional pollution of the well water with diarrhœal discharges. 3. Were the discharges those arising from ordinary autumnal diarrhœa, or from the specific diarrhœa of epidemic cholera? Neither affirmation nor denial was practicable, as Mr. and Mrs. G. on their return from Weymouth had traversed an infected district—Southampton. The first case of epidemic cholera in that town in 1865 had occurred on September 17. 4. On any hypothesis the outbreak was important as giving insight into the laws of action of a choleraic poison disseminated in water, or of fæcal matter in a state apt to produce choleraic disease so disseminated. From the time of assumed pollution of the water (September 27) to the date of attack of the last three cases was no less than nine days. Of the three persons attacked who did not drink the water, one was seized on the third day after communication with the sick, one on the fourth day, and one on the twentieth.

Mr. French passed a high eulogium on the late Dr. Snow, and made some remarks on the pathology of cholera.

Dr. Milroy directed attention to the fact that Mr. Radcliffe had failed to trace infection in the earliest cases at Theydon Bois.

Dr. Waller Lewis took occasion to offer some remarks on the action of filters in clearing water of organic impurities.

Mr. Liddle, Health Officer for Whitechapel, spoke generally on the question of the propagation of cholera by the drinking water, and illustrated the question by the experience of his own district during the late outbreak in the metropolis. The portion of the district supplied by the New River Company, although in all circumstances of population and sanitary state like the portion supplied by the East London

Company from Old Ford, suffered very slightly indeed in comparison with the latter.

Dr. Bain, Poplar, related several instructive instances of the propagation of cholera by the drinking water.

The discussion was resumed on May 6.

Rev. H. Whitehead, M.A., who discovered the source of pollution of the Broad-street pump, in 1854, contrasted the outbreak at Theydon Bois with that arising from the pump named. The Broad-street pump was contaminated with diarrhœa discharges on August 28 and 29. The greatest number of fatal attacks took place on September 1 and 2. He suggested that the greater intensity of action in this case might have been dependent upon the exceedingly high temperature which prevailed at the time.

Dr. Camps indicated several doubtful points in the history of the Theydon Bois outbreak.

Dr. Smart, R.N., gave a brief account of the outbreak of cholera among the crews of the British fleet in the Black Sea during the Crimean war. This he traced to the water which had immediately before been drawn from a stream unquestionably largely polluted by the discharges of a French division at the time severely visited by cholera. In his own ship, although the same water was used, but one case of cholera occurred. He ascribed the immunity to a rule which he had established, that no water should be drawn from a tank until it had been stored fourteen days.

Dr. Mapother, Health Officer for Dublin, stated that he had not traced any relation between the late outbreak of cholera in Dublin and the use of impure water; but some instructive relations to state of soil had been observed.

Mr. Lord, Officer of Health for Hampstead, indicated the relationship between filth and the prevalence of cholera.

Dr. Tripe, Health Officer for Hackney, stated the general features of the recent outbreak in his district, and that it was not influenced by the water supply.

Dr. Wm. Parker, Health Officer for Bermondsey, mentioned that no instances of dissemination of cholera by means of the water supply had taken place during the recent outbreak in his district.

Dr. John Chapman stated certain physical and pathological reasons why water surcharged with fæcal matter should act poisonously, and asserted that if he was condemned to elect between swallowing rice-water evacuations and ordinary fæcal discharges, he should prefer the former, as probably least dangerous.

Dr. Nicholson suggested that the immunity of Antigua from cholera to the present time might be dependent in some measure upon the sources of the water supply.

HARVEIAN SOCIETY.

Thursday, March 21.

Dr. J. E. Pollock, Vice-President, in the Chair.

Mr. Isaac Brown read a paper on

anæsthetics in midwifery.

Ether, the first anæsthetic introduced to the Profession, Mr. Brown considered entirely unsuited for midwifery purposes, from the large quantity required, and consequently its expense and unportability, and also on account of its disagreeable odour. Chloroform, *pur et simple*, he also objected to as liable to be given to the induction of full narcosis, although he admitted that in almost all private patients you can draw the line between loss of pain and loss of consciousness. Mr. Brown objected to the mixtures recommended by the Chloroform Committee of the Medico-Chirurgical Society, on the ground of the ether that they contained, and quoted largely from Dr. Sansom to show that in alcohol alone we have an agent on which we can fully rely as a diluent of chloroform. Mr. Brown, in March, 1865, had made some experiments with dilutions of chloroform with alcohol, and had found that the most convenient for use in midwifery was two parts of chloroform with one of alcohol; in the latter were distilled the essential oils used in the preparation of *eau de Cologne*. The mixture was clear, and, as it evaporated, very elegant and agreeable to the patient. If properly prepared, it should have a specific gravity of 1·152. It must not be confounded with a mixture of chloroform and ordinary *eau de Cologne*, in which there being water, the chloroform is at once precipitated. Mr. Brown did not consider there was any particular merit in the *eau de Cologne* beyond its agreeable odour, but suggested that it might help as a gentle stimulant, in combination with the alcoholic dilution, to prevent the patient from being fully narcotised. This mixture, to which he had given the name of chlorætherine—it being, as it were, a concentrated chloric ether—had been exhibited at the Obstetrical Society, October, 1865, and had since been used largely by him in his own practice, and also by many others. He did not himself use inhalers, but they who did could administer his mixture in them as well as chloroform. For all practical purposes he considered that for a dilution of chloroform a napkin folded cone-shape was most convenient. There were no particular directions with reference to its administration. It should not be given until the os is well dilated, except in cases of rigidity of the os, when a few inhalations will speedily produce relaxation; nor should it be given after the child is born, although patients may often ask for it, so severe do they find the pain accompanying the birth of the placenta, after having been delivered of the child without pain.

NEW BOOKS, WITH SHORT CRITIQUES.

The Poisons of the Spreading Diseases. By B. W. Richardson, M.A., M.D., F.R.C.S., etc. London: John Churchill and Sons. Pamphlet.

*** A lecture delivered before the Leamington Congress. The reader is brought face to face with the matters which produce contagious and infectious diseases, and their properties are fully discussed. What do our readers say to a bottleful of the poison of Surgical fever which Dr. Richardson exhibited?

On Happiness in its relations to Work and Knowledge. By the late Sir John Forbes. Second Edition. London: Hamilton, Adams, and Co. Pp. 57.

*** Himself an indefatigable worker, Sir John Forbes was deeply impressed with the value of labour as a means of human happiness, even before he had left college. The little pamphlet now before us was originally a lecture delivered at Chichester by Sir John towards the close of his career, and after having thoroughly tested his youthful notions by the aid of his great experience.

On Vital Force: its Pulmonic Origin. By T. Gordon Hake, M.D., F.C.S., M.R.C.P. London: Renshaw. Pp. 64.

*** This gentleman's ideas as to the origin of vital force may be shortly stated thus:—"The carbon of the blood is, in the lungs, oxidised.(?) The chemical force thus produced is transformed into electrical force, and by the blood corpuscles conveyed to the brain, there to be, through the agency of the nerve vesicles, converted into nerve force, by which the muscles are stimulated, thus producing heat." We cannot do less than praise the ingenuity of these views. Their correctness is another matter, and one on which, in the meantime, a decision cannot be summarily pronounced.

Chemical Notes for the Lecture-room. By Dr. Wood, Chemical Lecturer at the Brighton College. London: Warr and Co. Pp. 96.

*** This little work is intended to take the place of the ordinary notes taken by students in the class-room, and certainly contains a useful outline which would serve well as an index to the subject, but which cannot take a place as a treatise on chemistry. It is a syllabus, containing a good deal more of the abstract than of the practical portions of chemical science.

Report of the Cheshire Lunatic Asylum for 1866.

*** We are glad to see that this large asylum maintains its high character under the new Superintendent, Dr. Harper. The Commissioners report very favourably of it.

Prevention of Pauperism, and Suggestions for supplying Cheap and Healthy Dwellings for the Working Classes. By T. Hawksley, M.D. Lond. Reprint.

*** Dr. Hawksley, rightly looking upon the degrading surroundings and habitations of the poorer classes as a great inducement to careless expenditure, strongly advocates the building of new dwellings by money raised under a Government guarantee of a 4 per cent. rate of interest.

Notes on the Progress of Acupressure. By Sir J. Y. Simpson, Bart., M.D., D.C.L., Professor of Medicine and Midwifery in the University of Edinburgh. Second Edition. Edinburgh: Black. Pamphlet.

*** A sketch republished, with additional notes, from the columns of a contemporary. It is written in Sir James's lucid style, and shows what great results may be expected from acupressure.

Annual Report of the Cork Medical Protection Association for the Year ending March, 1867.

*** The great object of this Association is to obtain Medical reform. They want the Council to obtain greater powers, both with regard to enforcing a proper training, and the power of prosecuting pretenders. Such laudable endeavours cannot be too much praised.

Annual Report of the Manchester and Salford Sanitary Association for 1866.

*** Strange to say, the progressive men of Manchester have no Officer of Health, and leave a great part of the work which should be done by such a salaried officer to be performed by this Society, but we expect to hear better things of them soon. The report is highly valuable, showing the conditions under which so many men exist in the great city of Manchester. One ugly fact has to be faced—the great prevalence and fatality of continued fever among the lower classes there. Perhaps an Officer of Health with considerable powers might improve this state of matters.

Edinburgh.—We are glad to say that Professor Laycock reopened the class of Clinical Medicine on Tuesday. He was very warmly received.

OBITUARY.

THE LATE DR. WOODFALL, MAIDSTONE.

A few weeks ago we announced the decease of this estimable Physician, which took place suddenly at his residence from angina pectoris. He was the son of the late George Woodfall, Esq., of Great Dean's-yard, Westminster, and was born on December 7, 1810. At the proper age he went to the well-known School of Westminster, thence to Trinity College, Cambridge. After graduating as M.A., he became a pupil of the University College and Middlesex Hospitals, he took the Membership of the Royal College of Physicians, and was elected to the Fellowship in 1854.

His introduction to public practice took place in connexion with the Western Dispensary, of which he held the Physicianship until 1845, when the office of Assistant-Physician to the Westminster Hospital devolved upon him, and he discharged its duties for eight years; at the termination of which period he removed to Maidstone, becoming Physician to the West Kent General Hospital in 1853. This appointment he held to the time of his death. During this term he became extensively known in the town and county, an eminently social temperament and gentlemanly and kindly feeling conducing in no small degree to the popularity he enjoyed and the high esteem in which he was held by all classes. Having been placed upon the bench in 1862, he played an active and enlightened part as justice of the peace for the borough of Maidstone, devoting no inconsiderable portion of his time to promoting the progress and welfare of the town. In every relationship he will be missed and mourned, and certainly not least so by the surrounding Medical men who know well how to appreciate a high-minded and honourable man, an accomplished Physician, and a Christian gentleman.

The funeral took place at the Maidstone Cemetery, and was largely attended, all the Practitioners of the town being present.

PETER COLSTON, ESQ.

With sincere regret we record the death of Mr. Peter Colston, of Husbands Bosworth—a retired Surgeon, well known and deservedly esteemed throughout this and the neighbouring counties. After a long and painful illness, Mr. Colston expired a few days ago. In early life, Mr. Colston, bearing the name of his father—a well-known hosiery manufacturer of this town—after completing a sound course of preliminary education, under the superintendence of the Rev. C. Berry, was apprenticed to the late Mr. Harris, a general Practitioner in Leicester, some years ago. Whilst enjoying the benefits and advantages arising from a general practice so extensive as that of Mr. Harris, Peter Colston was in quiet communion with kindred spirits and *confrères* in the surgery that nursed the present Mr. Thomas Paget (now a distinguished member of the Council of the Royal College of Surgeons, and a late President of the British Medical Association). In company with Mr. Bowmar, Dr. Thompson, the late Mr. May, and others now departed, Mr. Colston had the benefit of early lessons in Surgery from the father of the present Mr. Paget, during the time he filled the office of Surgeon to our General Infirmary. From Leicester his Professional education was transferred to St. Bartholomew's, in London, and completed under the auspices of Abernethy, Lawrence, Skey, and others, well known in Medical and Surgical history. With delight, Peter Colston was accustomed to handle a knife that belonged to and was used by the great Abernethy in the wards of St. Bartholomew, fifty years ago. This memento of his teacher he seemed unable to forget; and to within a few days of his death could narrate the circumstances under which the knife was taken from the "dressing-case," as it lay on the patient's bed. Abernethy's son, Colston's fellow-student, was desirous that he should possess a useful relic of his father, with whom Colston was a kind of pet pupil. In the presence of the father the son handed the abscess-knife over to the pupil. The son soon after died. The pupil, in his fifty-eighth year, has this week left the knife behind him, which is carefully preserved in the hands of another Surgical generation, and will long serve as the connecting tie between the skilful Hospital Surgeon and the kind, humane, and benevolent parish Doctor. For many years Mr. Colston acted as Medical officer to the Husbands Bosworth district of the Market Harborough Union, and during that time frequently supplied food, as well as medicine, to those necessitously placed under his gentle care. To one of his Medical attendants, a few days before his death, he expressed a desire to lie in the cemetery by the side of one of his pauper patients—Mary Jelly, aged 76—who was deaf and dumb from birth, and who, with her infirm husband, had for years not only enjoyed an immunity from Doctors' bills, but an exemption from the exactions of Poor-law Commissioners, guardians, and ratepayers. Honest to the backbone of principle, Peter Colston ignored everything savouring of cant in the slightest. Lawyers, Doctors, and parsons he systematically set at defiance in true Abernethian style, until convinced of the integrity of their purpose. When convinced, his mad hostility soon became ardent amity, ending in enduring friendship. Thus, in a long life, the principles inculcated by Abernethy and Lawrence have been well and truly verified in the character we have cursorily described in this obituary notice. Having seen the subject of our notice as the "Parish Doctor," blended with the county gentleman, let us follow him on a little further. From the time our present Mr. Paget's father was an operative Surgeon in the Leicester Infirmary (the present Mr. T. Paget held office thirty-three years) Mr. Colston has taken a lively, though a quiet, interest in promoting the commercial welfare of the institution, by courting subscriptions, etc., and making those subscriptions subservient in a direct manner to the wants of the really sick and needy. It was never Mr. Colston's aim to sustain the Infirmary as a comfortable home, as well as Hospital, for gentlemen's servants and well-to-do tradesmen; but to render it available to those in abject poverty, who were really ill, and yet possessed sufficient English pride to keep them from applying to the parish for Medical relief. Mr. Colston's last pen to paper was to write a cheque, conveying his annual subscription to the treasurer of the Infirmary, which was accompanied with heartfelt wishes towards its welfare. From the foundation of the Royal Medical Benevolent College at Epsom—for the support of disabled Medical men and their widows and the education of their children—Mr. Colston appears to have been not only a substantial patron, but an active canvasser for foreign help in the shape of lay contributors, who appear on his list, as local secretary, in goodly numbers. Widowed mothers, with young sons, bred and born as it were in the Profession, and within the limits of our own county, will shed a tear on reading this obituary notice of their departed friend, Peter Colston, of Husbands Bosworth.—*Leicester Mercury and Chronicle.*

MEDICAL NEWS.

Royal College of Surgeons of England.—The following gentlemen, having undergone the necessary Examinations for the Diploma, were admitted members o the College at a meeting of the Court of Examiners on the 7th inst., viz.:—

Messrs. Frederick Morrish Pierce, Higher Broughton; John Galley Blackley, Manchester; and Thomas Henry Pinder, Whitley (students of the Manchester School); Henry Walter Gostling, Oakley, near Bedford; Ernest Thomson Raimbach Evans, Jersey; and Charles Henry Newstead, Royal General Dispensary (of St. Bartholomew's Hospital); Thomas Frederick Hopgood, L.S.A., Chipping Norton; and Benjamin Franklin, Liverpool (of University College); Joseph Gabe, Merthyr Tydfil; and Walter Maine, Barnstaple, Devon (of the Middlesex Hospital); George Thomas Willan, Bourne, Lincolnshire; and Charles William Chapman, Dalston (of Guy's Hospital); Samuel Hamilton Cartwright, Old Burlington-street (of King's College); Reginald Bayley, Nailsea, Bristol (of Charing-cross Hospital); James Cornelius O'Grady, Bombay (of Dublin); Robert Longuet Sheffield, L.S.A., Mile-end-road (of the London Hospital); James Robert Haynes, Clipstone-street (of the Westminster Hospital); Edward Fluder Chinery, Lymington, Hants (of Edinburgh); Frederic Walter Smith, Brenchley, Kent (of St. Thomas's Hospital); Henry Edward Juler, Shepherd's-bush (of St. Mary's Hospital); and James Walker, of Leeds.

The following gentlemen were admitted Members on the 8th inst., viz.:—

David Owen Fountaine, Stoke Hamond, Bucks; John Greaves Wiseman, Ossett, Yorkshire; Henry Cheesman, Lewes, Sussex; Louis Charles Achille Carré, Bath; Matthew Owen Coleman, Surbiton; and George Stokell, L.R.C.P. Lond. and Edin., and L.S.A., Hobart Town (Students of Guy's Hospital); Alfred Steward, Wolverhampton; Joseph Wharton, Oldham; and Charles Grindrod, Liverpool (of the Manchester School); Henry Widenham Maunsell, M.B. Trin. Coll. Dub., Dublin; Edwin Woodward, Birmingham; and James Brown, Dudley Port (of the Birmingham School); Henry Case, Boxmoor; and John James Swindell, Finchley (of the Middlesex Hospital); Alexander Paul Fiddian, Bridgend, Glamorgan (of King's College); Samuel Edwin Solly, Savile row (of St. Thomas's Hospital); and Thomas Richardson Soy, L.S.A., Stokesley, Yorkshire (of University College).

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 2, 1867:—

William Edmund Richardson, Rochdale; Thomas Frederick Hopgood, Chipping Norton; Thomas Richardson Loy, Stokesley, Yorkshire; William Hubert Holmes, Cork, Ireland; George Pavey, Edmonton; Edward Dyer, Clerkenwell; Ernest George Thomas Llewellyn, Witheridge.

The following gentleman also, on the same day, passed his First Examination:—

Henry Arthur Allbutt, Leeds Medical School.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BATT, C. D., M.R.C.S.E., has been appointed Assistant House-Surgeon to the Sheffield General Infirmary.

LEAF, W., M.R.C.S.E., has been appointed one of the Surgeons to the St. Marylebone General Dispensary.

MORGAN, JOHN EDWARD, M.D., M.A. Oxon., M.R.C.P. Lond., has been elected Physician to the Manchester Royal Infirmary, vice Dr. Renaud, resigned.

OAKLEY, C., L.R.C.P. Edin., M.R.C.L.S.E., has been appointed Physician to the Salop Infirmary, Shrewsbury.

TIDY, C. MEYMOTT, M.B., C.M., has been appointed Assistant Lecturer on Chemistry at the London Hospital.

WALLER, J., M.R.C.S.E., has been appointed Resident Medical Officer to the Western General Dispensary, Marylebone-road.

WITHERS, W. O., L.R.C.P. Lond., M.R.C.S.E., has been appointed House-Surgeon to the Salop Infirmary, Shrewsbury.

WRIGHT, R. S., M.D., has been appointed Resident Physician to the Queen's Hospital, Birmingham.

BIRTHS.

ALDERSON.—On May 2, at 8, Grove-terrace, the Grove, Hammersmith, the wife of F. H. Alderson, M.R.C.S.E., of a daughter.

BARNETT.—On May 2, at Milford, the wife of Dr. H. C. Barnett, of a son.

INGLIS.—On May 4, at 9, Royal-terrace, Edinburgh, the wife of T. Inglis, M.D., F.R.C.S.E., her Majesty's Indian Army, of a son.

SCOTT.—On May 4, at Rombold House, Ilkley, the wife of T. Scott, M.D., of a daughter.

MARRIAGES.

BURY—COOPER.—On April 30, G. W. F. Bury, F.R.C.S., of Whetstone, to Mary Florence, eldest daughter of E. Y. Cooper, Esq., of Wincanton, Somerset.

GOLDSMITH—ROBINSON.—On April 30, at the parish church of St. Marylebone, J. Goldsmith, M.D., of Worthing, to Sophia Elizabeth Rowden, eldest daughter of the Rev. F. Robinson, rector of Stonesfield, Oxon.

GOODEVE—ALLEN.—On April 25, at Bosherston Church, Pembrokeshire, E. Goodeve, M.B., Deputy Inspector-General of Hospitals, Her Majesty's Bombay Army, Honorary Physician to the Queen, to Elizabeth Jane, eldest daughter of the Rev. W. Allen, rector of Bosherston and of St. Bride's, Pembrokeshire.

HUTCHINSON—HUGHES.—On May 2, at the parish church, Bushey, Herts, Dr. F. B. Hutchinson, of Brighton, to Alice, daughter of P. Hughes, Esq., Bushey. No cards.

MCCOY—RUSSELL.—On April 30, at the parish church, Westbury-on-Trym, R. W. McCoy, M.D., of York, Western Australia, to Geraldine Jane Loftus, second daughter of the late C. Russell, M.D., of Enniskerry, co. Wicklow.

DEATHS.

BLACK, JAMES, Esq., M.D., F.R.S.E., F.G.S., &c., at 2, George-square, Edinburgh (late of Bolton-le-Moors, Lancashire), on April 30, aged 79.

STADDON, LIZZIE ALICE, aged one year, the only daughter of J. H. Staddon, Esq., L.R.C.P. Edin., and M.R.C.S. Eng., at Ipswich, on April 4.

TRAER, J. R., F.R.C.S., of 47, Hans-place, Sloane-street, at Paris, on April 23, aged 34.

VACANCIES.

LEEDS PUBLIC DISPENSARY.—Resident Medical Officer; two Assistant Medical Officers.

LIVERPOOL DISPENSARIES.—Resident House-Surgeon; Assistant House-Surgeon.

ST. MARY'S HOSPITAL, PADDINGTON.—Physician; Lecturer on Botany.

WEST HERTS INFIRMARY.—House-Surgeon and Assistant Secretary.

WESTMINSTER HOSPITAL.—Resident House-Surgeon.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Ashbourne Union.—The Mayfield District is vacant; area 8603; population 3013; salary £25 per annum.

Pwllheli Union.—Mr. John Williams has resigned the Criccieth District; area 10,800; population 2451; salary £50 per annum.

Spalding Union.—The Moulton District is vacant; area 16,278; population 2889; salary £45 per annum.

APPOINTMENTS.

Birmingham Parish.—Lucius Warrillow, M.R.C.S.E., L.S.A., to the Seventh District.

Lambeth Parish.—Alfred O. Grosvenor, M.D. Edin., M.R.C.S.E., Resident Assistant at the Workhouse.

Leicester Union.—Julius St. T. Clarke, M.B. Lond., L.R.C.P., M.R.C.S.E., to the Workhouse.

Leominster Union.—Philip Cowen, M.R.C.S.E., L.S.A., to the First District and the Workhouse.

Prescot Union.—John Rayner, M.R.C.S. Edin., L.S.A., to the Prescot District and the Workhouse.

West Ashford Union.—Robert Skimming, M.D. Edin., M.R.C.S. Edin., L.M., to the Fourth District.

ILLNESS OF SIR WILLIAM LAWRENCE, BART.—We regret to learn that the venerable Sergeant-Surgeon to her Majesty was taken suddenly and seriously ill on Tuesday evening last.

DR. MEADOWS, late one of the Hon. Secretaries of the Obstetrical Society of London, has been elected Hon. Fellow of the Obstetrical Society of Berlin.

THE LAST MEDICAL BARONET.—We believe that we may congratulate our *confrère*, Dr. G. Duncan Gibb, on having established a claim on an ancient Scotch baronetcy, that of Gibb of Falkland, Fife. We only are sorry to hear that at present it is merely a barren dignity, but we trust that the estates will follow.

THE EPSOM MEDICAL COLLEGE.—The annual election of candidates on the foundation of this institution takes place at the Freemasons' Tavern, on May 29. There are, we hear, nine vacancies to be filled up. There will be no election of pensioners, no vacancy having arisen this year.

FEMALE BENEFICENCE.—Another instance of generosity on the part of a lady is furnished this week by the registry of a number of legacies to Medical and general charities under the will of Mrs. Frances Cox, of Lawford-place, Essex, who has bequeathed, free of legacy duty, £3000 to the Cripples' Home, Marylebone, £500 to the London Fever Hospital, and £200 to the Sick Ladies' Home.

THE TANCRED CHARITIES.—The report of the Charity Commission for 1866 contains a scheme which is to be submitted to Parliament for remodelling the Tancred Charities founded in 1754, providing a home at Whixley, Yorkshire, for twelve decayed gentlemen, and the education of twelve students for the learned professions. They state that the principle of the foundation at Whixley has proved unsound, and it is not expedient to continue that establishment; but the studentships have been productive of benefit. The scheme proposes (subject to existing rights) out pensions not exceeding £1200 a year in the whole, extending this part of the charity to include women, and the application of the residue of the funds to an increased number of studentships. The income of the charity exceeds £4000 a year. The scheme gives powers to the governors which would enable them to relax the regulation made by the founder, that the divinity students should be educated at Christ's College, Cambridge, the Medical at Gonville and Caius, and the law at Lincoln's-inn.

THE BROWN BEQUEST.—Another scheme to be submitted to Parliament with the consent of the Charity Commissioners relates to the foundation of Mr. T. Brown, who died in 1852, having made a bequest to the University of London for establishing (fifteen years after his death) an animal sanitary institution, for the cure of the maladies of quadrupeds or birds useful to man, the institution to have a resident professor who should give free lectures to the public; the bequest to revert (if the institution should not continue to be conducted agreeably to the will) to the University of Dublin for founding professorships of the Welsh and certain Oriental languages. The trust fund is about £30,000 stock. The income of that fund would not maintain an efficient institution of the character contemplated by the donor; but his benevolent purpose would be effectually promoted by the application of the income to the improvement of veterinary science and practice. The senate of the University therefore recommend the institution of a department in which intending veterinary practitioners may submit themselves to progressive examinations, to be followed by the award of exhibitions and prizes, and by marks of honourable distinction, as well as certificates of proficiency; any remaining surplus of the income to be applied in other ways to the general diffusion and advancement of veterinary science. The Charity Commissioners, assenting to these views, have provisionally approved a scheme for carrying them into effect.

UNIVERSITY COLLEGE, LONDON.—FACULTY OF MEDICINE.—The distribution of prizes will take place on Monday, May 13, 1867, at 3 o'clock p.m. precisely. The Right Hon. Edward Cardwell, M.P., will preside.

ST. BARTHOLOMEW'S HOSPITAL.—The following testimonial has deservedly been presented to the late Senior Surgeon of the above institution. It is an elegant specimen of caligraphic skill on vellum, and records that "At a general Court of the Governors of St. Bartholomew's Hospital, held on Tuesday, the 9th day of April, 1867, it was resolved unanimously that this Court, in receiving the resignation of Thomas Wormald, Esq., the Senior Surgeon of this Hospital, sincerely regrets that the time has arrived when, in conformity with the rules and orders of the Hospital, such resignation should be tendered. That the Court cannot permit the long, faithful, and efficient services of Mr. Wormald to terminate without expressing its high sense of the admirable manner in which those duties have been performed, and specially marking the humane and unremitting attention ever manifested by him towards the poor patients committed to his charge during the long period of nearly thirty years in his capacity—first as Assistant-Surgeon, and subsequently as Surgeon. And further, that, to evince its appreciation of Mr. Wormald's Professional skill and length of service, this Court unanimously appoints him Honorary Consulting-Surgeon, under the conviction that it will gratify Mr. Wormald to have his name associated with the Hospital which he has so long, well, and faithfully served; and the Governors heartily pray that it may please the Almighty to continue to Mr. Wormald for many years uninterrupted happiness and prosperity, that he may be enabled to devote all the great skill, energy, and power of which he is still happily possessed to the benefit of suffering humanity.—W. FOSTER WHITE, Treasurer."

ROYAL INSTITUTION OF GREAT BRITAIN.—At the general monthly meeting held on Monday, May 6—Sir Henry Holland, Bart., M.D., D.C.L., F.R.S., President, in the chair—Henry Cosmo Bonsor, Esq.; Colonel Charles Douglas, R.A.; Frank Clarke Hills, Esq.; Arthur Thompson, Esq., were elected members of the Royal Institution. The following Professors were re-elected:—John Tyndall, Esq., LL.D., F.R.S., as Professor of Natural Philosophy; Edward Frankland, Esq., Ph.D., F.R.S., as Professor of Chemistry. The presents received since the last meeting were laid on the table, and the thanks of the members returned for the same.

THE QUEEN'S COLLEGE, BIRMINGHAM.—(Rolls' Court, May 7: Before the Master of the Rolls.)—The Court was asked in this case to approve a new scheme as settled by the Attorney-General for the management of this institution, which was considerably in debt, and principally supported by voluntary annual subscribers. The scheme suggested that these subscribers should form the future governors of the college, with power to elect the collegiate officers, etc., and that the college should be severed from the Hospital, with which it was now associated. His Lordship said that the scheme had already received the approval of two successive Attorneys-General, and, on the whole, was entitled to the sanction of the Court.

FRENCH PIGS.—Of the live-stock I can only say that as yet it is unimportant. There was a much more important show the other day at Poissy, which I think I shall always remember, not because I saw it, but because of a criticism on it which appeared in the newspaper *La France*. All the journals spoke well of it, but *La France* came forth nobly. After dilating with enthusiasm on the various classes of animals, the critic got up at last to the pigs. "*L'espèce porcine*," he said, "*n'a jamais été si brillante. On ne rencontre pas un seul porc médiocre.*"—*Paris Correspondent Times.*

GIBBON'S HYDROCELE.—Astley Cooper, while an apprentice, was present at Gibbon's autopsy, and has left us an account of it. The great historian was found to be the subject of an extraordinary scrotal hernia. The term extraordinary cannot be regarded as misapplied when it is recollected that almost the whole of the intestines capable of displacement had quitted the cavity of the abdomen, the pylorus itself having descended as far as the orifice of the hernial sac, and the ring being wide enough to admit the hand. Below the sac there existed a distinct cavity, capable of containing several pints of serosity, and reaching within an inch of the knee. This example of hydrocele appended to a hernia is, however, almost as nothing compared with a case met with by M. Bouisson, of Montpellier, in a man 52 years of age. It may be described as having the appearance of a second abdomen appended to the ordinary one. This supplementary abdomen is 50 centimetres long, and measures 1 metre 80 c. in circumference, having the volume of a large gourd, and descends lower than the knees. Its upper half is evidently occupied by the whole mass of intestines and omentum, and its lower portion by a serous collection. A first puncture, February, 1866, discharged 16 litres of liquid; and a second, in December, furnished 26 litres. To this combination of voluminous hernia with hydrocele M. Bouisson proposes to give the name of "Gibbon's Hydrocele." What will the manes of the illustrious author of the "Decline and Fall" think of this?—*Union Méd.*, No. 31.

OBSTETRICAL TEACHING IN PARIS IN 1831.—Von Siebold writes that, visiting Paris so late as 1831, he was surprised to find that there existed no public establishment for the instruction of the Medical students in midwifery—Paul Dubois, in fact, having organised the earliest means of practical instruction only in 1835. Until then all the instruction derivable was obtained in what were called *salles d'accouchement*, where midwives brought women just about to be confined, and took them away again immediately after delivery. In those days *midwives* announced, by placards and emblems of all kinds, that they delivered courses of lectures to the students. One of these placards ran as follows:—"Madame Dutilleux, *maîtresse sage-femme jurée*, admitted by the Paris Faculty, who has been for a number of years an authorised teacher of Obstetrical Surgery to Messieurs les Elèves en Médecine, continues to give lectures daily throughout the scholar year on the theory and practice of midwifery." "On my asking," says Von Siebold, "why an establishment so necessary for the students was wanting, I was told on several occasions, 'It would be against morality.' Morality in Paris! Thanks to the efforts of Paul Dubois, this *lacuna* has since been filled. On the other hand, I saw the magnificent Maternité devoted exclusively to the instruction of midwives; and it was with difficulty I could gain admission, and that only after I had displayed to Madame Legrand, the chief *sage-femme*, my titles of Obstetrical Professor and Director of an Obstetrical Clinic. Even then I was allowed only so superficial an inspection that I besought Cruveilhier, at that time Surgeon to the establishment, to let me accompany him on his daily visit, which he most kindly agreed to."—*Von Siebold, Lettres Obstétricales traduites par Stoltz.*

BISMUTH.—A discovery has recently been made in South Australia of a lode of bismuth, samples of the metal being now to be seen at the Melbourne Exchange, to which place it has been sent from the neighbouring colony. This metal is very valuable if found in quantity, and it is stated that the lode discovered contains abundance of rich stuff; but being situated about two hundred miles in the interior, some serious difficulties in the cost of carriage have been encountered. Trouble was also experienced in getting the metal smelted, but a quantity of it was sent to England in ingots a few days ago, and it is expected the supply will be kept up.—*Melbourne Age.*

COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN APRIL, 1867.—The following are the returns of the Metropolitan Association of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Loss by Ignition.(a)	Oxidisable Organic Matter.(b)	Hardness.	
				Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction	20·33	0·70	0·81	12·5	4·0
West Middlesex	19·67	0·75	0·68	12·0	3·5
Southwark and Vauxhall	19·67	0·50	0·70	12·5	4·0
Chelsea	20·00	0·60	0·68	12·5	4·0
Lambeth	19·87	0·60	0·70	12·5	3·5
Other Companies.					
Kent	27·40	0·10	0·00	16·0	9·0
New River	18·40	0·51	0·52	12·0	4·0
East London	20·00	0·50	0·50	13·0	5·0

(a) The loss by ignition represents a variety of volatile matters as well as organic matter, as ammoniacal salts, moisture, and the volatile constituents of nitrates and nitrites.

(b) The oxidisable organic matter is determined by a standard solution of permanganate of potash, the available oxygen of which is to the organic matter as 1 is to 8; and the results are controlled by the examination of the colour of the water when seen through a glass tube two feet in length and two inches in diameter.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Bristol.—Write to the Medical Officer of Health for the borough.

Coming Events, etc.—The *Pall-mall Gazette* speaks of the learned and indefatigable Medical Officer of the Privy Council as *Sir* John Simon.

Kilkenny Moderator.—The "Black Death" of the present day is typhus with petechiæ.

J. S.—We cannot undertake to prescribe for patients, nor to recommend Medical men. If J. S. will live a chaste life, consult some respectable Surgeon or Physician, and do as he is advised, he will doubtless recover his health.

Dr. Williams.—Percival's "Medical Ethics" will give you the desired information. Consult also Wilcock's "Laws relating to the Medical Profession."

Dr. Thomas.—Sir Richard Blackmore, although a very amiable man and a distinguished Physician, did not escape the satirical shafts of Pope, who wrote—

"Would'st thou be damn'd at once, and perish whole,
Trust Blackmore with thy health, and Melbourne with thy soul."

He was a great friend of, and highly respected by, Sir Hans Sloane. The celebrated philosopher Locke took his degree of Bachelor of Physic February 6, 1674.

Dr. Thompson is thanked. It was William Turner, M.D., who was also Dean of Wells. He was the author of the first English Herbal, which was in great estimation before old Gerard's.

A Third Year's Student.—It will be necessary that you return at once to register, and, under the peculiar circumstances, no doubt you will be allowed to make good the trifling error.

Dr. Andrews.—The speech was attributed to Dr. Hoadley that "the *errors of Physicians* afford no reason against taking *physic.*"

Arthur Wilson.—You will find the account in the Life of Edmond Malone, by Sir James Prior, who states that the celebrated Sterne was buried in a graveyard near Tyburn, belonging to the parish of Marylebone; that the body was raised by some "resurrection men," and sent off to an anatomical Professor at Cambridge.

L.S.A.—Mr. Burgess, Apothecary to James II. and William II., was a Privy Councillor. The celebrated ring given by Queen Elizabeth to the Earl of Essex was long in the possession of the Warner family. The last of the family in possession of the relic was Mr. Joseph Warner, a member of the Council of the College of Surgeons.

A Physician's Appetite.—It is stated that the celebrated Dr. Fordyce dined every day for more than twenty years at Dolly's Chophouse. His researches in comparative anatomy had led him to conclude that man, through custom, eats oftener than nature requires, one meal a day being sufficient for that noble animal, the lion. At 4 o'clock, his accustomed hour of dining, the Doctor regularly took the seat at a table always reserved for him, on which were placed a silver tankard full of strong ale, a bottle of port, and a measure containing a quarter of a pint of brandy. The moment the waiter announced him, the cook put a pound and a half of rump steak on the gridiron, and on the table some delicate trifle as a *bonne bouche*, to serve until the steak was ready. This was sometimes half a broiled chicken, sometimes a plate of fish. When he had eaten this he took one glass of brandy, and then proceeded to devour his steak. When he had finished his meal, he took the remainder of his brandy, having during his dinner drunk the tankard of ale, and afterwards the bottle of port. He thus daily spent an hour and a half of his time, and then returned to his house in Essex-street to give his 6 o'clock lecture on chemistry. He made no other meal until his return next day at 4 o'clock to Dolly's.

Position in Protracted Labour.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—If Mr. F. W. Clarke will examine the second volume of the *Transactions* of the London Obstetrical Society, he will find, at page 79, an article on "Special Position and the Obstetric Binder," in which his treatment of protracted labour is exceedingly well advocated and recommended. The paper is by R. Hardy, Esq., M.R.C.S., etc.

I am, &c. John Brunton, M.D.

207, Caledonian-road, May 4.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In reply to your correspondent, Mr. Francis Winter Clarke, I may state that I saw the practice to which he refers adopted in a case at the Rotunda Lying-in Hospital, Dublin, by the master, Dr. Denham, in 1865.

I am, &c. Wm. Vawdrey Lush, M.D.

Weymouth, May 8.

Dr. Macloughlin on Cholera.

The following has been sent us for publication:—

(Copy.)

John Simon, Esq., Medical Officer to the Privy Council.

Sir,—As cholera cases have manifested themselves here in London and in Paris, it is to be apprehended that this early outbreak will be as fatal as it was in 1832. You are aware that this disease has never been scientifically studied in any country; that this country forms no exception to this rule; and that, as a rule, the Medical treatment in this country, in our colonies, and in India, assists the disease to destroy life. Therefore, in the interest of the public, in the interest of humanity, permit me to call your attention to the necessity to have the pathology, the etiology, and the Medical treatment scientifically studied. And permit me to suggest that the Royal College of Physicians of London, as the only competent Medical authority in this country, be called upon to carry out this inquiry. I have the honour to be, Sir,

Your obedient servant,

David Macloughlin, M.D., Member of the Legion of Honour.

36, Bruton-street, Berkeley-square, W., May 7.

Army Medical Officers.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In reply to an "Assistant-Surgeon, Netley," you give an incorrect statement of the military precedence of Medical officers on the authority of "Dod's Peerage."

All Medical officers, except Surgeons-Major, take precedence, according to dates of commission, with the military officers of corresponding rank. Surgeons-Major rank with, but after, Lieutenant-Colonels, because the Deputy Inspectors-General of Hospitals, under five years' full-pay service, rank with Lieutenant-Colonels according to the dates of their respective commissions.

The editor of "Dod's Peerage" appears to be rather ignorant of the Royal Warrant of 1858. I am, &c. A Surgeon.

"New York Milk from the Cow."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Under the above heading some remarks on an article in the current number of *Fraser's Magazine* appear in this day's journal. I know that many readers of this article have been struck with terror lest the abominations said to be practised in New York should find imitators in London; but surely their alarm is groundless, for, whether the writer in *Fraser* has been hoaxed or is amusing himself with hoaxing others, certain it is that a more ludicrously untrue story was never imposed upon the public. We are told that the cows kept in the underground cellars of New York are so closely packed together that not only are they unable to lie down, but that, when one dies, the pressure of its neighbours prevents the body from falling to the ground. Then as to the food. We know how large an amount of solid material is necessary to supply the capacious digestive organs of a ruminant, and yet we are expected to believe that the cows are fed wholly on the fluid refuse which runs through pipes from a distillery, and that some of the animals live as long as five years without any solid food whatever, and yet continue to yield milk all the time. Just as if the mammary glands were mere filters, through which any quantity of fluid might be poured with the certainty of its turning into milk!

Then we are told that the cows' teeth fall out; also, that their tails rot off, in consequence of an inoculation which is practised upon them as soon as they are admitted into these dens of horror, and the stumps "look like a row of clothes-pegs along each side of the stall." In short, the whole article is about as credible as the story we had some years ago from America, describing the hidden city of the Aztecs, where the cocks were kept underground for fear their crowing should lead to the discovery of the mysterious capital.

If the use of distiller's refuse, in combination with their ordinary food, injures the health of the New York cows, by all means let the fact be made known; but such a cock-and-bull story as this in *Fraser's Magazine* defeats its own purpose, and can only provoke the ridicule of thinking readers. I am, &c.

Portman-square, April 20. James Dixon.

The Bohemian Hospitals in the late War.

A controversy has arisen between the two great Medical authorities, Professor Langenbeck, of Berlin, and Professor Dumreicher, of Vienna, as to the state in which the Hospitals of Bohemia were found when they were made over by the Prussians to the Austrians. Professor Dumreicher has just published a pamphlet in which he repeats his former accusations, and brings documentary evidence to prove that many of the Hospitals, especially those which were not subject to frequent visits from higher military and Medical authorities, were found in an abominable and filthy state. The wounded men were disgracefully neglected by the Prussian Surgeons, and the mortality was frightful. At Vsetar, seventy-two wounded men were under the care of one Surgeon and three students, but the Surgeon only showed himself every two or three days, students once a day, and their patients were left to the care of a few Hospital attendants. The state of the Hospital at Skalitz in September, ten weeks after the battle, was such that "it is hardly possible to describe it. . . . The floor had never once been washed," writes the Austrian Surgeon, Dr. Hauer, to whom it was made over by the Prussians.

From Trautenau, Dr. Baron Mundy writes on September 12:—

"All the patients were in the highest degree unclean and neglected, their bodies not washed for weeks; their body and bed linen, unwashed for weeks, were full of . .; straw pallets and mattresses were partially rotten, rooms unwashed, utensils unclean. No attempt at disinfection. Filth lay about everywhere. . . A ditch 12 ft. long, 4 ft. wide, and 6 ft. deep was filled up with the filth that lay about the Hospital, the cellar, and barrack No. 1."

The pamphlet is full of similar evidence in support of Professor Dumreicher's former accusations, and it behoves Professor Langenbeck, if he desires again to defend the fame of his colleagues in the army, to do something more than assert that Professor Dumreicher must have picked up his stories of the ill-treatment of the Austrian wounded from some old woman in Bohemia.—*Austrian Correspondent of the Times.*

Original Letters of John Hunter.

We have much pleasure in publishing the following letters by the celebrated John Hunter, which have been sent us by a correspondent:—

Dear Brother,—I have been very impatient to hear from you this long while, I wrote you some time ago, giving a hint about yours to Portugal, if we should be removed from this place, but as that is not likely to be the case, I am very well contented where I am, as my present pay is more (perhaps) than what I should then have. I have been employ'd ever since General Hodgson went in inspecting and directing the Regimental Hospitals this obliges me to keep a Horse and a great deal more trouble as this is intirely new, and not in my absolute duty I do not see why I should not be pay'd for it, as I have 20s. a day already. I wish it could be brought about to give me a commission where I should have 20s. a day by which means I should have ten shillings a day half pay, my titles and business are at present many I am called Surgeon-General, Deputy

Purveyor, and inspector and director of the Regimental Hospitals. I could wish that you would give a hint of this to Mr. Adair who I hope is my friend. if a letter from Mr. Lambert who is our Commander was necessary I flatter my self I should have it. I am sensible how dissagreeable all this is to you, but as it is likely to be the last effort for advancement, I take this liberty. I should be glad to see the London observations and your answer to Monro. I am now thinking seriously about the Lock'd-jaw for I have had 10 cases under my own care, two have got well, and one is still doubtful. I believe I have given opium in greater quantity than ever it has been given.

I should be glad to hear from you soon and believe me to be most sincerely, Your affectionate Brother,

Belleisle March 23, 1762. JOHN HUNTER.

Dear Brother,—I this moment received yours. I have only time to tell you that I am sorry that you should have had so much trouble concerning me, but I am very well satisfied with my destination, supposing that I loose ten shillings a day by it, I have not yet recd. your answer to Monro nor the London Essays. I am glad to find that Monro gives up these three material points, vizt. that there is no particular duct from the epidedimus, that there are Lymphatics in Fowls, and that the red veins do not absorb, but I hope that he does not call these discoverys of his, his own, I hope that he allows that it belongs to the Hunters. I am obliged to be Physician and everything here, and I think I do as well as the best of them, but I hope to make the affair of Gun shot wounds appear in another light than what they have done, another campaign will compleat me. As to my affairs in London I believe that you need not scruple to let Mrs. Evans have what money she wants upon my account, in gratuity besides payments (if I am ever able) you have my most greatfull acknowledgment of the obligation. Dear Brother whatever hapens I shall always suppose that it is the best that can be done for I cannot suppose that my friends neglects me. Please to give my compts to all that think that I am worth their enquiry and believe me to be most sincerely your most affectionate Brother,

Belleisle May 28th 1762. JOHN HUNTER.

Excuse the cloth for there is no good paper to be got here I had forgot to acquaint you that it is my arrears and my Irentiers that you are to receive ever since we both comenced soldiers.

Dear Brother,—Poor Cheeland importuned so much with Tears in his eyes, for me to deliver the inclosed to you, that I could not possibly refuse. If I could have afforded it, I would rather have given him the money than been the means of conveying a letter to you, which it seems you had refused to see. The poor Devil wants five guineas to carrie him to Hull, where he proposes staying to all eternity, and never plaguing you more. If it is contrary to any resolution to assist him you will be so good as to let me know. He is to call upon me on Thursday morning.

If it would be proper and right in me to call upon Lady Hartford by the way of civility you will be kind as to inform me of it.

Yours most sincerely,

Jermyn-street, Tuesday Evening JOHN HUNTER.

To Dr. Hunter.

COMMUNICATIONS have been received from—

Mr. CHARLES LEE; Mr. J. Z. LAURENCE; A SURGEON; Dr. MACCORMAC; L. M. E.; Dr. JAMES ARNOTT; Mr. F. W. CLARKE; Mr. FURNEAUX JORDAN; Mr. J. B. CURGENVEN; Dr. JOHN BRINTON; Mr. JOHN HANTON; Dr. VIVEN; Dr. W. V. LUSH; Mr. BLACK; Mr. G. A. ROWELL; Mr. C. C. ATKINSON; Dr. MURCHISON; Dr. MACPHERSON; Dr. B. W. RICHARDSON; Dr. HUGHLINGS JACKSON; Mr. J. CHATTO; Mr. BUXTON SHILLITOE; Dr. W. PIRRIE; Rev. Dr. S. HAUGHTON; Mr. C. C. BLAKE; Dr. CHOLMELEY.

BOOKS RECEIVED—

Watts's Dictionary of Chemistry, Part 39—Vintras's Repressive Measures—Drysdale on Infanticide—Curgenven's Infant Life—Meteorological Almanac; Forbes on Happiness in its Relations to Work and Knowlege, second edition—The Seaside Register of Houses to Let—Journal of Anatomy and Physiology, May—Medical Mirror, No. 41—Brande's Dictionary of Science, Literature, and Art, three volumes—Porter's Surgical Reports—Catlow's Principles of Æsthetic Medicine—The Dublin Quarterly Journal of Medical Science, May.

NEWSPAPERS RECEIVED—

The Laboratory—Gazette Hebdomadaire—Medical Press and Circular—The Islington Gazette.

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 4, 1867.

BIRTHS.

Births of Boys, 1193; Girls, 1188; Total, 2381.
Average of 10 corresponding weeks, 1857-66, 1914·9.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	642	595	1237
Average of the ten years 1857-66	634·1	613·9	1248·0
Average corrected to increased population..	..	..	1373
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,388	3	2	1	..	6	5	2	..
North ..	618,210	8	3	7	7	10	11	2	..
Central	378,058	2	1	1	1	4	4	3	..
East ..	571,158	7	1	4	2	6	9	4	..
South ..	773,175	6	3	6	3	10	7	4	..
Total ..	2,803,989	26	10	19	13	36	36	15	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·779 in.
Mean temperature	51·5
Highest point of thermometer	68·4
Lowest point of thermometer	35·3
Mean dew-point temperature	42·7
General direction of wind	Variable.
Whole amount of rain in the week	0·22

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, May 4, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending May 4.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending May 4.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	2381	1421	1237	68·4	35·3	51·5	0·22	22
Bristol (City) . .	165572	35·3	127	74	‡60	70·0	36·3	51·6	0·26	26
Birmingham (Boro')	343948	43·9	257	167	129	69·7	35·1	50·8	0·22	22
Liverpool (Borough)	492439	96·4	461	285	241	70·1	40·0	54·4	0·36	36
Manchester (City) .	362823	80·9	286	205	‡189	72·0	35·0	51·5	0·30	30
Salford (Borough) .	115013	22·2	110	58	57	70·5	34·0	50·8	0·41	41
Sheffield (Borough).	225199	9·9	211	119	108	71·5	33·5	49·4	0·25	25
Leeds (Borough) .	232428	10·8	238	118	115	..	..	..	..	..
Hull (Borough) .	106740	30·0	73	49	46	..	..	..	..	..
Nwcstl-on-Tyne, do.	124960	23·4	90	66	68	65·0	40 0	47·6	0·48	48
Edinburgh (City) .	176081	39·8	136	85	82	58·7	38·0	47·1	0·60	61
Glasgow (City) .	440979	87·1	384	257	258	60·6	36·1	48·3	0·55	56
Dublin (City and some suburbs) .	319210	32·8	175	†157	147	70·6	32·5	52·3	0·42	42
Total of 13 large Towns . . .	6187764	34·8	4929	3061	2737	72·0	32·5	50·5	0·37	37
					Week ending April 27.	Week ending April 27.				
Vienna (City) . .	(1863) 560000	..	..	..	383	..	..	§ 57·4	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·779 in. The barometrical reading increased from 29·41 in. at the beginning of the week to 30·00 in. on Friday, May 3.

The general direction of the wind was variable.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 48·7°.

APPOINTMENTS FOR THE WEEK.

May 11. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Prof. Huxley, "On Ethnology."

13. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

NATIONAL ASSOCIATION OF SOCIAL SCIENCE (Health Department), 8 p.m. Adjourned Debate on Mr. J. Brendon Curgenven's paper "On the Waste of Infant Life."

14. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ANTHROPOLOGICAL SOCIETY OF LONDON, 8 p.m. Meeting.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Dr. John Harley, "On Cysticercus of the Brain." Dr. Edward Ballard, "On the Influence of Weather and Season upon Public Health." Mr. E. Wilson, "On Change of Structure of the Hair produced by Syphilis."

15. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 2 p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.

16. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

HARVEIAN SOCIETY OF LONDON, 8 p.m. Mr. Berkeley Hill, "Historical Sketch of the Treatment of Syphilis without Mercury."

17. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.

ORIGINAL LECTURES.

LECTURES ON EXPERIMENTAL AND PRACTICAL MEDICINE.

By BENJAMIN W. RICHARDSON, M.A., M.D., F.R.C.P.,
Senior Physician to the Royal Infirmary for Diseases of the Chest.

ON THE INFLUENCE OF EXTREME COLD ON NERVOUS FUNCTION.(a)

(Continued from page 490.)

Influence of Extreme Cold on a Nerve-cord.

When a compound nerve-cord supplying voluntary muscle is subjected to cold in the same gradational manner I have described in the preceding experiment, there is first subjectively evoked, as I find by acting upon the ulnar nerve, some over-action, causing sensation towards the distal extremity of the limb. At the same time the will controls the muscular motion, and there is no trace of convulsion. As the nerve-tissue becomes actually frozen, sensation is entirely destroyed at the part acted upon, and, as we learn by operation—especially by the operation of nerving in the horse—the frozen nerve-cord may be cut through without any pain whatever being elicited; this is true, also, of the human subject, as I have witnessed during operations where the frozen trunk has been divided. The objective signs presented by the experiment are striking. At first the nerve is seen slightly coloured, then it suddenly becomes intensely white, very hard, and, I had almost said, of dull metallic lustre. This occurs whether the nerve be living or be just dead. I can, therefore, show you frozen nerve-cord by experiment. We have here a portion of nerve-cord, which we place in this glass tube. We direct our spray on this tube until the nerve within is frozen. Now I pass the frozen nerve round, in order that those of you who get it before it is thawed may compare it with the other unfrozen portion of nerve that accompanies it. In time the nerve relaxes as the cold is withdrawn, and assumes, with little so-called reaction, its natural character.

And here let me demonstrate a new and curious fact in reference to the power of the nerve trunk to convey an electrical current. To carry us on from step to step, we will start with a portion of perfectly desiccated nerve. The nerve has been dried at a temperature below 100°, and wants only so much water to make it active nerve again. We try to make, then, this dried nerve form a portion of a circuit of a weak continuous galvanic current derived from one of Mr. Pulvermacher's beautifully constructed chains. We test for the current with this large but delicate galvanometer, fitted up for the present occasion by Mr. Pulvermacher, and the result is that we find no indication of any transmission of current. We turn to a small and much more delicate galvanometer, and still there is no current. The desiccated nerve does not conduct, and the current is arrested in its course. We take now a portion of fresh nerve, and place it in a glass tube. We try to make this piece of nerve form part of the circuit of a feeble galvanic current, and we test for the current. You will see at once the rapid deflection of the needle of the large galvanometer; the needle moves twenty-six degrees on the dial. This nerve matter, consisting of water, fat, and albumen, conducts; it does not conduct like metal wire, but it conducts well.

We will make a third change: we will take a portion of fresh nerve fibre, placed in a glass tube, as in last experiment, and freeze it as fully as we should need to freeze it if we wanted in the living body to cut off sensation by the process. We now test again for the electrical current, making the nerve act as a part of the circuit; and although this time I should fail to show a current with the large galvanometer, I shall find it here in this small and very delicate instrument. Observe how true this is: the needle moves twenty-five degrees, showing positively the passage of a current. In this experiment we have an analogous phenomenon to that which occurs when, pressure of a mechanical kind having been applied to a nerve, an electrical current is transmitted through the compressed part. By pressure we can cut off all sensation, but yet, when we test the conducting power, we can find there is still a passage of the galvanic current.

We must not, however, spring at the conclusion that we cannot by any degree of cold stop the transmission of the electric current through the nerve. We can do this by continuing the freezing process until every portion of the nerve is rendered equally inert, and all the water of the nerve-tissue is converted into ice. Then nerve matter becomes composed of two separated constituents, both imperfect conductors, so-called non-conductors—viz., of water now in the form of ice and of solid nerve matter. In this state the nerve is virtually disorganised—that is to say, its natural parts are disarranged and altered in physical quality, and then there is no conduction of electricity. In this case again, pressure may afford us an analogous condition—that is to say, if we carry pressure on nerve to the extent of breaking up the nerve-tissue and dividing it, we destroy the power of transmission. At the same time there is a marked difference of result; the frozen nerve by care in its treatment will recover at once, but the nerve injured by pressure is usually injured beyond all recovery.

Experiments on the influence of galvanic action on frozen nerve may be made with effect and with wonderful precision, because without pain, in a living animal rendered for the time dead generally to excitement and suffering. If in this condition the sciatic nerve of a large rabbit be laid bare, and, without dividing it, a feeble galvanic current be passed through a portion of the nerve (say half an inch) well insulated, the galvanometer will demonstrate the free passage of the current, and, coincidentally with the deflection of the needle, there will be a convulsive twitch in the muscles of the limb supplied by the nerve. If we now freeze the nerve in the part included by the needles, we can watch all the gradations from the natural state up to the state of absolute freezing of every part of the nerve-cord. At first the needle will be deflected, say forty degrees, and the muscles, with each make or break of contact of the battery, will twitch vigorously. As the chilling progresses, the action of the needle will continue until the moment of actually freezing; and even now, although sensation would be cut off, there will be some indication of current by the needle, and also indication of movement in the muscles. At last, the extremest degree of freezing having been carried to every portion of the nerve fibre, the needle stands motionless, and the muscles, the same as the needle, forbear to give any sign of action.

In this inactive state we can hold the parts for long periods of time if we please, and then, by withdrawing the cold and allowing slow reaction, we can restore them to their natural functions.

One other point is worthy of notice, and it is this:—that if the nerve be fully frozen, not between the two poles including the nerve, but above them—that is to say, on the brain side—the muscular motion previously produced by making and breaking contact is as completely checked as when the frozen part itself forms the portion of the circuit, the motion being equally restored as the part is allowed to recover its usual temperature.

Thus we learn that the function of a compound nerve can be destroyed as effectually by extreme of cold as it can be by excessive pressure, or even by actual division. But there is this grand difference: in the first case the structure of the nerve is dangerously injured, if it be not actually destroyed; while in the latter case there is no positive injury, but merely and solely a temporary, but for the time total, extinction of function. These effects of cold on the animal body seem to me to be developed in every part, in every structure. By removing force we destroy action, or, in other words, those phenomena which exhibit matter under the influence of force; but we in no way injure matter so as to disenable it from further work. Resupply it with the force taken from it, and it is as ready again for function as if nothing had happened.

If we pass from nerves of a compound character to nerves supplying semi-voluntary muscles or voluntary muscles, the objective changes in the nerve itself are the same as before stated in relation to compound nerves. But there are other phenomena of a remote kind developed in the muscular parts supplied by the nerve. Thus, if we lay bare the phrenic nerve and apply the spray to it at one section, there is at first violent excitation of the diaphragm—action that is so violent it can be heard, I may say, as well as seen. In time this action becomes subdued, and as the nerve is frozen through its entire structure, there is sudden cessation of movement of the diaphragm and rigidity of the muscle, which lasts until the nerve is thawed, when the natural action is restored.

(a) Delivered on Tuesday, May 7, 1867.

On the Influence of Extreme Cold on the Cerebrum.

The facts relating to the influence of extreme cold on the living cerebrum are so striking that unless they are actually witnessed they are scarcely to be realised by the mind. At the same time they are so simple they can be demonstrated by any careful experimentalist.

And first I would observe that the cerebral structure while yet alive undergoes, on exposure to cold below freezing point, the same changes as other living structures under the same influence. The structure can be frozen as hard as bone, but the time required for freezing it is longer than is required for skin, and the depth of surface frozen is slighter. When quite frozen, brain-surface has a white, almost metallic, appearance.

In some cold-blooded animals, as in frogs, the process of freezing the cerebral organs with active ether is a matter only of a few seconds, and is much better as an experiment than the ablation that up to the present time has been practised. At first the process of cutting off the cerebral action by the cold destroys conscious effort on the part of the animal, but in a little time, even if the frozen state be well sustained, there are apparent evidences of conscious acts, of what may be called in these animals spinal consciousness. There is apparently conscious movement, and there is natural breathing and pulsation; but there is this one peculiarity—that, although the limbs move when touched or irritated, the movement is clearly not from pain; it does not follow the application of the irritant immediately, but after some hesitation; it is what is sometimes called a reflex movement, but what ought to be called an *indirect* movement. By increasing the irritation, this indirect spinal movement can be made convulsive in character, and even tetanic. This is due clearly to the condition of the spinal cord, which is receiving, or rather sustaining, the force that ought to be distributed equally through it and through the cerebral ganglia; for if in this condition we play a jet of ether on the spine, we excite convulsion, stage of pre-action; but if we go on so as to extract more force, we produce paralysis of an universal kind, and even death. Presuming we do not interfere with the cord, and, having frozen the cerebral organ, allow it gradually to come back to its usual state, there is always perfect recovery on the part of the animal. These observations on frogs are fully confirmed by the experiments of Mitchell, as far as his experiments with the same creatures extend. He says, speaking of frogs, "When the rhigolene jet" (Mitchell in his inquiries uses often a petroleum called rhigolene in place of ether) "is thrown upon the region of the brain, the functions of this organ are abolished for a time, and the frog exhibits the phenomena which are common to this animal when it is decapitated. A jet cast on the spine occasions spasmodic movements of the legs, and at intervals violent tetanic contractions. After a few minutes the frog is able to crawl, but it does not recover the power to leap, its usual mode of locomotion, until a longer time has elapsed. Recovery is always perfect, and there are no backward movements."

I have one remark more to make on the subject of freezing the cerebrum in frogs. When the cerebrum alone is frozen, the act is so sudden that the animal becomes insensible at once, without any sign of that pre-excitement which I have called the stage of pre-action. But after the brain has been rendered inactive, and when by that means the spinal cord has become surcharged with force, then, by directing the ether on the over-excitable cord, a stage of preaction, even in this, a cold-blooded animal, is definitely produced.

The influence of extreme cold on the living cerebrum of a warm-blooded animal is still more remarkable. In young animals, where the bones of the head are thin and almost membranous, the cold can be applied to the extent of freezing the cerebral substance without any preparation of the animal. In extremely cold weather, as during the late winter, the freezing process can be sustained for many hours without any risk to life; in warm weather there is a difficulty in restraining the reaction, and there is therefore danger.

The phenomena presented on freezing the living brain of a warm blood are as follows:—There is first produced a soothing effect, followed in a short time by a stage of excitement, in which stage or degree common sensibility is to a very large extent lost. The muscular power of the animal is unbalanced. This stage is identical with the degree of narcotism from a general anæsthetic called by Dr. Snow the second degree. The cold being continued, the animal gradually lapses into profound stupor and complete general anæsthesia, in which state it may be kept for a long time by sustaining the cold. Young animals can thus be made artificially to hybernate, and in this state any Surgical operation can be performed without pain.

The time and form of the recovery turns entirely on the mode in which the process of recovery is allowed to take place. If the animal be placed in a temperature not above 45° Fahr., and not below 35° Fahr., it will gradually recover without showing any excitement whatever. It will slowly awake, as from a long, and deep, and pleasant sleep. In other words, by virtue of the slow restoration of function incident upon the slow thawing of the brain structure, the stage of reaction will not be visibly manifested.

If, on the other hand, the animal be placed, while the insensibility is complete, in a higher temperature, say even in a temperature of 60° Fahr., then it will not recover so easily; then from the deep sleep there will be a passage into restlessness, and from restlessness, it may be, into convulsion. If the symptoms be not severe, there will be reeling and rolling of the body, as in drunkenness, imperfect action of the limbs, and slower recovery.

With due care in the experiment, it does no harm to sustain freezing of the cerebrum for a long time. During the intensely cold weather of the late winter I put a pigeon to sleep by freezing the brain, and laying it, quite insensible to all the outer world, on the table of the laboratory, the air of the laboratory being at 32°, I kept up the effect, by an occasional breath of ether, for seven hours—viz., from 10 o'clock in the morning until 5 in the afternoon. Then the animal was put in a comfortable hutch, with another bird of its own kind. At 7 o'clock it was asleep, but could be roused, and on the following morning it was as well and as lively as its fellow; indeed, it could not have been surmised by any one who knew nothing of the facts that the animal had been in any way disturbed or removed from its usual state of existence. Wound up with the force latent in food, it took on action once more as well as ever.

Again, if care be taken in the process of recovery, so that the reaction is not violent, the number of times that the cerebrum is frozen does not make any important difference—granting, of course, that between each freezing sufficient time be allowed for recovery, and that plenty of new force be given by food to restore motion. Thus I have known the cerebrum frozen so as to produce entire unconsciousness forty-six times in the same animal, and certainly with no more hurt than if the animal had been narcotised with chloroform as many times.

In these experiments, sometimes, an accident will happen, and the animal will die. When this occurs the freezing process has suddenly extended too low—viz., to the medulla oblongata—and the respiration has been stopped, of which more will be said in due time.

And now for experiment direct. We have here a pigeon which has been put to sleep several times by having the cerebrum frozen. The day is so intensely hot I prepare you for some little loss of time in repeating the experiment; but we will proceed. I will direct, with a fine jet, a spray of compound ether on the anterior part of the cerebrum; the thin bony walls of the skull intervene, but these will only cause some delay. At first no peculiar action is manifested, but soon there is excitement, and this state of excitement will last for two or three minutes. At last, observe, the bird settles down into sleep; it is quiet and powerless, insensible to pain, and dead to all impressions: we could at this time operate upon it without causing the merest evidence of sensibility; but as the process has only been just carried far enough to show you the production of insensibility, the recovery will be rapid and complete, without any violent reaction.

In birds the stage of pre-excitement is marked by attempts to fly, sometimes forward, sometimes backward; the period of reaction is marked by similar phenomena. In other animals the excitement is muscular mainly, and in rabbits it is marked by an unconscious or semi-conscious cry or scream. This same kind of cry is always made by rabbits during the second state of narcotism from the inhalation of chloroform, ether, amylene, or other volatile anæsthetic.

Thus far I have spoken of what may be called the natural phases of this curious experiment, and what we have seen in this way is fully sustained by the observations of Dr. Mitchell. The eighth experiment related in his essay, published in the January number of the *American Journal of the Medical Sciences*, tallies in every particular with the experiment that has been before us. In his experiment, by directing rhigolene spray on the cerebral region for three minutes, the animal, a

pigeon, "was thrown into a state of profound torpor. The third minute after the freezing the head fell, the eyes were closed, and the animal fell sideways. From this state the bird made an effort to walk, and again fell into a stupor roused by falling over. These spells recurred, but further apart. There were no backward movements at any time."

In watching these natural stages of anæsthesia by the application of extreme cold to the cerebrum, I was very soon impressed with the fact that every mark of excitement occurred at one of two stages—viz., midway in the transition from the natural state to the state of complete stupor, and midway from the stupor to the state of recovery. These states of excitement are identical in point of place and time with those stages of pre-action and reaction which I exhibited on my own body. In truth, therefore, the effects we observe are first developed on the vessels of the brain and their nervous supply, just as occurs on the peripheral surface. Primarily, there is removal of force from the nervous filaments of the vessels, and removal of tension from the vessels: there is dilatation of the vessels, excessive local evolution of heat from rush of blood, and overaction marked by exalted functional phenomena. The cold being sustained and intensified, there is universal abstraction of force, the change of physical condition known as freezing, and absolute inertia of the part itself and of all it governs. Secondarily, there is the reverse order of phenomena—viz., from torpor to reaction with excitement, and finally a return to natural distribution of force-equilibrium.

I dwell on this point because it shows that all disturbance of nervous function marked by excess of function, such as muscular convulsion or exalted sensibility, is connected either with the stage of pre-action or of reaction. In respect of reaction, and the effect of it, Mitchell comes practically to the same conclusion.

The experiments thus far have had reference to influence of cold on the superior surface of the cerebrum, and to those cases in which the animal is allowed to recover. To what has been told I may add that so perfect is the recovery, that no evidence of after-injury need result. The animal that has been insensible with frozen brain for seven recognises everything on coming round again, exactly as though it were awaking only from natural sleep.

We can, nevertheless, when the brain is actually frozen, induce other classes of phenomena, to the consideration of which we may now transfer our attention.

(To be continued.)

ORIGINAL COMMUNICATIONS.

ON THE

USE OF STRYCHNINE IN EPILEPSY.

By WALTER TYRRELL, M.R.C.S.

The action of strychnia in producing spasms and convulsions in the healthy subject, closely allied to, if not identical with, those of epilepsy, is, of course, known to us all. My object in the present paper is to call the attention of the Profession to the remarkable power which that drug possesses of controlling and altering those attacks in the epileptic. I made my first trial of strychnine in epilepsy in 1860, and was led to do so by reading a passage in Professor Van der Kolk's work on epilepsy, published by the New Sydenham Society in that year. He states (see page 258) that he was led to try the effect of conia in epilepsy from observing the manner in which that drug controlled the convulsions produced by strychnia. He accordingly placed three epileptics under this drug. So early, however, as the second and third days, he was obliged to give up its use, as the attacks were so decidedly increased, both in severity and number. It was from this that I was first led to look to strychnia for the means of controlling epileptic convulsions. It being plain that conia, which controls the convulsions of strychnia, increases those of epilepsy, is it not probable that strychnia, acting, as we know it does, directly upon the spot we are now taught to consider the seat in which convulsion arises, may control the attacks in the epileptic? The first case in which I made use of strychnia occurred in the early part of 1860, in a young gentleman, aged 28, who had been for some time losing flesh and strength, and had been latterly subject to attacks of "*petit mal.*" These culminated at last in a severe convulsive attack, in which he bit his tongue. After giving him rules for diet, exercise, etc., I prescribed for him the sixteenth part of a grain of the sulphate of strychnine, to be taken twice daily in solution. Under this treatment, which he continued for two months, he at that time entirely recovered, having no further attack, and improving in a most marked manner in health and strength. He had a slight tendency to relapse after about a year, which yielded at once to a return to the strychnine; since that time he has continued perfectly well. Though this was a favourable case for any treatment, yet its result was especially encouraging to me, as tending to prove that strychnine certainly did not *increase* the tendency to convulsion. Since that date I have treated sixty-nine cases of epilepsy with strychnine, some in America, some in England; and although in many cases I am unable to give the result, owing to my losing sight of the patients, I have seen as yet no case in which the strychnine did not exhibit a marked power in controlling and altering the convulsive attacks.

As my space is very limited, I shall confine myself to a few cases, choosing those in which the exciting causes of the disease appear to be different. In 1863, I saw a child, aged 6, suffering from a severe form of "*petit mal.*" The disease had existed almost from birth. The attacks, which were very frequent, were unattended with convulsion, beyond an occasional stiffening of the right arm. She was semi-conscious during some attacks, perfectly unconscious during others. She sometimes fell. She had been under a variety of treatment—iodide of potassium, iron, valerian, etc. She entirely recovered under small doses of strychnine, after one slight relapse.

Severe convulsive epilepsy, partial parslysis, resulting from masturbation; J. P., aged 26; six years epileptic, last two years almost idiotic; attacks, two or three in the day, varied much in intensity; often bit his tongue; partial paralysis of bladder and tongue. The effect of strychnine here was most marked. Fits at once diminished, both in severity and number. Paralysis decreased very much. Ultimately fits entirely ceased; memory improved greatly.

S. T., aged 38, had epilepsy fourteen years. Fits come on once in the week or ten days, probably excited by some gastric irritation, as they often occur after meals. In this case, from the first taking strychnine, the interval was ninety-six days, when an indiscretion in diet produced a slight attack, the last. He continued strychnine for ten months. Is now quite well.

J. S., a clerk, unmarried, has led a very irregular life. The fits, which have continued at irregular intervals for six years, were dependent on irregular circulation probably. In this case I found the combination of strychnine and digitalis very useful. He had suffered from delirium tremens. He is now quite well.

M. B., aged 24. Epilepsy, dependent on menstrual irregularity. A strong plethoric girl, subject to epilepsy for six years. First occurred after a stoppage of menstruation from cold. Fits violently convulsive; interval irregular. Here strychnine, with aloetics and antimony, produced an entire cessation of the fits.

I have lately seen E. H., aged 34. Attacks dependent on deranged menstruation. In this case the fits, which occurred every week or ten days, have been entirely absent since taking strychnine, now four months. Menstrual regularity restored.

The following case I give at length, as I think it will be allowed to have been a most unfavourable one for treatment, owing to the length of time that the fits had existed, and also to the early age at which they came on. I give the case in the words of Mr. Swinhoe, Surgeon, of Swindon, Wilts:—

"Thomas F., aged 20, first had convulsive attacks at the age of 13 months, which have continued at intervals ever since. Has never had less than two or three in the week. First seen by Mr. Tyrrell in August, 1866, at which time he frequently had two fits in the day. Ordered to take strychnine, which at first made him feel giddy, and twice a fit followed its administration; but by a little management and attention to bowels the strychnine became tolerated. He has now taken it in small doses for about five months. His present condition is as follows:—The fits, which never occur oftener than once in the week, are more like fainting fits than epilepsy, and he is much better in health and more cheerful; in fact, in this most unpromising case the strychnine has proved of the utmost benefit." I may add that Mr. Swinhoe has another and most severe case under similar treatment, and doing very well.

In the following case, where the attacks are certainly due

to derangement of circulation, the same change in the character of the attacks was observed; and from being violently convulsive they have become more like syncope, except that she is partially conscious throughout them:—J. K., aged 50, suffered from epilepsy twelve years; attacks very frequent; violently convulsive; circulation very irregular; suffers much from palpitation. Commenced strychnine November, 1866. Attacks now two in the week (formerly two and three in the day), (February, 1866).

Having now laid before you the practical effects of strychnine in controlling and modifying the epileptic attack, I will endeavour to show the manner in which I believe it to act. I believe that, to have convulsion at all, you must first have existing a peculiar nervous sensibility, and by nervous sensibility I mean a condition not of nervous strength, but of weakness—an increased sensibility, with a lessened power of control. This condition being present, I believe that convulsion may be produced by two great exciting causes:—

1. Derangement of circulation in and about the medulla oblongata.

2. Nervous irritation, either centric or centripetal, to borrow Marshall Hall's terms.

In our treatment of epilepsy hitherto, I think that we have been looking too much to the virtues of individual drugs. At one time zinc has been in favour, at another nitrate or oxide of silver has been in vogue; and all cases were treated with one drug, however various might be the exciting cause. Now, I think that in strychnine we possess a medicine which acts directly on the seat of the disease, as a controller of the convulsive attacks; but, at the same time, I think that, in almost all cases, we must remove the exciting cause, which I think in most cases it is not difficult to discover and obviate. Thus, supposing the attacks to be induced by a deranged circulation in and about the medulla oblongata, I think that digitalis will be found a very effective remedy; and derivatives, counter-irritation, etc., will also be found of great service. I have also used ice to the neck with great effect. When the exciting cause results from nervous irritation, I think that, having discovered the set of nerves which are giving rise to the irritation, it is almost always possible to relieve their excitability. Thus, the pneumogastric is undoubtedly a most frequent seat of irritation, and it is in these cases where nitrate of silver, the sulphates of zinc or copper act so well. Again, where the nerves of the uterus convey the irritation through the spinal cord, bromide of potassium will be found useful; and so on, through all the known causes of irritation. I would sum up by saying that I believe that in strychnine we possess a drug which will *always* control the excitability of the medulla oblongata and prevent convulsions, but that to cure the disease we must also remove the exciting cause.

I have now gone as far as my limits will allow me, but I hope in a future paper to lay before the Profession other important points in the cause and treatment of epilepsy.

Great Malvern.

ON THE PATHOLOGY OF SYMPATHETIC OR INFLAMMATORY FEVER.

By J. H. JAMES, F.R.C.S.

The inflammations in the preceding essays, although they constitute a considerable portion of the external species, are wholly irrespective of those which arise from injury, and the internal inflammations which proceed from disease, thus leaving a vast field untouched. In what I have done I have endeavoured to elicit useful practical conclusions from a close examination of the facts I have myself witnessed. They constitute what may be considered four classes. The first limited, with a predominant disposition to suppurate or slough. The second non-limited, with a strong disposition to suppurate or slough, but not without a disposition to resolve, either naturally or under treatment. The third ulcerate or mortify. The fourth differ materially from the preceding, having no disposition to suppurate or slough, but a predominant one to resolve, or pass into a chronic state, and upon these essential and distinct characters the treatment must in a very considerable degree depend. And here I should stop, unless it were that I have reason to believe that very important processes connected with all and every inflammation, constituting what is called inflammatory (or sympathetic) fever, are now sought to be explained upon principles which are only partially true. There can be no doubt that the whole mass of the blood, passing in succession through an inflamed part, may, to a certain extent—probably will—be contaminated by what it meets with in such parts; and in certain frightful cases there can be little doubt that the whole mass does become utterly changed, as, for instance, in gangrenous inflammations consequent upon severe injuries, etc., constituting what O'Halloran termed cacochymia. But if universal contamination occurred in every case, as seems to be contended, the results would probably be very different from what they actually are, and I think I can produce some facts which render extremely doubtful the general application of such a theory; for instance, every Surgeon must have seen that the urgent constitutional symptoms, arising from a carbuncular abscess, begin to subside immediately after a free opening, the principal exciting cause being removed, the blood still passing through the inflamed part. Whereas, if the symptoms had depended upon the contamination of the mass of the blood, a change so immediate could hardly have been produced. Again, upon the supposition that inflammatory fever arises from the circulation of such materials, it would of course follow that it would be in proportion to the extent of the inflammation and the amount of blood sent through the part; but it often happens that the fever runs quite as high when the part is very small as when it is very large. Thus a sloughing ulcer of the cornea will produce as much fever as an extensive inflammation of the arm or leg. And this is far from being the only instance of a very small inflammation producing a high degree of fever. Thus, also, an inflammation at the root of a tooth or in the sheath of a tendon, parts strongly bound down, although quite small in comparison, will occasion a great degree; while, on the other hand, a person may have an extensive gouty inflammation without any fever at all. Various other facts might be added militating against the hypothesis of transmission, which carries with it the ignoring of sympathy altogether as the cause of this fever. It seems much the course at present to make light of sympathy, but I think every Surgeon of experience must have seen cases where most decided fever could be accounted for in no other way. Thus it often happens that after passing a bougie (even with very slight pain), as severe a paroxysm of fever will follow as in the case of a regular ague. Here transmission is out of the question. Not denying that the blood is more or less affected by transmission through an inflamed part, I would yet suppose that it, if considered *en masse*, living, feeling, and acting in every part, is able to control this taint, as it seems to have powers quite sufficient—for instance (a fact which is perfectly well known), if blood be taken in a succession of cups, the condition of that blood varies in every successive cup, which must arise from a change impressed upon the whole mass by the hæmorrhage, as it flows.

The change principally consists in the increase of fibrine. This has, of course, largely engaged the attention of every one who has made the condition of the blood in inflammation the subject of special observation; but, notwithstanding the many investigations which have been made during the last forty years, I cannot find that the question has been left in a very satisfactory position. Two points especially demand inquiry—First, how the sudden appearance of an increased quantity of fibrine is accounted for; second, whether that is to be considered a natural condition under the circumstances, or otherwise. Many pathologists consider that the conversion of albumen into fibrine explains this.(a) Without engaging in a long discussion, which my own present condition forbids, I may briefly state that the presumption appears to be that the increase of the fibrine cannot be created by any conversion of any other part of the blood, for it is much too sudden, the quantity actually varying as the blood flows; besides which, if the production of fibrine in the natural way is only to be obtained by elaborate digestion, and if, when lost by hæmorrhage or exhausting diseases, it is with difficulty restored, we must see that such facts are also opposed to the rapid conversion according to the suppositions I have alluded to. The question then arises, How can this sudden appearance be accounted for? I have for a great many years entertained an opinion that this additional quantity is already existing in the mass of the blood, being contained in the smaller vessels for the special purposes of nutrition for those structures for which fibrine is wanted; that the occurrence of hæmorrhage or inflammation in any part occasions a demand for an increased quantity; and that, by a power of selection existing in the blood itself, in the vessels, or both, a portion of this fibrine is

(a) Palmer's Works of Hunter, page 37.

thrown into the general circulation. This may be very difficult to prove; but we are not without some analogous facts—as, for instance, as to mere quantity of blood being supplied where it is required—*e. g.*, for the mammary or salivary glands, or other organs; it is at once directed to them. These are merely natural processes. But supposing a piece of iron should impinge upon the cornea, a number of vessels previously invisible to the naked eye will become distended with red blood; but if hæmorrhage be produced—in other words, a vein be opened—these vessels will speedily empty themselves again if faintness takes place, the contained blood, with its proportionate portion of fibrine, finding its way into the general circulation (this independently of selection). And what we can see in the eye, we may conclude, occurs more or less in every part of the body. Supposing the proportionate quantity of fibrine ordinarily contained in the general circulation is as great as that in the minute vessels. Still, if we may judge from the amount of hard injection which will fill the larger vessels, as compared with that which the minute vessels will receive of fine injection, the absolute quantity of the latter is considerably greater; and when thus called into the general circulation by any emergency, this may to a certain extent account for the greater quantity there; still more if the relative amount in the minute vessels is greater than that in the larger (a not improbable supposition), since it is in those that fibrine is so particularly required to support the nutrition of most important parts, such as the heart and arteries, as well as other fibrous structures. Those who believe in the conversion of albumen into fibrine must allow the blood very considerable powers of its own, especially if they regard the suddenness of the change as shown in the succession of cups. In support of the opinion that the blood and vascular system have the power of selection, I would refer to what we observe in the sac of an aneurism; we see that large quantities of fibrine are often separated and deposited upon the walls of the sac, and this, perhaps, not merely to strengthen those walls, but to answer another purpose, as I formerly suggested(b)—viz., to fill up part of the cavity, and thereby lessen the impulse which the fluid in that cavity would sustain under a similar law to that of the hydrostatic paradox, if we only substitute the impulse of the heart for the height of a perpendicular column of fluid being multiplied by the square surface, as in that case. The same object is often further carried out by the simple coagulation of a portion of blood; and I think I may say, from having had a considerable number of aneurisms under my care and observation, that when the contents are solid or semi-solid, the impetus from the heart is much less forcible than when it is altogether fluid. There is a point connected with this which deserves attention, as showing the percipient power of the vascular system; it is this, that while the channel through an aneurism and beyond it continues open, strong efforts are made to maintain the circulation through the original channel, but if Brasdor's operation is performed, by which the channel is definitely obstructed. the efforts cease, and the blood is sent through other routes, which readily accommodate themselves to this new order of things.(c) None of these facts amount to absolute proof of the selective power I have been contending for, but they are not without important bearing upon the subject.

An opinion has been lately formed that fibrine is no indication of a healthy condition, but the reverse, and this has been supported by the statement that it abounds in diseases of an anæmic character. Now, as I have never been in the habit of bleeding in diseases of this kind, I can state nothing of my own knowledge, with the following exceptions—namely, that, in those frightful cases of hæmorrhage from the removal of teeth, great danger, and sometimes actual death, are caused by the absence of the coagulable principle. In cases also of hæmorrhage from the rectum or uterus, producing great anæmia, I have found the blood coagulating very loosely; in scurvy also we have the same deficient crasis of the blood, and all connected with the same condition. If, on the other hand, we take what I believe to be the fact, that fibrine in the "*chair coulante*" (as an eminent physiologist has termed it) is constantly employed in supporting the most important parts of our fabric—viz., the heart and arteries, as well as other muscular structures—if we consider that it is essential to the hourly preservation of our lives, as without it and the concomitant contraction of the arteries every wound of any size would prove fatal; that it is essential to the formation of plasma by which these wounds are repaired; and, moreover, that it essentially assists in the limitation of those inflammations which might equally tend to our destruction—it is really very difficult to look at fibrine as anything but a most necessary and conservative element.

I may, perhaps, incidentally mention another circumstance which rather tends to support the hypothesis I have ventured to advance—namely, that, as the surplus quantity of fibrine disappears from the mass of circulating blood when the inflammation or hæmorrhage which caused it to appear has ceased, it is not unreasonable to suppose that it has returned into that part of the vascular system where it was previously existing, for the nutrition of fibrous textures; whereas, if, on the other hand, it were thrown off from the system as a morbid product, there would be a great deficiency left, which it is not easy to provide for unless conversion of albumen into fibrine, instead of the creation of fibrine by digestion, be the ordinary proceeding, of which I apprehend no sufficient proof has as yet appeared.

While alluding to experiments on the blood, I may mention that, in addition to the difficulty occasioned by the reception of the living blood into a dead cup, which must occur to every one, there is another circumstance which does not appear to have received the attention it deserves—namely, that, in procuring this substance for examination, we actually institute another abnormal condition (hæmorrhage), which also affects the component parts, and may occasion a considerable discrepancy in the product; for, although the inflammation may be a condition not materially varying, the size of the stream and many other circumstances will be affected as regards the hæmorrhage.

Those who consider the hypothesis of transmission not satisfactorily to account for the phenomenon of inflammatory fever, must necessarily fall back upon the old doctrine of sympathy; and here I shall take leave to quote a paragraph which I submitted in 1831, as containing a brief summary of that condition taken in an enlarged sense:—

"The body consists of an assemblage of organs, the functions of which are each more or less essential to the healthy and vigorous action of the whole. They are so connected that the system at large can both feel the influence of any impression made on a part, and any process going on in it, whose functions are especially connected. A particular communication of feeling and action exists. This connexion of all the parts with each other, and of several between themselves, is most probably effected by means of the nerves—at least, there is every reason to believe so. It is denominated sympathy, and exerts a most material influence on the phenomena of disease." (d)

I may also here observe that although the inquiries of Le Gallois, Wilson Philip, C. Bell, Brodie, Magendie, M. Hall, Brown-Séquard, and many others, have thrown much light on the physiology of the nervous system, yet none appear to set aside the previous doctrines of Mr. Hunter and others regarding sympathy. Of Marshall Hall's doctrine of reflex action I shall presently speak, but I may observe that when an enlarged view of the nervous system and its relation to every part and organ of the body is taken, we can hardly fail to see that there must be a consciousness, pervading the whole machine, of the actual state of every part and organ, and also of the actions going on sleeping and waking, and of this consciousness the result is that an index is constantly offered by the state of the pulse, which records every change which takes place. And next let us inquire as to the seat of this consciousness. Some experiments which have been made would indicate the possibility of a particular part of the nervous system being the seat of this. It may be the *fons et origo*, but it is perhaps more probable that the different currents from every part passing through this as a focus, and bringing every part into communication, may account for the phenomena; however, it is clear that unless an intelligence is equally complete and universal, the different actions requisite to be performed could never be executed in due order and

(b) *Provincial Medical and Surgical Transactions*, vol. xii

(c) The blood not only has the power to increase its disposition to solidity, but conversely to fluidity; proofs of this we have in the remarkable phenomenon exhibited in cases of cholera, where blood is taken in the asphyxiated state. When the vein is opened it can hardly be said to flow, but may be pressed out, like semi-liquid currant jelly or treacle. After some quantity has been obtained in this way, it becomes more fluid and will flow in a stream. This I have myself witnessed in a patient who had lapsed into the blue stage, and whom I was led to bleed from the "agonising" pain in her bowels, in the year 1832. She recovered. Now the conversion of grumous blood into a fluid state must, I conceive, arise from the action of the blood itself, for the few minutes required will not account for any restoration by the imbibition of fluids, and it militates against the supposition that the asphyxiated state arises solely from the loss of fluid.

(d) "Observations on Inflammation," second edition, p. 31.

time. I would call this physical intelligence, for assuredly the mind has nothing to do with it, and the Almighty Creator has, in his unbounded wisdom and benevolence, made us the tenants of a machine which not only can work in a given direction like Paley's watch, but will accommodate itself to every change, and repair its own machinery. It may be urged that this resembles the "Archæus" of Van Helmont, and no doubt there are points in which this theory bears some resemblance to it; but, as far as I can see, he has indulged in a variety of fancies hardly supported by any facts, but for that now advanced many may be adduced. I will only add that if these views are correct, we need go no further to explain the phenomena of inflammatory or, if you please, sympathetic fever.

It may be said that sympathetic fever is often rather injurious than otherwise. Speaking of it as connected with injuries, it is not injurious if not excessive; but why is it excessive? Because it may occur in an individual of an unhealthy constitution, under circumstances of mental disturbance or other adverse causes. But when it befalls a person of sound health, tranquil mind, with other favourable conditions, it not only is beneficial, but absolutely essential, for if it falls short of what is required, the local inflammation is insufficient for the repair. In children one generally finds the favourable circumstances combined, and in them, as well as in healthy adults, we often see operations borne, and injuries repaired, which in opposite conditions could hardly take place. I am speaking now of sympathetic fever as the result of injuries; where arising from morbid inflammation, the effort may still be required, but the coexistent state materially affects it. But it is highly important, in considering this question, to take a more enlarged view of the subject. All hot-blooded animals are constituted upon the same general principles as man; they are equally liable to injuries, and these need repair; the processes are the same, and their system contributes, upon the same laws as our own, to carry out the work of repair. And it is marvellous to what an extent this is generally accomplished. In the perfectly wild state the concurrent action of the system, hardly deserves to be called a fever. But we know full well that when they occur to domesticated animals, as in our own species, it often becomes excessive. Much more might be said on this subject.

Dr. M. Hall's theory of reflex action (in some cases better expressed by concurrent) is undoubtedly a very important one, especially in a pathological point of view. In a physiological, perhaps, it has been rather exaggerated; for although it accounts for several important phenomena of the nervous system, it can by no means supply the place of sympathy fairly and fully understood, bearing as it does upon all those important connexions which bind the whole animal economy together, and of which the blood as well as the solids really seem to bear a part.

Sympathy seems to be going out of favour, and for no other reason that I can see than that its phenomena cannot be exhibited actually and physically as those of reflex action; but here we must consider how many things there are that admit of no direct proof, but can only be inferred from effects, and yet cannot be doubted. Even such are the laws of gravitation. If we look at the nervous system, we find that the very same phenomena, produced by obvious physical causes, are equally so by those which are not cognisable to our senses, and which neither the knife of the anatomist nor the eye of the microscopist is ever likely to discern. The same depression of the heart and stomach which is produced by a blow, or exhilaration of both which is produced by a glass of wine, shall be equally produced by a piece of good or bad news, although where or how they touch the nervous system we cannot in the least discover.

In concluding this series of papers I think it but right to mention the very peculiar circumstances under which they have been contributed. It was my good fortune to have been a Surgeon to a provincial Hospital at an early age. As such a position generally leads to a considerable practice without its walls, to endeavour to repay such advantages was little short of a duty, and I had been collecting materials when attacked by an illness of a very distressing and complicated character, and thereby disabled from active exertion, and almost entirely deprived of sight; this was in the autumn of 1863, and I must have given up all attempts to carry out my plans if my kind friend Mr. Lydall, who has accompanied me to every change of place and acted with my other kind Medical friends, had not placed his valuable offices as an amanuensis at my service—a greater obligation, because he waived his own extensive acquaintance of modern pathology not to interfere with my plans. The materials I had collected were so much without arrangement, that I never attempted to put them together, and I must be held indebted to my memory for what these papers contain. I am apt to hope and think they will not be altogether without their use.

RUPTURE OF THE LIVER, SPLEEN, AND LEFT KIDNEY—FRACTURE OF BOTH ARMS—DEATH FROM TETANUS.

By J. FAYRER, M.D., F.R.C.S.,
First Surgeon to the Medical College Hospital, Calcutta.

Ram L., aged 25 years, a Hindoo confectioner, was admitted into the Medical College Hospital on February 20, 1867, at 4 p.m., with simple Colles's fracture of the left forearm and compound dislocation of the right wrist-joint, caused by falling from a tamarind tree from a height of 35 or 40 feet. He was stunned by the accident, and could not remember whether he struck against anything as he fell.

There was a contused wound on the inner and anterior aspect of the right wrist-joint, about an inch in length, through which the styloid process of the ulna protruded, but it was neither fractured nor denuded of periosteum. The radio-ulnar ligaments were torn, and the bones were consequently freely movable. The left radius was broken just above its lower epiphysis, and the styloid process of the ulna was detached, giving to the wrist the peculiar deformity of Colles's fracture. Pulse very weak.

Ordered tinct. opii ɱxxv. immediately; stimulant mixture every two hours.

The dislocation was reduced, and the arm put on a straight inner splint and bandaged. A pistol-shaped splint applied to the left forearm.

21st.—Complaining of pain in the hypogastrium. Passed urine once after the accident, which was uniformly bloody, but contained no clots. A catheter was passed with ease into the bladder, and a little more bloody urine withdrawn. No fracture of the pelvic bones could be detected. Pulse feeble.

Stimulants every hour; hot bottles; diet, milk and soojee and soup.

22nd.—Passed bloody urine again. Wound beginning to assume an unhealthy aspect.

The pulse became stronger day by day; hæmaturia ceased. Pain in the hypogastrium subsided, but slight fever continued. Extensive suppuration occurred, the wrist swelled, and free incisions were made to prevent any burrowing of pus.

On the 28th, the extremity of the ulna was found denuded to the extent of half an inch, and necrosed. Considering it to be the source of irritation, the dead portion was removed with the bone forceps.

Although the fever abated in its severity in two or three days, the wounds still looked foul, and occasional starting of the limb foreboded the approach of grave mischief, and within a short time symptoms of tetanus set in. The wound was examined again. The joint was found to be disorganised, and the radius, necrosed at its lower end, protruded through the wound. Amputation at the middle of the forearm was performed on March 4.

It is to be remarked that the tetanic spasms were limited to the muscles of the jaw, of deglutition, and of respiration, the extremities being completely free from the disease.

Brandy and soup were administered every hour, and a pill composed of opium gr. j. and tobacco ℈j. smoked every two hours. An injection of castor-oil, turpentine, sulphuric ether, and assafœtida was given every six hours. The stump was kept wetted with opium solution.

On the day of the operation the tetanic fits became less frequent, and he could swallow food or medicine better than before. But the spasms increased, and he died on March 8, four days after the operation, and sixteen days after the accident.

Post-mortem Examination Nineteen Hours after Death.—Lungs: Healthy and crepitant; firm decolorised clots in the right ventricle passing into the pulmonary artery; left ventricle very much contracted; a small decolorised clot in the aorta. Liver studded with numerous pyæmic patches of whitish-grey softening, each rather smaller than the tip of the little finger, and extending about a quarter of an inch into the substance of the liver; there is a superficial rent on the posterior thick margin of the right lobe and two others on the under surface; there is also a dark line along the upper and

anterior surface, which is apparently another superficial rupture nearly healed. Spleen with two ruptures in its posterior edge, the upper one extending deep into its substance. Left kidney: At its upper end is a very extensive rupture running up into the hilum. The areolar tissue surrounding the vessels at their entrance into the hilum was dense from infiltration of blood. Nearly three-fourths of the kidney, including its upper and nearly all its posterior surface and a great part of its anterior, is of a pale buff colour, and soft and doughy to the touch. The posterior so affected is separated from the sound part by a dark-coloured wavy line of demarcation, which can be seen extending through the deep as well as the superficial structures on the surface of the incision made obliquely into the anterior surface of the organ. About two ounces of blood clots lay on the great omentum, which was folded and wrinkled upwards. Some coagulated blood over the kidney and left side of pelvis. No peritonitis. Cavity of bladder clear and healthy.

Remarks.—This is a case of great interest, not only in a Pathological and Surgical, but also in a Medico-legal point of view. The injuries to the abdominal viscera were themselves such as are generally considered more than sufficient to cause speedy death, and the question has over and over again occurred in courts of justice as to the effects of rupture of the spleen—an accident, unfortunately, of frequent occurrence where the spleen is so liable to be softened and enlarged as the result of malarious poisoning. Though it has been always considered possible that a person might survive for a short period after rupture of the spleen, yet it has been regarded as an accident almost certainly mortal. Yet here we have not only rupture of the spleen, but also of the kidney and liver, without any indication, beyond hæmaturia of a few days' duration, that there was any abdominal injury at all. The abdominal pain had disappeared, the urine and secretions were normal, and, but for the unfavourable changes which occurred in the arm, all seemed to be doing well. The injury was so severe that from the first it was considered doubtful if the limb could be saved, and when extension of suppuration and tetanic symptoms together urged the necessity, amputation was performed in the hope of saving life. Not the least suspicion had existed that the abdominal viscera had been so severely injured. The hæmaturia, which had passed away without leaving any further indication of mischief, had been attributed to some comparatively trivial injury of the bladder or kidney. The state of the liver was very interesting, studded with numerous patches of degenerate or dead tissue, whilst the lungs and other organs were free from the presence of any indication of pyæmic poisoning or capillary embolism. I think it is obvious in this case that the mischief was due to capillary embolism occurring through the splenic vessels in consequence of the laceration of the spleen. No doubt minute coagula had formed in the bruised and injured vessels of the spleen, and thence been carried direct to the liver, and so given rise to numerous embolisms which resulted in the local deaths with which the viscus abounded. There does not appear to have been any suppuration in the medulla of the divided bones.

I am indebted to my House-Surgeon, Baboo Gopaul Chunder Roy, L.M.S., for the preceding notes of this interesting case, and to Dr. Colles, Pathologist to the Medical College Hospital, for the account of the examination of the abdominal viscera.

THE LONDON SURGICAL HOME.—The following letter appears in the *Times* of Wednesday:—Sir,—At the instance of the Committee of the London Surgical Home, I recently issued a circular soliciting support for that institution. At the time I was unaware of certain proceedings of the Obstetrical Society, which had resulted in a decision affecting the position of a Professional gentleman closely connected with the Home. I have no desire to express any opinion as to the correctness of that decision, but as I should have considered it a sufficient reason for declining the responsibility of the circular had I been aware of it at the time, I feel bound, now that it has come to my knowledge, to withdraw my recommendation, and, in order to save time and secure publicity, I ask permission to do so through the medium of the *Times*.—I am, Sir, your obedient servant, SPENCER.—Spencer House, May 13. [*** We may ask whether the attention of the various members of the Royal family whose names appear in the list of patrons of the Surgical Home has been called by their Professional advisers to the recent proceedings of the Obstetrical Society.]

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

MIDDLESEX HOSPITAL.

Position — Beds — Heart Disease and Choreic Movements — Treatment of Dropsy — Lead and Opium Lotion in Erysipelas — Cirrhosis of the Liver — Counter-irritation — Diagnosis of Typhoid Fever and Tubercular Meningitis — Subperiosteal Rhinoplasty — Cancer Wards: their Origin; Acetic Acid in Cancer; New Plan of Introducing Acetic Acid — Chlorine as a Deodoriser — Stramonium Ointment — Aneurism or Malignant Tumour? — Gout and Rheumatic Gout — Iodine in Collodion — Obstruction of the Venous Circulation in the Leg — Curious Hæmoptysis — Treatment of Internal Aneurism — Breathing of Emphysema — Pulse of Mitral Disease — Intermittent Hæmaturia — Fæcal Accumulations in the Cæcum — A Cause of Recto-vaginal Fistula — Sulphite of Soda in Erysipelas — Carbolic Acid as an Application to Sores — Sumbul in Gout, etc. — Galvanism — Ligatures to be Drawn through Flaps — The Glue Bandage.

SITUATED in a central and populous locality, Middlesex Hospital possesses many advantages from its position. The number of cases seen is very large, and as the Hospital has wings projecting backwards as well as forwards, it contains a greater number of beds (upwards of 300) than would be anticipated from its external appearance, and usually these beds are filled.

Turning, however, to what more immediately concerns us —we mean the practice of the Hospital—we shall begin with cases we have seen under Dr. Murchison's care. And, in the first place, we cannot help referring to the excellent system of clinical instruction adopted by this Physician. The students are not only taught to name symptoms, but to study wide conditions of ill-health, the method of teaching being tutorial rather than dogmatic. One very curious case we noticed under his care. The patient, a young lad, had long ago suffered from rheumatism, and, at the time we speak of, was labouring under severe mitral disease, his urine containing much albumen, the innervation of his right side being also considerably affected. There was no actual loss of power, but a feeling of numbness, but immediately on being touched the whole body was thrown into curious choreic movements. He died, but on a post-mortem examination no peculiarity of the nervous system could be detected. There were other cases of heart disease in the wards, in some of which there was apparently embolism of the brain or kidney, in the latter situation giving rise to albuminuria. Collections of fluid from heart disease, Dr. Murchison usually treats by purgatives, for he looks upon diuretics as most useful in cases where the dropsy is renal rather than cardiac, but only using the milder diuretics for the purpose of washing out the kidney.

Another case we observed under Dr. Murchison was one of erysipelas in the lower extremity. This had been treated with a lotion which is probably too much neglected. It was proposed many years ago by Professor Christison to make use of a combination of acetate of lead and opium as a local application in acute inflammatory affections, the proportions recommended being four grains of acetate of lead and four grains of opium to the ounce of water, the lotion to be applied warm. Of course the lead combines with the meconic acid of the opium, but it is doubtful if this is any very great disadvantage; at all events, in private practice it may be effectually got rid of by using acetate of morphia along with the acetate of lead, a most elegant and useful combination. In the latter case it is better to dissolve the morphia in a few drops of acetic acid before adding the lead, which may here be used in the form of Goulard's extract. The leg had done remarkably well under the use of the rougher preparation, as had several other similar affections which had been treated by Dr. Murchison in the same way.

Another case under the care of the same gentleman shows well what care and caution are needed to obtain a satisfactory diagnosis in certain internal diseases. A man was admitted with far-advanced ascites, his legs being also swollen and his urine slightly albuminous; the fluid in the abdomen had also pushed the heart and liver somewhat out of their places. He was slightly jaundiced, but there was some

difficulty about the history of the case, for although no chest affection could well be made out, the man persisted that the swelling of his legs had preceded the accumulation of fluid in the abdomen. Altogether, Dr. Murchison was inclined to accept this as a case of cirrhosis of the liver, although the order of the symptoms was rather unusual.

In cases where counter-irritation is required, Dr. Murchison frequently makes use of blistering fluid (a strong solution of cantharides) painted on the part, say the scalp, and then covering it with cotton wool until the blister appears. The action is more speedy and satisfactory than when the old-fashioned emplastrum lyttæ is employed. In some instances we have seen a poultice usefully supersede the cotton wool. But of all applications for blistering a surface with certainty and despatch Dr. Murchison recommends liquor ammoniæ, which is frequently used at the Fever Hospital when most other things would fail. A piece of lint is soaked in the liquor and applied to the surface, say the scalp, and carefully covered up for a *few minutes* to prevent the escape of the volatile alkali. The use of a poultice or similar application soon brings up the blister, but if allowed to remain too long in contact with the skin, the ammonia sometimes produces serious sloughing.

No two diseases are possibly more difficult to distinguish in their earlier stages than typhoid fever and tubercular meningitis; yet, as Dr. Murchison points out, we now have in our hands a means of diagnosis which we did not formerly possess —we mean the thermometer. Probably observations are not yet sufficiently extended to enable us to reap the full benefit of its application to Medicine, but in this case it is both easy and simple. From the first the temperature is elevated in typhoid fever, rising sometimes as far as 103° to 104° Fahr.; in tubercular meningitis there is no such elevation, the heat being but little above the normal standard. This simple diagnostic should not be forgotten.

Turning to the Surgical wards, we noticed, under the care of Mr. Moore, a rhinoplastic operation performed under some little difficulty. The septum narium was completely destroyed, and nothing was left of the nose save a triangular opening. To bring down a flap from the forehead was an easy matter, but how to support it and form the nostrils was the question. Mr. Moore determined to try one of those subperiosteal operations now so much in vogue on the Continent. A portion of the upper lip was folded back so as to constitute a septum, and the edges of the triangular opening, having been pared, were drawn together at its upper part, so as to leave but two small orifices separated by the new septum. Four weeks after the operation complete union had been effected, and the outer surface of the bone was about to separate when fits of an epileptic character supervened, and for a few days the patient was far from well. They have now, however, passed over; the wound on the forehead is looking well, and the patient is in every way much better, with the prospect of his disfigurement being to a great extent overcome.

A peculiarity of Middlesex Hospital is the special cancer wards, the history of which is somewhat curious. One day, when riding in the country, Samuel Whitbread, the brewer, saw a man working with his head wrapped up. He inquired what was the matter, and, on learning that it was cancer, asked why he did not go to Hospital. The man told him that he had been rejected on account of the incurability of his disease, which so struck Mr. Whitbread that he immediately set about procuring an asylum for similarly affected persons "until released by death or relieved by art." For years it was not known who this benefactor was, for the secret only transpired at his death. Subsequent bequests so far enriched the special fund that there are now thirty-three beds devoted to the reception of cancer patients. Here it is, too, that Dr. Broadbent's plan of treatment has received its most extensive application, and, it must be confessed, with very favourable results. A modification of the plan of introducing the acetic acid which we saw employed by Mr. Moore promises to be of great value; instead of using a syringe, as is ordinarily done, Mr. Moore employs a hollow elastic ball at the end of a flexible tube of some length; to the other extremity of this tube a hollow gold needle is attached. This is introduced into the acid, and the ball filled in the same way as the ordinary enema bag; the needle is then introduced into the part to be operated on, and to keep it there one or two strips of plaster are employed. The acid is not forced from the bag, but this is attached to an object considerably elevated above the spot punctured—the crown of the head, for instance—and the atmospheric pressure is allowed to drive the acid into the part. A patient assured us that the pain was not anything like so severe as when the acid was injected, and it evidently spread far more extensively through the tumour and surrounding organs than when driven in by manual force. Might not the same plan be adopted in the subcutaneous introduction of anæsthetics, and thus avoid that disagreeable and almost deadly faintness observed in certain cases after injection?

It might be supposed that wards containing patients with so many foul and unhealthy sores would be far from agreeable, but they are sweet and clean as could be wished. The agent called in to effect this is chlorine, a faint but not unpleasant smell of which pervades the wards; it is generated in a perforated vessel, by allowing sulphuric acid to fall slowly, drop by drop, into a mixture of black oxide of manganese and common salt. Sometimes also antiseptics (permanganate of potash, charcoal, etc.) are applied to the ulcerated surfaces. Another local application we noticed was an ointment of stramonium, a somewhat uncommon preparation, but one which seemed to give considerable relief. Of course, the cases treated in these wards are mostly Surgical, cancer of the breast or uterus being the most common forms of the malady observed, but in other parts of the Hospital instances of internal cancer are taken in.

One man we saw with Dr. Burdon Sanderson, whose case presented some little difficulty. He was admitted with a rapidly growing tumour in his abdomen, apparently near the origin of the cœliac axis, and at first it could not well be made out whether it was aneurismal or malignant, for pulsation in it was distinct. The subsequent history, however, induced the belief that it was cancerous, more especially when, from its effects, pleurisy with extensive effusion made its appearance.

The number of cases of gout encountered in this Hospital would certainly tend to disabuse the minds of those who think that gout only occurs in connexion with high living; in fact, rheumatic gout might be said to result from quite the opposite condition. A case, apparently of this nature, we saw under the care of Dr. Goodfellow, in which the great toes had never been affected, the right side was rather worse than the left, and the pain and tenderness over the joints were extreme, although they were but slightly reddened. Dr. Goodfellow says that in gout urate of soda is formed; in the inflammation accompanying rheumatic gout bone is produced. By the latter the supply of blood is cut off from the interior of the bone, which consequently atrophies *pari passu* with the thickening of its exterior. In the early stage water is the best application for both forms of disease to be followed, when the inflammation has been subdued by the use of iodine, in the shape of the compound tincture, painted on the part. When the acute stage has passed away Dr. Goodfellow recommends the Turkish bath, not, however, carried to an excess, as it is not advisable that the patient be weakened by too free perspiration. Another elegant application, highly spoken of by Dr. Goodfellow, when the first sharp onset of the disease has passed away, is a solution of iodine (gr. xij.) and iodide of potassium (gr. xxiv.) in collodion (℥j.); only a thin layer to be applied to the painful parts; but in the first instance the great thing is water. Being essentially a disease of weakness, Dr. Goodfellow is strongly opposed to enfeebling remedies in rheumatic gout, and holds that there is no specific. He rather recommends keeping up the strength, and, when the brunt of the attack has been borne, advises tonics.

We noticed under the care of the same gentleman a somewhat curious case. A man came into Hospital some time ago with one of his legs enormously swollen, and presenting a deep red erythematous rash on its surface. The cause was obscure; but by-and-by, when the swelling had somewhat diminished, under the influence of rest and proper management, a cluster of enlarged glands was detected in the groin, and on further examination by the rectum, a similar mass could be detected in the pelvis. The case was now clear. The venous circulation in the limb was obstructed at this point; hence the swelling, the inflammatory appearance being nothing more than was to be expected under such circumstances. Iodine and iodide of potassium, however, soon so far improved his condition, that he was able to go to work.

Another case illustrates a point of diagnosis.

A man came into Hospital for spitting of blood, but the blood thus expectorated presented none of the characteristics ordinarily encountered; in fact, after standing for a little while, it was dark and grumous, not unlike what might be brought up in a bad case of pneumonia somewhat advanced, but the chest appeared to be healthy. On closer examination,

it turned out that it came from the gums. The patient was a weakly subject, excessively hypochondriacal.

Under the care of Dr. Greenhow, we came across a case of aortic aneurism. The patient came in complaining rather of bronchitis than of the effects of the aneurism, and for a short time the latter remained unnoticed; as, however, the râles disappeared, its bruit became audible. This case Dr. Greenhow proposes treating by absolute rest and a diet somewhat below the average, the quietude thus induced being sufficient to keep such patients alive a long time. Another case showed well the peculiar breathing of emphysema, the muscles attached to the upper portion of the chest strongly contracting and elevating the skin of the neck, but with all the exertion the chest was but little expanded. With each inspiration the intercostal spaces were drawn in, as were the integuments below the ribs both in front and in the angle they form with the spine behind. Senega and ammoniacum had considerably improved this patient, and she was about to be put upon iron. A somewhat anomalous condition was observed in another patient, who laboured under mitral regurgitation with hemiplegia, probably from embolism. The peculiarity, however, consisted in his pulse not having the small, feeble, and irregular character usually associated with the disease, but was rather the jerky splashing pulse of aortic regurgitation, although there was no murmur with the second sound.

Although curious cases are probably not the most instructive of reading, still intermittent hæmaturia is not the most common of diseases, and deserves some mention. The patient in this case had a syphilitic history, but the character of his hæmaturia is the most interesting feature of his case. He may be well for a long time, but should his feet get cold, straightway blood appears in his urine, even in a couple of hours afterwards. But few corpuscles are contained in it, and globulin rather than albumen is to be detected. So it continues for one, two, or three micturitions, when the blood disappears as it came, and the man may be well for months. No treatment is required, so the Practitioner can claim no credit for the recovery of his patient. Cases of this kind have been reported by Dr. Harley, Dr. Pavy, Dr. Dickinson, and Dr. Gull. Dr. Gull calls it hæmatinuria.

Some little time ago, a girl came into the Hospital with a hard rounded tumour, very painful on pressure, in the right iliac region; the bowels were regular enough, and there was no vomiting or very great constitutional disturbance. Nevertheless, Dr. Greenhow diagnosed the case to be one of fæcal accumulation in the cæcum, and put her upon opium for a few days. He finds that in this way the bowels often come to act of their own accord after a time, but in this instance he preferred to employ castor-oil enemata, which effectually relieved the patient.

In the Surgical wards under Mr. Nunn were certain cases of interest for themselves alone or for the means employed for their remedy. A woman who had given birth to a child some twenty years ago remained tolerably well until some six years back, when she became troubled with what were called piles. At all events, an abscess formed and burst into the vagina, forming a communication between the rectum and that canal. For the relief of this a Surgeon laid open the whole of the perineum, thus throwing rectum and vagina into a common cloaca, with no benefit to, but rather to the great discomfort of, the patient. It was not, however, until she came into Hospital that the real *fons et origo mali* was detected in the shape of a stricture in the rectum, immediately below the point where the abscess formed and the recto-vaginal fistula originally existed.

One or two somewhat unusual preparations are used by Mr. Nunn; thus of late he has been employing sulphite of soda somewhat extensively as a prophylactic against erysipelas, as well as in the treatment of the malady; but as yet the results are too uncertain to make anything of them. We have, however, something more tangible in the use of carbolic acid mixed with water (to be agitated until they are thoroughly incorporated before application), as a means of removing the fœtor of certain discharges, and there can be no doubt of its success in this way. Sumbul is another substance extensively employed by Mr. Nunn, but we fear the therapeutic action, if not also the value, of this has yet to be settled. It certainly acts as a stimulant, probably also as an anti-spasmodic, but its properties are badly defined. Mr. Nunn is using it in several cases, particularly, of gout. Galvanism is also a favourite means of stimulation with this gentleman whenever increased action is required in a part; as, for instance, when ulcers are slow to take on a healing action, or when an organ seems to have its nourishment impaired—its advantages in such cases are unquestionable.

Some time ago, Mr. De Morgan suggested the propriety of drawing the ligatures employed in controlling hæmorrhage in flap operations directly through the integuments instead of allowing them to depend from the wound, keeping up a constant irritation, and preventing speedy union. It would seem that the same plan had been adopted in New York by Van Buren and others, but that is no derogation from Mr. De Morgan. Suffice it to say, however, that we saw a case of excision of the mamma where this plan had been adopted, and with the best result, union being thereby greatly promoted, for the wound was closed before the ligature was ready to come away.

A variety of immovable apparatus for the treatment of fractures, introduced by the same gentleman, is of great value. It is termed the "glue bandage," and is thus made: French glue is to be soaked in water for from twelve to twenty-four hours, until it has absorbed as much as it can hold. By the aid of this it is to be dissolved over a water bath, a small quantity of spirit added, when the adhesive fluid is ready for use. Before bandaging the limb, it should be covered with a layer of cotton wool, after which it is to be enveloped in a bandage, to which the glue should be applied. Another bandage and another application of glue is to be employed, even for a third time, if necessary. When the required thickness is attained, a pair of scissors run up the limb slits the whole open, the cotton wool preventing any injury to the limb. Two longitudinal strips of cloth, with hooks on them, are to be stuck to the edges of the slit, when, by means of a cord passing from one to another of these, as in lacing a boot, any degree of firmness may be attained. When varnished all over, the whole constitutes one of the most elegant appliances we have seen. The chalk and gum bandage is also employed, but it is not so elegant as the one we have just described.

There is an ophthalmic department at this Hospital, under the charge of Mr. Hulke and Mr. Lawson. Both these gentlemen are Surgeons to the Hospital.

Finally, before taking leave of Middlesex Hospital for a time, we must express our obligations for the pains taken on our behalf by all the officers of the institution. To Dr. John Murray, Resident Physician's Assistant, we are especially indebted.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0

Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

Terms of Subscription for India, £1 15s. per annum.

The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.

Post-office Orders and Drafts on Army or Navy Agents, should be made in favour of Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d. | A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d. | A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, MAY 18, 1867.

INDIAN MEDICAL SERVICE.

At last a gleam—we may say, two gleams—of sunshine have reached us from the far East, casting for once, by way of variety, a pleasant light on the hitherto dark and unsatisfactory aspect of the affairs of the Indian Medical Service. The first gleam is from Madras, where the Medical Officers have nobly and successfully vindicated their characters from some most unjust aspersions wantonly cast upon them by the Governor,

Lord Napier. Some months since, it appears, an Inspector or Deputy-Inspector of Hospitals visited one of the "up-country" Dispensaries, and not finding it quite up to the mark, according to his views, he reported the same on his arrival at Madras to Lord Napier, who thereupon caused to be issued a most objectionable order requiring that for the future all the returns of Civil Medical Officers, before being sent on to Government, should be submitted to the collector or magistrate of the district for the purpose of obtaining a certificate that the said returns were truthful. Need it be said that the Civil Medical Officers, from one end of Madras to the other, rose as one man to protest against the inuendo thus cast upon them? It is said that one and all at once tendered their resignations. The principal Inspector-General, with a readiness and ardour that does him great credit, came to the rescue, and addressed a long letter to Government, depicting, in forcible terms, the injustice and impolicy of the obnoxious order, pointing out that the suggestion that Medical documents should be verified by unprofessional persons was not only impracticable, but, by implying a doubt as to the truthfulness of Medical Officers in civil employment, must necessarily tend to make such employment most distasteful to all gentlemen of honourable feelings. These protests and representations fortunately had the desired effect. The local Government, apparently ashamed of its conduct, has issued a second order, annulling the first one, stating that the veracity of the Medical Officers in the Civil Department is above suspicion, and they direct that for the future "a copy of the Annual Report be submitted to the collector for his information, the latter to report on the general state of the Dispensary and its usefulness and acceptability to the native community, but not to enter on the question of professional treatment or to certify to the accuracy of the return." The victory of the Medical Officers in this instance is as complete as it is satisfactory. We hope that Lord Napier will profit by the lesson furnished him by this episode.

Our second gleam of sunshine rests also on the affairs of these Civil Medical Officers, not, however, in Madras alone, but throughout the length and breadth of India. The Warrant of December 23, 1864, so explicit as to the pay of the purely Military Medical Officer, left almost untouched that of his civil brother in the same service. Hence, for the last two years and a half, there has been a constant exhibition of illiberality and niggardliness on the part of the local authorities, and of resistance, remonstrance, and dissatisfaction on that of the Medical Officers. This most undesirable and unhappy state of things, we now trust, has come to an end. We have before us another Warrant "in continuation of G.G.O. No. 1060, of December 23, 1864" (rather a long interval between the two), setting forth a revised scale of consolidated salaries for Civil and Military Officers alike. Most heartily do we congratulate our Professional brethren on their just demands having at last been granted by Government. The document enters into such minute details, and is, on the face of it (we speak after a hasty glance at it), so explicit, and based on so apparently liberal a scale, that it cannot well fail, we should say, to give satisfaction. But until it comes into actual working operation, it is almost impossible to predict what will be the verdict of the Indian Service. If "pounds, shillings, and pence," or, in the case of India, "rupees," were everything, there can be no doubt that the Indian would bear off the palm over every other public Medical Service in the world; but money is not all. What amount of pay, we would ask, would suffice to compensate a man of honourable feeling for being insulted in the manner in which Lord Napier insulted the Medical Officers of the Madras Presidency by his late order? No! Justice, fair dealing, consideration, respect, must also be awarded, or the Indian Medical Service will never regain the high esteem in which it was once so deservedly held by the Profession at large.

THE FORCED ATROPHY OF TUMOURS.

The great desideratum in treating tumours is to find some means of spoiling their tissue and causing them to waste, without running the risk of suppuration or of gangrene. Nature supplies us with two models of such a process. In the case of organs whose existence is useless, as the womb after parturition, and the breasts after weaning, there is an actual wasting—that is, interstitial death and removal without renewal. In morbid growths, again—in the "adventitious tissues" resulting from inflammation, scrofula, cancer, and every other kind of tumour, there is often seen a more clumsy process of degeneration and obsolescence; for the morbid tissue may die and degenerate, whilst its *débris* are left harmlessly in the shape of oil globules, granular corpuscles, and earthy salts. All this has been familiar to pathologists since Müller's work on cancer, and may be found at large in Lebert, Walshe, Collis, and the other best and latest writers on cancer.

This form of obsolescence is unattended with irritation and abscess. Nay, pus itself may be absorbed, and leave a slowly vanishing putty-like or "yellow tubercular" mass behind.

Thus, then, we have the fact that tissue, healthy or morbid, may decay, and that though decayed, and become a "foreign substance," it may remain harmlessly till perhaps it be slowly absorbed.

It has been the aim of many an experimentalist to imitate by art these processes: whether that which is the rule in the womb after parturition, or that fatty degeneration which is an occasional or partial process in tumours; and many have been the means proposed, of which, however, extreme cold and constant pressure are perhaps the best known. Dr. Broadbent of late has supplied us with another agent in the form of acetic acid, which is used so as to effect such a gentle change in the tumour elements as shall spoil their organisation and stop their growth, leaving the spoiled tissues to slow decay and absorption. Dr. Broadbent's plan is but in its infancy, and, with a variety in the solvent injections and other details, will probably continue to increase in usefulness

Dr. Althaus has lately proposed the use of galvanism,(a) the results obtained from which in disease are certainly not yet equal to the expectations formed from the powerful and mysterious nature of the agent. This may be due to the fact that we yet lack the right manner of using it, and the skill to discriminate the various effects which it produces under varying conditions. The wearer of a galvanic ring or galvanic belt expects marvels, and sometimes finds them in imagination; but, as yet, we lack definite philosophical observations, made with all modern precise appliances, on the effects of galvanism.

In the little work whose title we have quoted, Dr. Althaus describes three effects of galvanism on the tissues. The first are the effects of the heat generated when a current is forced to pass a thin wire of low conducting power. This is the galvanic cautery, a well-known remedial agent; but it is not this on which Dr. Althaus depends for the destruction of tumours. He disclaims any effect of heat whatever, and says that none is developed by the apparatus he uses.

A second effect may be the modifications of nutrition effected through the vaso-motor nerves.

But the third, and most important, is the *electrolytic*;—that agency whereby liquids submitted to a powerful current are resolved into their elements, the electro-*negative* of which, *i.e.*, oxygen and acids, find their way to the *positive* pole, whilst hydrogen and alkalis are evolved at the negative pole. Let us say that, for this effect, not mere *quantity* of electricity is necessary, but that *intensity* which is due to a multiplication of cells. The battery which Dr. Althaus employs, contains fifteen cells on Daniell's principle, with the acid solution mixed with sawdust, so that it can be carried about with no waste or spilling of liquid. From 5 to 15 cells can be used

(a) "On the Electrolytic Treatment of Tumours, etc." By Julius Althaus, M.D., etc. London: Churchill and Sons. 1867. Pp. 32.

at will; the negative pole is applied to the substance of the affected tissue by means of a fine gilt needle, or set of needles, plunged into it; the positive pole is applied to the surface of the skin of some neighbouring part of the body.

Now we shall let Dr. Althaus speak for himself.

"I was first led to adopt the electrolytic treatment in consequence of a series of microscopical observations I made some time ago on the changes which animal structures undergo under the influence of the chemical action of the continuous galvanic current. . . . . .

No animal tissue whatsoever can withstand the disintegrating effect of the negative pole, and the force and rapidity with which this disintegration is brought about, are directly proportional to the electro-motive force which is employed, and to the softness and vascularity of the structures acted upon. Thus ten cells of a battery have a more thorough and rapid effect than five, fifteen more than ten, and so on; while as regards the tissues, those containing most water, such as the muscles, the cellular tissue, the spleen, etc., are more rapidly disintegrated than those which contain less fluid. Bones and teeth withstand the action of the current for a considerable time. . . . . .

"A most curious and novel circumstance forced itself early on my attention; and this was, that the electrolytic action of the negative pole on animal tissues was mainly composed of two different elements—viz., of *the mechanical action of the nascent hydrogen*, which was, under the microscope, seen to rise in innumerable bubbles, as soon as the circuit was closed, and to force itself, as it were, between the structural elements of the tissues, driving their fibres mechanically asunder; and secondly, of the *chemical action of the free alkali* (soda and potassa), which, together with the hydrogen, is developed at the negative pole of the battery. . . . . .

"It was then observed that a needle connected with the negative pole of the battery could be inserted into, and removed from, the body without causing any loss of blood; that the current used did not appear to give any pain to the animal beyond what was due to the introduction of the needle through the skin; and that the parts operated upon shrank sensibly after the operation, but that there was neither inflammation, suppuration, nor sloughing. If the negative pole was made to act upon blood-vessels, it was found that they were first filled with a foreign body, due to disintegration of the blood, and round which afterwards a slow deposition of lamellated fibrine took place; they were thus changed into solid strings, wherever the current had been made to act.

"It appeared fair to conclude from these observations that the current could be safely and successfully applied to such parts of the body where shrinking and disintegration of tissue, and obliteration of blood-vessels, might be required for Surgical purposes. The first case in which I used it in this manner was that of a patient under the care of Mr. White Cooper, in July, 1866. Since then I have operated in a considerable number of cases, and in none of them has there been any bad symptom during the progress of the treatment which could have been traced to the application of galvanism."

Dr. Althaus subjoins only four cases—that of nævus, under the care of Mr. White Cooper and Dr. Allan; one of papillary tumour; one of molluscum, in a patient of Dr. Tilbury Fox; and one of hydatids in a horse of Mr. Mavor's. In each of these cases the effect of the battery was produced quickly and perfectly, with no ill effect.

If these things be so, it is clear that Dr. Althaus has furnished us with a remedy which robs a large part of Surgery of its terrors. Let us take nævus, for example. It is a very common congenital blemish; mothers are anxious to have it obliterated; Surgeons are ready enough to find the means, and there is an operation more or less painful, and a scar to follow. If, then, nævi can only be electrolysed into nothingness, it will be a boon indeed. We may say the same of all superficial tumours of soft texture, including especially piles; and on these common maladies we think it a duty in Hospital Surgeons to give Dr. Althaus a full and public opportunity of demonstrating his method. It is a thing which could be done in a week.

If we may venture on one word of advice to the author, it would be not even to speak of the cure of cancer, aneurism, hydrocephalus, spina bifida, empyema, and stricture of the œsophagus till the simpler disease of nævus has been vanquished, and a good collection of cases published. We should be very glad also to receive fuller details of the electrolytic effects—*e.g.*, Does a tumour when electrolysed become emphysematous from the evolved hydrogen? What are the microscopic appearances of recently electrolysed tissues? If hydrogen and alkali are evolved at the negative pole sufficient to disintegrate a tissue, what effects are produced by the equivalents of oxygen and acid which must be evolved at the positive pole? Supposing that cancer—say, of the breast—is to be electrolysed, we suppose the gland must perish along with the growth which it nourishes. Can Dr. Althaus produce atrophy of such a gland—say, the mamma, of one of the lower animals? Could he do so to any given muscle? Before he ventures to attack an aneurism, can he close a set of varicose veins? The whole thing is well worth the fullest investigation; and, as we have said, a very few days ought to decide whether we have one of the most brilliant successes or most dismal failures in the history of therapeutics.

"THE MEDICAL TEACHERS' ASSOCIATION."

To many of our readers it will be no news that an effort is being made, and not for the first time, to form an "Association of the Teachers and Members of the Staffs of the Metropolitan Hospital Medical Schools," the prime object of which shall be "to confer on all subjects connected with the education of Medical students in the Schools of London, and to be a medium of communication between the teachers." We are happy in being able to say that the project is, after preliminary meetings at Mr. Brodhurst's, so far advanced that a meeting of the Hospital staffs and teachers is called for Friday, May 24, at the Rooms of the Medical and Chirurgical Society, to take the question of the establishment of such an association into consideration. It has our heartiest good wishes for its success and vitality. We need not seek for a reason for such a movement, nor does it require any excuse. The simple fact that no such association exists is the strongest argument possible for the establishment of one—the strongest justification that could possibly be offered in favour of the present attempt. The system and management of Medical teaching in London is imperfect, and wasteful to a degree almost incredible, and of this many proofs might easily be given; but it would be difficult to give a more striking and pregnant proof than the fact that up to this time there exists no common bond of union among the teachers—that they possess no means of intercommunion, no machinery or opportunity for taking counsel together on the conduct and management of the great work in which they are engaged, no medium by and through which they can, as a body, exert any influence on the progress of Medical education, on the Profession at large, or on the public. This divided and isolated position of our Schools has been possible only because with us Medical teaching is a private speculation. Every Hospital which can succeed in supporting a hundred and odd beds must needs have a Medical School attached to it, and, no matter whether the various members of its staff have or have not the faculty of teaching, each one must undertake to lecture on some subject required by the Medical curriculum of the day. Hence, in the nature of things, arise jealousies and rivalries between the several Schools, and the success of each becomes more immediately important than the advancement and perfection of Medical education. The consequence is, that mere lecturing holds the first place in our system, and men enter the Profession absolutely ignorant of the practical bedside work that awaits them, and have to learn Clinical Medicine and Surgery on their private patients. This state of things is far less possible under the system of endowed chairs and Academies of Medicine, which obtains on the Continent; and it is by the establishment of some

such system that most look for the improvement of Medical education in England. At present, the greater number of lectureships are actually a tax on the holder's pocket, and very few indeed pay well enough to tempt the most able man to undertake them, and devote to them the time required to make his teaching anything like full and perfect. We do not propose, however, to note now all the points in which our system of Medical teaching requires improvement, nor all the ways in which an association of Medical teachers may do valuable work. Such a body, if once well started, will gradually, and very easily, find its work, and cannot fail, if well managed, to be able to exert very considerable influence with the Profession, the Medical Council, and the Government, on all questions of Medical education and policy. This power and influence will necessarily, however, be of slow growth at the best. To form at all a strong association out of our different, and in some degree antagonistic and rival, schools, is by no means an easy matter. Good men have tried it and failed, partly, we suspect, from having attempted too much at starting. *Chi va piano, va lontano*, would be a good motto for the Association; and we have hopes of its successful establishment from the gradual advance of late in the views generally held of what Medical education ought to be, and from the tact and judgment of Mr. Brodhurst, the promoter of the present effort.

THE WEEK.

TOPICS OF THE DAY.

The Convocation of the University of London have this year had two particularly satisfactory topics for discussion—the building which Government are going to provide for the University, and the right of returning one, if not two, members to Parliament, which it is now pretty certain will be conferred by the new Reform Bill. We congratulate the University on being so near both goals, although, as is often the case when people have got what they want, Convocation does not seem altogether satisfied. The first matter, that of the building, seems to be the cause of great burnings of heart. Grecian or Gothic is the question at issue. When a building was first decided on, Mr. Cowper was in office, and he, sharing in what appears to have been a family dislike, determined on the adoption of the classical style. When, however, Lord John Manners succeeded him, his lordship, of course, as the head of what used to be called "Young England," now alas! no longer young, had predilections for the mediæval. He consequently directed that a plan in that style should be prepared for consideration. At this stage, Dr. Carpenter was called into consultation, who, with all due modesty, disclaimed any right or intention of speaking on the part of the Senate, but, at the same time, expressed his personal opinion in favour of mediæval architecture. The present designs, therefore, are mediæval; they are now hung for the consideration of Parliament, with whom must rest the final decision. Government does not seem inclined to submit to much dictation from the University on the subject, and perhaps it is better that it should be so, as Convocation are evidently not of one mind upon it. One member said that the University should have a structure which, amongst other things, should possess simplicity and repose—if so, it is to be hoped that these attributes will be confined to the building.

We think the argument for a classical structure founded on the style of the adjacent Burlington-house is worthless. Were any part of London built in one way, there would be something in it; but as diversity in London is the rule, and uniformity an unknown exception, it is of not much use to begin now to enforce the latter. Besides, there is an undoubted charm in diversity if it be judiciously combined. We have only to go to some of the Oxford Colleges to learn how mediæval and classical may lend beauty to each other.

The Profession of Medicine have no reason to complain of the amount of enfranchisement they will receive under the combined English and Scottish Reform Bills. The only two of registered Practitioners who will not have the right to vote are Miss Garrett and Dr. Elizabeth Blackwell, unless, indeed, Mr. Mill should succeed in his chivalrous enterprise. But besides their right to vote as Medical Practitioners, a large proportion of the Profession will have a voice in returning members for one or other of the Universities, for we are glad to see that Medical graduates of the Scottish Universities are expressly included by Mr. Disraeli. We may hope that the feelings and wishes of the Profession of Medicine will, now at least, not be, as in former times, systematically ignored by a so-called liberal legislature.

The meeting of the Medical Council will, we conjecture, not be productive of any very marked alterations in the laws which govern the education of Medical Practitioners. We expect to hear that good results have already accrued from the gentle pressure put upon examining bodies by the visitation of examinations. For ourselves we wish that Medical instruction in England could be made more tutorial and less professorial. If fewer lectures were given, and more examinations by the professors, and if the latter could be got to furnish the examining boards with a regular report of results, another real step would be made towards a reform of Medical education. With regard to the Medical Amendment Act, we should suspect there may be a better chance for the measure under Mr. Gathorne Hardy than under Mr. Walpole, as the former has shown that he is not deficient in energy, and his Metropolitan Workhouse Bill proves that he entertains a proper appreciation of Medical science and work.

Deaths from sunstroke in May in this country are excessively rare, but inquests were held last week on two cases by the coroner for Middlesex. The cutting easterly wind which has followed will prove, there can be no doubt, even more dangerous to human life. The indefatigable Medical Officer of Health for Islington, however, has this week, at the Medico-Chirurgical Society, advanced the opinion that if intense cold be more productive of mortality, intense heat is the greater generator of general disease; but we must wait to see his paper and statistics in print before we hazard an opinion on them. One point, however, we may note, that Dr. Ballard showed by the statistics of many diseases that a heavy fall of rain, where drainage is good, diminishes disease. Unfortunately, the valuable and elaborate tables and averages which Dr. Ballard had compiled, fell, if we may trust our impressions of the debate which followed, on an unappreciating audience. In fact, the debate evidenced more than the average dulness which seems of late to be generated by the atmosphere of Berners-street.

THE FATE OF DR. LIVINGSTONE.

There seem to be good grounds for believing that Dr. Livingstone may be still alive. Moosa, the Johanna man, whose circumstantial account of Livingstone's assassination produced such a general feeling of despair, has been caught tripping in his story. At first he said that Livingstone was attacked by a band of Mavites or Zulus, but he has since asserted that he was killed in a quarrel with the native negro population. Sir Roderick Murchison also communicated to the Geographical Society, on Monday last, an account given by an Arab merchant, who arrived on the coast in March last, and reported having seen and spoken with a white man on Lake Tanganyika. It was one of the objects of Livingstone's expedition to determine the boundaries of this lake, and there seems to be really a reasonable ground for hope that he may have lived, not only to accomplish his aim, but to give the world the story of his success. The expedition which is fitting out to determine his fate will leave England on June 9. They are to ascend to the north end of the Lake Nyassa.

SIR WILLIAM LAWRENCE, BART.

We are glad to hear that this venerable Surgeon is slowly recovering from his late severe attack: although the power of utterance is reported to be still imperfect, that of locomotion is in a great degree restored. At a meeting of the Council of the Royal College of Surgeons, on Thursday afternoon, a letter was read from him in which he expressed a wish to resign his chair as a member of the Court of Examiners, to which he was elected so long ago as 1840. It appears from the Calendar that Sir William Lawrence was admitted a Member of the College in 1805, and in 1828 had a seat in the Council, filling the office of President twice—viz., in 1846 and again in 1855. He delivered the Hunterian Oration in 1834, and again in 1846.

THE "DREADNOUGHT" AND GREENWICH HOSPITAL.

From what we have already said on this subject, it might have been evident to which side any strictly neutral authority would incline, and we need scarcely say that the gentlemen to whom the matter in dispute was referred were unlikely to be biassed by any influence apart from the merits of the case. Accordingly, we understand, although the report of Dr. Bristowe and Mr. Holmes has not yet been made public, that they have given their decision in favour of the allotment, for the purposes of the Seaman's Hospital Society, of that portion of the building originally assigned to them, but which the Society refused to accept. This refusal, however, according to Dr. Rooke's letter, published in our columns, appears to have been founded on a misconception on the part of that gentleman as to whether the partition walls in Queen Mary's Quarter were removable or not. We had already shown, and we must take the credit of having been the first to do so, that these walls were removable, and our opinion has only been confirmed by the Commissioners. Whether or not the Society will accept the portion of the buildings assigned them yet remains to be seen, but should they obstinately refuse to do so, they must lose to a certain extent the support and confidence of the public; but we hope that matters will not come to such a pass, and that common sense will have its proper influence on the Committee.

THE BLACK DEATH.

Reports as to the reappearance of the black death of the middle ages in Ireland have been flying about for some time back, and the sudden death of Lord Hubert Butler has tended to make these *canards* all the more readily accepted. The power of a name is thereby well shown, for the mere idea of the terrible black death being abroad has made some nervous people really ill—much more so than if they had been told that a very bad form of typhus fever, coupled with a tendency to inflammation of the brain and spinal cord—the latter affection being, in some cases, the more important of the two—had attacked a considerable number of people, with a fatal result in a large number of the cases. Yet so it is. There is nothing new in all this; both diseases have been known before separately and in combination, and their reappearance now need not excite that unnecessary alarm which always attaches to the unknown. We propose on a future occasion to make the character of the epidemic better known to our readers.

A NEW DISCOVERY IN COMPARATIVE ANATOMY.

The very able conservator of the Museum of the Royal College of Surgeons, Mr. Flower, has lately brought a new fact of great interest before the Royal Society in reference to the dentition of that curious order or sub-class—apparently the first created of mammalia—the Marsupials, or pouched animals. One of the broad divisions of Mammalia has hitherto been into Diphyodont and Monophyodont, or mammals having two sets of teeth and mammals having only one set. Of these the latter include the Cetacea and the Bruta, whilst the remaining majority of mammalian orders are all Diphyodont. If Mr. Flower be correct in his generalisation—and the examples he adduces from the different sub-orders of Marsupials appear sufficiently numerous and remarkable to warrant him in making it—we might place these creatures midway between the Monophyodont and Diphyodont types; for in them we trace the first step towards a double set of teeth, the representative of the deciduous or milk teeth being reduced to a single tooth—a milk molar—which is succeeded by the hind premolar on each side in both jaws. Neither the incisors, the canines, nor the other premolars have any temporary predecessors, although, as Mr. Flower hints, it might perhaps be found that at a very early period of development some trace of their follicular stage might be present. This is the more probable, as in some known instances—*e. g.*, some Rodentia—milk teeth are exceedingly evanescent and are shed *in utero*. But the existence of such traces is merely a speculation; whereas Mr. Flower's actual observation of the early stages of dentition in kangaroos, opossums, and thylacines completely support his position. He remarks that it is very interesting to notice that the deciduous tooth alone developed in the Marsupials corresponds homologically with that which is, generally speaking, the most persistent in typical Diphyodonts and in Man—viz., the posterior milk molar, replaced by the posterior premolar. We think, however, that even a higher interest is raised by the observation of this, so to speak, first intimation of the idea of Diphyodont dentition in the race of mammals which are the living representatives of the sole known mammalian life (Phascolothere and Amphithere) of the Mesozoic period, and we congratulate Mr. Flower on his discovery.

STATISTICS OF TOWNS OF SCOTLAND.

The monthly return of the Registrar-General of Scotland for April shows that in the eight principal Scotch towns, containing in 1861 a population of 884,955, and now probably numbering at least a million inhabitants, 573 marriages, 3580 births, and 2347 deaths occurred during the month. Of the aggregate births, 9·6 per cent. were illegitimate, the proportion varying in the several towns from 5·1 per cent. in Leith, 5·7 in Greenock, 6·3 in Paisley, 8·6 in Perth, 8·9 in Edinburgh, to 10·2 in Aberdeen, 10·5 in Glasgow, and 10·7 in Dundee. Scotland presents the peculiarity of a higher ratio of illegitimacy in rural than in town districts. Last year the proportions were 9·9 per cent. in towns, and 10·5 in the country, which Dr. Stark accepts as proof that illegitimacy in Scotland is a very different thing, and has different causes, from illegitimacy in other countries. The mortality of children under 5 years of age averaged 42 per cent. of the total deaths in the eight towns during the month, the lowest rate being 29 per cent. in Perth, and the highest 45 per cent. in Glasgow and Dundee. The intermediate rates were 35 in Aberdeen, 36 in Paisley, 38 in Greenock, 39 in Edinburgh, and 41 in Leith. Typhus caused 11 per cent. of the deaths in Leith.

OPIUM-SMOKING IN INDIA.

Appended to the report of Dr. Hewlett on the Health of Bombay (noticed in the *Medical Times and Gazette* of the 4th inst.) are interesting accounts of some of the trades carried on in that city, which affect in greater or less degree the health of the population. Foremost among those producing the most baneful results, are the places of resort for opium-smoking, whose proprietors go by the name of "Chundool shopkeepers." The following description of the *modus operandi* of inhalation is supplied, apparently verbatim, from the lips of one Achin Ahoon, the owner of an opium shop doing a considerable amount of business:—

"I am 30 years of age and was born at Macao. . .

I am now a Christian by the name of Sylvester Salvador. I keep an opium shop in the Colbhât-road. I sometimes have fifty customers during the day; they consist of Mussulmen, Hindoos, Purvoes, Banians, Mahrattas, and sometimes a few Manilla men come. I have never seen a Parsee or a European smoke in my house.

"I buy raw opium at the Custom-house, and pay 24 rupeees for a Calcutta seer. I take a seer of raw opium and cut it up into small pieces, which I put into a saucepan, and pour on them about seven pints of water. I put the saucepan on the chula and boil the water, stirring it up with a wooden spoon, and continue the stirring for one hour. The saucepan is then taken off the chula, and the mixture is strained through a dungaree cloth into another saucepan. The residue which will not pass through the cloth is thrown away, but the fluid which has passed through the cloth is then boiled a second time, and left to boil down until only four pints remain. It is then thick, and is put into a jar, being ready for use. When a customer comes, he asks for the quantity he requires, varying from nine pies to one rupee eight annas' worth. I always make the customers pay first before giving them any opium. A person who can smoke one rupee eight annas' worth would take all day doing so. I supply the opium in a little china cup, and give the smoker a pipe, which is composed of a china bottle with a piece of bamboo thrust into the mouth of it. The bottle has a small hole bored on one side. I also give him an iron pin, pointed at one end, and called in Hindustani sick, and an oil lamp defended from the air by the bottom of a bottle (generally half a soda-water bottle) with the end broken off. The smoker lies on a raised wooden platform matted over, which I have fitted in the centre of my shop. These articles are placed by his side. He dips the point of the pin into the cup containing the opium, and then holds it over the flame of the lamp. The opium bubbles up, and becomes inspissated. This is repeated until a small ball of porous opium is formed, which is rolled round on the pipe. This is then made red-hot and pushed into the hole on the side of the bottle. The smoke is then inhaled through the stem, and taken into the lungs, and after a short time expelled through the mouth and nose. It takes about fifteen minutes to finish a cupful, which would cost about four annas. A cupful holds about 80 minims, and will send a man to sleep. A confirmed opium-smoker dares not leave off; if he does, he gets sick and dies. The greatest number of persons come to my shop at 8 o'clock at night. I keep separate pipes for Mussulmen and Hindoos. I smoke very little, about one pipe every other day. My father smokes about twelve annas' worth, or about forty or fifty pipes, a day. If I were to drink a cupful of the opium, it would kill me, but it would only make my father a little drunk. I generally buy about two seers of opium during the month, and make about twelve rupees profit on every seer, but I have to pay for the oil and the wages of one servant."

This description is lucid enough in its way, but it wants the remarkable sketch of the interior of this chundool shop, with its occupants in the different stages of inhalation—from the new-comer, eagerly taking his first whiff, to the maudlin customer, who is presumably a "little drunk," and culminating with the stupefied form extended like a corpse on the floor—to convey the full impression of one phase of the effects of this precious trade.

We take this opportunity of repairing what might have seemed to be an omission in our former notice of Dr. Hewlett's excellent report—we refer to the illustrative drawings contributed by Mr. F. Knight, of Bombay. Most of these are done with a vigorous and life-like artistic power by no means frequently to be met with. We may instance especially the sketch of the "New Sonapore Depot for Dead Cattle," representing in the foreground a group of vultures feasting themselves on the carcase of a dead bullock, and resenting the intrusion at their banquet of a hungry dog; the "Silk Dyers" at work is also a capital sketch.

FROM ABROAD.—PROFESSOR ROSER ON THE EXTRACTION OF BULLETS—LETTER OF PROFESSOR VON BAER TO THE FRENCH ACADEMY OF SCIENCES.

Dr. Roser, the well-known Professor of Surgery at Marburg, and one of the ablest among the German critical writers, has commenced publishing a series of papers in the *Berlin Med. Wochenschrift*, entitled, "On some of the Errors in Military Surgery." The first of these relates to "Extraction of Bullets." The saying of Pirogoff respecting Garibaldi's gunshot wound—that, had the presence of the ball been too early diagnosticated, he never would have preserved his limb—has its application, in Professor Roser's opinion, to thousands of cases, for the necessity of hastening to seek for and extract balls is one of the most prevalent among the time-honoured prejudices of Military Surgery. All experience shows that this is wrong, and yet useless or mischievous manipulations are constantly resorted to. This has chiefly arisen from the precepts of the manuals and the theory of gunshot wounds being deficient in clearness on this point, and in part from the erroneous idea that the injury produced by the ball is due rather to the irritation and pressure caused by its presence than to the mischief done to organs and tissues by its penetration. But the maxim may be boldly laid down that, with few exceptions, the presence of the ball is but an unimportant part of the pathological process; that its extraction is scarcely ever a pressing necessity; that its too early cutting out and extraction is anything but a conservative procedure; and that, as a rule, its removal is only imperative when prolonged suppuration has to be prevented or terminated.

When a ball is lodged under the skin or only superficially in the muscular tissue, it should not be too hastily cut out. In many cases it has escaped notice for days or weeks, and in most cases it is much easier removed after suppuration has loosened it than if it were sought for at first amongst the bleeding and infiltrated tissues. Exceptional cases do arise, as when portions of clothing are carried in with the ball, and give rise to acute and fetid suppuration. Even when the ball has penetrated the muscles deeply, we should abstain from the employment of instruments to search for it, such attempts irritating the wound, admitting the air, and increasing the effusion. They are, too, rarely successful, and, when they are so, necessitate much cutting or rupture of the fibre; and it may be well questioned whether the operation for the removal of the ball does not produce far more mischief than would have resulted from leaving it where it was. The rule in such cases should be to wait until the development of suppuration around the foreign body furnishes determinate indications. Even in the case of injury to bones, attempts at primary extraction of the ball should be exceptional, its mere presence little influencing the ultimate consequences of the accident. Finally, the time at the ambulances consumed in searching for and extracting balls would be far better employed in attending to other cases liable to be neglected. The author quotes Pirogoff, who decidedly objects to such attempts being made in the ambulances, these operations being of too delicate a character and requiring too much time. He attributes the unfortunate issue of many cases to such premature and hasty interference.

Professor von Baer, of St. Petersburg, the veteran physiologist and anthropologist, who was recently honoured with the Cuvier Prize by the Paris Academy of Sciences, in testimony of the vast benefit his researches have conferred on natural science, acknowledged the compliment in the following interesting note:—

"The Academy of Sciences has kindly desired to embellish my old age by calling to mind the labours of my younger days, and declaring them worthy of the Cuvier Prize. This is an honour to which I should not have ventured to aspire, and for which I feel extremely grateful. The name of Cuvier has been that which from my youth has inspired me with the profoundest veneration, and the Cuvier Prize has never been accorded save for eminent services. My researches were received in Germany, at the epoch of their publication, with less attention than they might have hoped for; but the French Academy, whose voice is always that which most resounds throughout the scientific world, has loaded me with honour by judging them worthy of its approbation after so long a

lapse of time. You may well understand, gentlemen, how such a distinction would render me proud were I not old enough to have observed how science is marching forwards. Few, indeed, of its cultivators are named at the end of a century—the Aristotles, Newtons, Linnæus, Lavoisiers, and Cuviers alone remaining amidst the unknown crowd."

PARLIAMENTARY.—THE BUILDINGS FOR THE UNIVERSITY OF LONDON—THE METROPOLITAN GAS BILL—THE BROWN BEQUEST FOR PROMOTING THE STUDY OF VETERINARY MEDICINE—THE TANCRED CHARITIES—INDIAN MEDICAL OFFICERS—THE LABOURING CLASSES' DWELLINGS ACT AMENDMENTS BILL—THE SCOTCH REFORM BILL, REPRESENTATION OF THE UNIVERSITIES, FRANCHISE GIVEN TO THE MEDICAL GRADUATES.

On Thursday, May 9, in the House of Commons,

Mr. Goldsmid asked the First Commissioner of Works whether he would state to the House the course he intended to pursue with regard to the new building for the University of London, and whether he would take the opinion of the House upon the design he proposed to adopt.

Lord J. Manners could only repeat that he had done what he promised to do before the adjournment for the Easter holidays—namely, to place both the alternative designs in the House of Commons for the inspection of members. They had been placed in the library, and any hon. member could see them there at present. With regard to the second branch of the question, he apprehended that if the design selected were not approved, it would be open to any hon. member to move its rejection and the substitution of another.

Mr. Goldsmid asked whether the noble lord would refer the question to a select committee.

Lord J. Manners said that in this matter time was of great importance. He therefore thought it better to follow the course which had been taken with regard to the new Foreign-office.

After some debate on the Metropolitan Gas Bill a motion that the committee on that Bill should consist of five members was agreed to.

Lord R. Montagu obtained leave to bring in a Bill for confirming a scheme of the Charity Commissioners for "the charity founded by Thomas Brown, Esq., for Promoting the Study and Cure of the Maladies, Distempers, and Injuries of Quadrupeds or Birds useful to Man;" and a Bill for confirming a scheme of the Charity Commissioners for "the several charities founded by the settlement and will of Christopher Tancred, of Whixley, in the county of York, Esq., deceased."

These Bills were subsequently brought in and read a first time.

On Monday, May 13,

Mr. Bazley inquired what compensation the Government intended offering to the Indian Medical Retiring Funds for losses incurred through the non-accession of fresh subscribers resulting from orders passed by the Home Government in 1858; and what compensation was to be offered to the Medical officers of the late East India Company's Service for the loss of appointments transferred to Medical officers of the British Army serving in India, as all the rights of the Medical officers of the Indian Army had been secured to them by Parliament.

Sir S. Northcote stated that the offer which the Government had made to the representatives of the Madras and Bombay Medical Retiring Funds had not been complied with, and they had been informed that they could retain the management of the fund in their own hands; if they resolved to do so, it would be for the Government to consider what amount of compensation should be awarded to the fund on account of the loss sustained by it. In each case an actuary would have to estimate the amount of compensation. The managers of the Bengal Medical Fund had agreed to the terms offered by the Government, and arrangements were now being made for a conditional transfer of the liabilities of the fund to the Government. With regard to the second question, he stated (as we understood) that the appointments referred to were of the nature of staff appointments, and in respect of compensation it had never been thought proper to deal with them in the same way as with ordinary commissions. All those appointments had been necessarily reduced in number in consequence of the reduction of the force; but in every other respect, including accelerated promotion and increase of pay, everything had been done to add to the attractions of the Medical service.

The Labouring Classes' Dwellings Act (1866) Amendments Bill was read a second time.

On the same evening, in stating the provisions of the Scotch Reform Bill, the Chancellor of the Exchequer said that he proposed to give two members to the Universities, which in 1858 had received a popular constitution through the exertions of the Lord Justice Clerk. He said:—

"That measure has been perfectly efficient, and indeed, I may say, singularly successful. It has accomplished the end it was intended to achieve, and it has given to the four Scotch Universities — Edinburgh, Glasgow, Aberdeen, and St. Andrew's—a real constituency of above 5500, which is rather more than the constituency of Oxford, somewhat less than that of Cambridge, and considerably exceeding the constituency of what is called the University of Dublin, but which is merely Trinity College. Trinity College sends us two members, under the name of the University of Dublin, with a constituency of only 1700. I do not grudge the two members Trinity College sends us, though they are not always on the same side of the House. I think the word 'University,' and the title and function which, though only formally, they really possess, may ultimately lead to a University in Ireland. There may be other Colleges akin to Trinity College, and then the constituency will naturally increase. The Universities of Oxford, Cambridge, and Dublin have each two members. Now, what we propose as the question to be first considered is the constituency of the Scotch Universities, amounting now to 1500, but which really and virtually will be, under the bill I am about to introduce, 6500—for there is a considerable number of Medical graduates, whom it was intended in the original scheme of 1858 to endow with the franchise, and have made part of the constituency of the Colleges, but who were omitted, I believe, entirely from a technical reason, and whom by this bill it is intended to introduce—and this will increase the constituency of the Scotch Universities to 6500. We think, under these circumstances, that two members ought to be given to the Scotch Universities, but we propose that they should be divided, that the University of Edinburgh, which contributes about one moiety of the constituency, with the smallest University of St. Andrew's, shall return one member, and that Glasgow and Aberdeen shall return the other member."

NEW WORKHOUSE DIETARY.

Dr. Edward Smith's Report on Uniformity of Workhouse Dietaries (a) is a welcome harbinger of a reform, the necessity for which has existed ever since paupers have been fed within the houses provided for their reception under the new Poor-law. The administrators of this law at the very onset showed themselves ignorant of the principles on which dietaries should be framed for the labouring classes. Their ignorance was probably shared by most of the community. At last, however, the Poor-law Board is anxious to adopt a system in accordance with modern science, and they have selected wisely one who, from long habit of patient research, is eminently qualified to guide and inform them in their work.

Dr. Smith found that in his own district (and, he had reason to believe, throughout England and Wales), the greatest diversity of dietary in Union workhouses existed. One Union house in the midst of the same class of labourers would have a totally different dietary for its inmates from an adjoining one, although the population around was precisely similar. This was a state of things that could only be remedied by studying what really ought to be the basis of uniformity in dietaries throughout the country; and this basis once established, any special requirements, indicated either by diversity in the classes of labourers to be provided for, or by the varied surroundings of any individual class, might be easily superadded. In 1863 Dr. Smith personally made inquiries as to the ordinary food of the labouring classes in every county of England and Wales in the most exact manner and in the houses of the labourers; and we find that he ascertained certain unequivocal data upon which he has founded his proposed

(a) "Uniformity of Workhouse Dietaries: Report to the Right Hon. Gathorne Hardy, M.P." By Edward Smith, Esq., M.D., F.R.S., Medical Officer to the Poor-law Board. 1867.

system. For instance, he proved that each adult among the labouring classes consumed on an average weekly a little more than twelve pounds of breadstuffs, consisting of flour, bread, oatmeal, and rice. He then examined the relative nutritive value of the different cereals, as well as their commercial value, and "on a review of this subject," he says, "I arrive at the conclusion that wheaten *seconds* flour should be universally adopted for the food of paupers, whether in- or out-door, and, considering its high nutritive value, with its present low price, it is true economy to allow it to form a very important part of outdoor relief and of workhouse dietary." Dr. Smith found that the "seconds flour is richer in nitrogen than the farina, which is the only part of the wheaten meal left after its several screenings, and has, therefore, in one direction an advantage in nutrition. This, conjoined with the lower price paid for those varieties of flour, renders the seconds a more economical food than the finest flour." The coarser kinds of bread, especially "brown," are condemned, not only on account of their being more indigestible, but actually injurious, in consequence of the diarrhœa that is apt to follow their use, from the mechanical action of the indigestible matter contained in the flour.

Every workhouse family is characterised by the diversity of its elements; hence the first and greatest difficulty which arises when we attempt to frame a dietary justly suitable to all. For instance, we have the inevitable pauper—as the aged, the infirm, the diseased, mothers who are about to give birth, or have done so, and children, besides lunatics. Then there is the occasional subclass, under which we find the honest, willing, able-bodied labourer, who is the sad inmate of the house simply from circumstances over which he has no control; he can get no work, however anxious he may be for it, and he is compelled to seek an asylum for himself and family until happier days of honest labour return. Then there is the able-bodied "ne'er-do-weel," who can, but will not, toil. And, lastly, there is that wretched subclass who neither can nor will work, from long habit of dissipation and crime—wanderers, as it were, from the prison to the workhouse. Assuredly, to treat all these alike, whether in health or disease, would be to do a gross act of injustice to those who would, but cannot, maintain themselves.

The author of the report has, we think, succeeded in selecting, with due regard to instinctive experience and philosophical deduction, what really ought to be the basis of a diet at once capable of promoting the growth of children whose heritage is work; of sustaining the healthy frame of the occasional able-bodied pauper labourer so as to keep him ready for work; and of supplying the deficient powers of age and infirmity when the poor man's work is done or prematurely cut short, without taxing his weakened powers of digestion, with food that will warm and comfort him in his last asylum.

To select, however, a dietary sufficient to keep the able-bodied pauper in health and to render him fit for resuming work at a moment's notice is a difficult task, for we have to be careful lest we provide one that may tempt those inclined to idleness to prefer inactive dependence to honest labour. In performing this task, Dr. Smith has drawn upon his experience during his sojourn among the labourers of England and Wales.

Taking the two important elements of nourishing diet, carbon and nitrogen, Dr. Smith alludes to the fact that the daily requirements of an able-bodied adult of the average weight of 150 lbs. are about 4500 grs. of carbon and 200 grs. of nitrogen when employed indoors. Acting upon this, he has proposed a diet for this class as follows:—Nine pounds of bread per week, sixteen and a half pints of gruel, which contain twenty-four ounces of oatmeal, besides a due proportion of suet and treacle; once a week he is allowed a pound of meat pie, and twice a week ten ounces of suet pudding, besides nine pints of broth and soup and half a pound of cheese; so that this class is allowed daily nearly 2 lbs. of highly nutritious food, equal to 4397 grs. of carbon and 212 grs. of nitrogen daily, which corresponds, as nearly as possible, with the amount demanded and supplied by the labourer when free to make his own selection. It will be found that all the varieties of the indoor pauper are equally well provided for, and that abundance of food is allowed for mothers suckling their infants and for children during their growing up. The diet of the sick is left to the Medical Officer, whom we hope the Boards of Guardians of the different Unions will take to their counsel, and thus follow the example set them by the controlling power.

Dr. Smith has made very clear the principles on which his suggestions are based. The report is not one of dull detail and statistics; its perusal, indeed, will reward any one interested in domestic economy—and who is not? Cooking, dishing up, carving, and the mode of laying the pauper's table in the workhouse, are all thought of, and the great aim of the writer seems to be to render the poor man's meal not only as palatable and nutritious as possible, but that it shall be served to him in such a manner as to remind him of his fireside under happier circumstances with as little regret as possible.

Dr. Smith must expect to be cavilled at and attacked on many points, but he may rest assured that hereafter his labours will be rewarded by the pleasant reflection that he has used his talents for scientific research in placing the dietary of the poor man upon a proper foundation.

We are glad to hear that the Poor-law Board are preparing, and will soon issue, a uniform dietary, founded on Dr. Smith's report, for the aged and infirm in London workhouses.

THE JOURNALS.

Reverting to the journals which have accumulated with us, we find that the most important articles in the April number of the *British and Foreign Medico-Chirurgical Review* are on cancer and leprosy, the writer of the former contending strongly for a mixed local and constitutional origin, the latter being a careful summary of the report by the Royal College of Physicians. Of the original communications, the most striking is one recording no fewer than sixty-two cases of lithotomy by the late Mr. Norgate, of Norwich, sent by Dr. Copeman. Great success seems to have attended his operations (performed with the partially blunt gorget), only eight having died while under treatment, whether from, or apart from, the effects of the operation.

In the *Edinburgh Medical Journal* (April) is a most valuable paper by Dr. Basham, of St. Mary's, on tubercular meningitis, to which we referred when speaking of tubercle. He looks upon it as originating in the proliferation of cells lining a series of perivascular canals in the meninges.

Mr. Annandale records the successful removal of an encephalocele connected with the posterior part of the head by a band of fine fibrous tissue. Mr. Heron Watson concludes his cases and articles on excision of the knee-joint, and speaks highly of the operation when performed on adults. He pronounces against attempting to obtain a movable joint, and advises performance of the operation by a single anterior semilunar incision, retaining the patella.

In the May number of the same journal we notice a valuable paper on *inversio uteri* by Dr. Matthews Duncan. He holds that, for the production of this somewhat rare complication of labour, either complete paralysis, or partial paralysis with partial contraction of the walls of the uterus, is necessary. Thus, he says that spontaneous passive inversion may be produced by complete relaxation of the uterus, with the continuance of active expulsive efforts. Artificial passive inversion by a similar relaxation, combined with dragging at the cord of an attached placenta, or pressure on the fundus uteri. Spontaneous active inversion can only take place when the fundus is relaxed and pressed down, so as to be seized by the firmly contracted fibres nearer the os. In artificial active inversion a similar result is brought about by interfering with the cord or fundus when the uterus presents the same peculiarity of contraction with paralysis. Mr. Annandale writes on reducing dislocations of the hip by manipulation. Having brought the patient under the influence of chloroform, he is to be laid on his back, the pelvis steadied, and the limb, grasped by the ankle and knee, is to be flexed on the thigh and body. In this position the limb is to be made to take a circular sweep, outwards or inwards, as the case may require, and to be suddenly extended, by which it will probably then be brought into its proper place. Dr. Eben. Watson recommends Calabar bean in tetanus and poisoning by strychnine, whilst Dr. de Chaumont opposes Dr. E. Smith's views as to ventilation of Hospital wards, showing that 500 cubic feet for each patient is insufficient.

With April appeared a new quarterly dedicated to diseases of the skin and edited by Erasmus Wilson. The first number contains articles on a great variety of topics, to which we can only cursorily refer. Mr. Wilson gives a lecture on the skin, which is followed by a paper by Mr. Milton on Lupus. This gentleman holds that it is not syphilitic; that, if not identical with, it is closely allied to, sycosis; and that it is rather amenable to treatment than otherwise. Dr. M'Call Anderson, writing on the same subject, brings forward a new subdivision,

warty lupus. Every variety of the disease he holds to be of a strumous origin. The warts should be removed, and powerfully stimulant ointments applied. Dr. Tilbury Fox, speaking of tinea, employs the term generally, and applies it to all skin diseases where fungi exist either as cause or effect. He holds that the number of vegetable parasites might be decidedly lessened. We find, among other valuable matter, a paper by Mr. F. Smith referring to that most interesting subject, coloured discharges in skin diseases, or rather, in the case of eczema, to indican in the urine only. Space will not permit us to refer to the other communications.

The number of the *Quarterly Journal of Mental Science* is quite up to the mark. We would refer the reader to a highly interesting account of a visit to the insane colony of Gheel, and a comparison of the plans adopted there with those employed elsewhere.

REVIEWS.

Injuries of the Eye, Orbit, and Eyelids; their Immediate and Remote Effects. By George Lawson, F.R.C.S. Eng., Assistant-Surgeon to the Royal London Ophthalmic Hospital, Moorfields, and to the Middlesex Hospital, late Assistant-Surgeon Rifle Brigade. London: Longmans, Green, and Co. 1867. Pp. 430.

Mr. Lawson's reputation as an able and accomplished Surgeon already stands so high, that a work from his pen, and especially a work on Ophthalmic Surgery, is sure to be warmly welcomed by the Profession, while at the same time the Profession will expect any production of his to be one of no ordinary excellence and value; and we venture to affirm that the book before us will fully justify and satisfy all such expectations, however high they may be. It is an admirable practical book in the highest and best sense of the phrase. Copiously illustrated by excellent woodcuts, and with well-selected well-described cases, it is written in plain simple language, and in a style the transparent clearness and frankness, so to speak, of which add greatly to its value and usefulness. Only a master of his subject could so write; every topic is handled with an ease, decision, and straightforwardness that show the skilful and highly educated Surgeon writing from the fulness of practical knowledge.

The several chapters into which the work is divided treat of "Superficial Injuries to the Eye," "Injuries to the Eye from Burns, Scalds, and Chemical Agents," "Penetrating Wounds of the Eye, and other Injuries of the Cornea and Iris," "Traumatic Cataract," "Capsular Opacities and Dislocations of the Lens," "Foreign Bodies within the Eye," "Traumatic Intraocular Hæmorrhage and Rupture of the Globe," "Gunshot Injuries of the Eye," "Sympathetic Ophthalmia," "Injuries of the Orbit," and "Injuries of the Eyelids." We give the table of contents for the information of our country readers, to whom we think Mr. Lawson's book will be of special value. In each chapter the clearest possible instructions are given as to the management of the various injuries treated of, with full information as to what symptoms and effects, immediate and remote, may be expected or feared, and the best methods of preventing, meeting, or anticipating them. We would especially recommend to notice the chapters on "Traumatic Cataract," and the various operations now resorted to to remedy the loss or defect of sight caused by it, on "Foreign Bodies within the Eye," and on "Sympathetic Ophthalmia." Though Ophthalmic Surgeons are now well aware of the frequent occurrence and the destructive nature of sympathetic irritation and sympathetic ophthalmia of the sound eye, after one of the two has been lost or injured, and are agreed as to the great difficulty, if not the hopelessness, of arresting the mischief by any means other than the excision of the injured organ, yet there exists, not only among the public but in the Profession at large, not a little incredulity both as to the frequency and dangerous nature of the sympathetic affection, and as to the necessity for apparently so severe a remedy. Mr. Lawson treats the subject very fully, and describes most clearly and forcibly the nature, course, and danger of the affection. All who study carefully the chapter devoted to it will, we think, accept the "conclusions" he has arrived at, the most important of which are:—

That in sympathetic irritation "the excision of the lost or injured eye at once arrests the disease. All sympathetic irritation ceases when the cause which gave rise to it is removed."

And with regard to sympathetic ophthalmia:—

"That it is a peculiar inflammation of one eye, originating solely from an irritation in the other.

"That the most frequent causes of sympathetic ophthalmia are:—

"α Penetrating wounds of the eye, and especially those which involve the ciliary region.

"β Foreign bodies within the eye.

"γ The irritation excited in the sound eye by degenerative changes taking place in the one already lost.

"That one of the great peculiarities of sympathetic inflammation is its tendency to the rapid effusion of lymph, into all the tissues of the eye which it invades, capable of speedy organisation.

"That the disease, once started, is very difficult to arrest.

"That it is recurrent in its nature, and that even if the first attack be arrested, a recurrence is almost certain to take place.

"That the removal of the injured eye affords the best chance of arresting the disease; and if this operation is resorted to in its very early stage, there is a good prospect of its doing so."

The disease is extremely insidious in its attack, and when the symptoms of it are fully developed, "the removal of the injured eye (the source of the irritation) may fail to arrest the disease," though still affording a chance not to be neglected. But "in no instance" has Mr. Lawson seen "sympathetic ophthalmia *originate* in an eye after the other had been removed on account of an injury;" hence the great importance of being well acquainted with the disease, and of knowing in what cases of injury it is likely to follow.

We may add that the present method of removing an eyeball, "one of the greatest improvements in modern Ophthalmic Surgery," and introduced into English practice by Mr. Critchett in 1851, is an extremely simple and almost bloodless operation.

We predict for Mr. Lawson's work a great and well-merited success. We are confident that the Profession, and especially, as we have said, our country brethren, will feel grateful to him for having given them in it a guide and counsellor fully up to the most advanced state of Ophthalmic Surgery, and of whom they can make a trusty and familiar friend.

In conclusion we must give a word of especial praise to the "index" of the book; it is admirably full, and, at the same time, clear and simple in arrangement. The convenience and usefulness of the "set of test-types, printed so as to correspond with Jäger's," which will be found at the end of the volume, will, we doubt not, be generally appreciated.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

Edinburgh, May.

Dr. Laycock, Professor of the Practice of Medicine and Lecturer on Medical Psychology at the University, who, it will be remembered, submitted to an amputation of the thigh about ten months ago, reopened the class of Clinical Medicine on Tuesday. Both past and present pupils assembled to welcome the return of their esteemed Professor. The cheers which announced his entrance into the theatre were sufficient proof of the interest which all entertained in his recovery. The Professor did not arrive in Edinburgh till Monday night, and there was a general impression among the students that he would not be able to deliver his introductory lecture as announced.

Professor Laycock is a man of high culture and deeply sensitive feelings, which, added to his kind and considerate manner, has always won for him the affection of all his pupils. On resuming the chair it was evident he was much touched by the kindly reception which greeted him. The following were some of his opening remarks:—

"It is not without some emotion, gentlemen, that I can feel myself once again permitted to address you from this chair. My enforced absence from you during the past session gave me no small amount of regret. I have during my stay at Clifton taken a warm interest in your progress, happily relieved from all anxiety, knowing that I had left you in the hands of my much-respected friend and substitute, Dr. Warburton Begbie. I cannot thank him too sincerely, and I am sure you all join me in this—(loud cheers)—for the very

kind manner in which he consented to take charge both of my class at the University and of my duties here in the Hospital during my absence. That this arrangement met with your approval is amply attested by the large and regular attendance which you all gave to his lectures, and especially by the high position which so many of you took at the class competitions."

The Professor then commenced his Introductory Lecture on the Aids to Diagnosis in Clinical Observation. He stated that within the last few years about fifty instruments had been invented specially for this purpose; that they were of great use to the Hospital Physician, greatly assisting him not only in the study of disease, but in its demonstration to the student, who was now enabled to investigate every case for himself; and that thus the interest of clinical teaching and its value to the student were much enhanced. On the other hand, general Practitioners, under the extreme pressure of work, too often found them but cumbrous baggage, and, perforce, neglected their use. He then proceeded to explain his views of physiognomical diagnosis, which his class afterwards had the opportunity of seeing successfully demonstrated in the wards. He concluded his lecture by explaining that the duty of the Physician is to obviate the tendency to death, and the position which he and Nature relatively hold in the cure of disease.

The Professor informed us after the lecture that he is still troubled with neuralgia of the stump, and is still obliged to use crutches. This, however, will not prevent him from making his daily clinical visit, which he commenced in earnest immediately after the lecture, acquainting himself with the nature of every case in his wards. We are glad to hear that the Professor intends resuming his class of Medical Psychology, and we trust he may be long spared to uphold the dignity and honour of the Edinburgh University.

GENERAL CORRESPONDENCE.

DR. BEALE ON CLINICAL TEACHING.

Letter from Dr. Beale.

[To the Editor of the Medical Times and Gazette.]

Sir,—There are some remarks in an article in the last number of the *Medical Times and Gazette* upon which I should like to make a few observations. You rightly complain of the neglect of clinical teaching. It may be quite true that "the clinical practice of our wards—the very highest branch of teaching—is meagrely and unsystematically handled," but if this be so who is to blame? Is there really much demand for careful clinical teaching in London in these days? The majority of students only require certificates that they have attended! We clinical teachers are not asked to satisfy ourselves that our pupils have actually learned what we are called upon to teach, nor are they compelled to pass an examination in clinical Medicine before they can practise. Is it therefore to be wondered at that many students should be careless about attending to this and other departments of study of real importance, such as the "physiological basis" of Medical work or institutes of Medicine, to which you refer? A young student can hardly be expected to determine for himself what he ought to learn, and it is natural that he should look to his examiners. They examine him in some things, but not in clinical Medicine, nor in certain branches of scientific knowledge of the utmost importance to Medicine, and he therefore concludes that his examiners consider these things of very little importance. Of course, he agrees with them in opinion and acts accordingly. He, too, may feel the injustice of being compelled to pay fees to study what his examiners evidently regard of minor importance or absolutely unimportant, and he does not want to learn, and he may fairly complain of being compelled to listen to much that he has been led to regard as unnecessary, and which he knows will not help him to pass his examinations.

Now is it likely that the majority of students will submit to the hard work of learning the art of diagnosis, case-taking, the microscopical and chemical examination of urine, auscultation, and the like, when they know they need not be examined upon any of these things? It seems to me but fair that the public and the Profession should know that the teachers are not responsible for the wretched state of Medical education at this present time. We desire earnestly enough to advance with the times, but those who regulate Medical teaching are against us. We who teach have no voice in the passing or rejection of candidates, and we are sometimes sorely disappointed at finding that a highly intelligent well-informed pupil has been rejected; although, perhaps, more frequently surprised to find that others who were by no means well up had passed easily, and had been highly complimented. No one desires to see the "fetters" removed from school teachers more than many of the teachers themselves. Some of us think that there should be far greater freedom than there is, and that students should be compelled to see the practice of more than the one Hospital at which they enter. But it is obvious that nothing can be done by the teachers or by the students until very serious changes are brought about. Look at this one fact:—An examiner examines my pupils, who when I was born was some years older than I am at this present time, although I have myself been a teacher for nearly twenty years.

I am, &c. Lionel S. Beale.

THE CAUSE OF CHOLERA.

Letter from Dr. J. W. Mudge.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the last communication by the Rev. Samuel Haughton, M.D., on the causes alleged to produce Asiatic cholera, published on page 490 of the *Medical Times and Gazette*, it is stated: "In an inquiry like the present one, or two positive facts are of more importance in a logical point of view than ten thousand negative facts." Agreeing for the most part in this assertion, I am desirous to place on record a positive fact, which, though perhaps known to certain parties in India, is, I doubt not, quite new to the majority of your readers in England. Madras, as you are aware, is rarely free from cholera. As one of the Presidency Surgeons there for six years, I cannot remember a month in which cholera cases were not admitted into some of the Hospitals. This might be expected in a tropical city containing nearly 500,000 inhabitants, where sanitary arrangements are not only imperfect, but exceedingly bad, and where travellers are constantly arriving without let or hindrance from all districts, whether healthy or infected. I know not what the Sanitary Commission may be doing at present, but during the many years of my experience anything resembling quarantine was entirely unknown. If cholera prevailed in the surrounding districts, it might with certainty be expected in the city sooner or later, and was generally to be traced to some of the halting-places for country carts, many of which there are in various parts of the suburbs. These carts bring cotton, straw, grain, and various articles of merchandise from the rural districts, encamp on certain spots allowed by the police, where the drivers live entirely in the open air, and perform all the operations of nature *sub dio*, and as near to their carts and bullocks as decency will allow. The consequence is, that the immediate neighbourhood of these places becomes very filthy, and at certain times a hotbed of infection. The men passing through villages where cholera prevails, and encamping on similar spots, are thus exposed to the infection, and are taken ill after arriving at their destination. All their dejections are passed on the open ground, where they soak into the soil, or are washed into ditches or drains by the monsoon rains, and so give rise to epidemic outbreaks amid a vast and careless population. At such times the mischief is widespread, and all classes are more or less liable to attack; but to this rule there is one notable exception. The *employés* of the Government powder manufactory, which is by no means situated in a good locality, are stated never to have been attacked by cholera. This establishment was for some years under my Medical charge, yet I never had a case of cholera there. The wives and children of the men are not exempt, but the men themselves, who are daily employed in the manipulation of charcoal, nitre, and sulphur, have, so far as I can judge from my own experience and the previous information I received from the military superintendent, enjoyed complete exemption. There are cart-stands very near the manufactory. The men are under no particular sanitary arrangements. They are fed and clothed just as other natives of their class, and mingle intimately with the general population, among whom they reside during the hours when they are not employed in the powder-mills. Is their exemption due to charcoal, or sulphur, or nitre, or to the *tria juncta in uno*, gunpowder? It would be interesting to inquire if a similar exemption from cholera infection has

attended those occupied in powder manufactories in this or other countries, and, if so, to what practical purpose we can apply the fact.

I trust public opinion is gradually arriving at the conclusion that cholera is propagated by the *alvine discharges alone*, either air or water becoming the medium of communication, as the case may be, and the so-called sporadic cases being no exception whatever to the rule. For many years past I have acted on this belief, and have had every reason to be confirmed in it. I am, &c. J. W. Mudge, M.D.,

May 13. Deputy-Inspector-General (Retired).

THE VACCINATION BILL.

Letter from Dr. Edward C. Seaton.

[To the Editor of the Medical Times and Gazette.]

Sir,—As I find by the editorial comments made in a recent number of your journal that while the Vaccination Bill now before Parliament has your general approval, strong exception is taken to the retention of those clauses which provide for the registration of successful vaccination, as being useless and unnecessary, and as much misapprehension appears to exist with regard to the grounds on which the registration of successful vaccination has been advocated by the Epidemiological Society and others as an indispensable part of the machinery of a compulsory law, I think it very important that these grounds should be brought fully before the notice of the Profession and the public; and if you will be good enough to afford me space, I will endeavour to state them as clearly as I can.

Let me say at starting that this registration has never been advocated (as the objectors to it so constantly assume) merely for the purpose of affording parents a legal defence against prosecution. No one, so far as I am aware, has ever doubted that the scars on the arm of the child are a sufficient proof, and the best proof, of the parents having complied with the law; and though provision is needed for those cases (comparatively few) in which a parent may have done all he can be called upon to do under the Act, and yet no scar on the arm remain, this provision need certainly not involve the cost and trouble of registration.

Why then *is* registration requisite? In the first place, it is necessary to ground proceedings. A local authority summoning a parent before magistrates for the non-vaccination of a child, is in the position of having to prove a negative. The authority says, "This child is not vaccinated." The parent replies, "I shan't commit myself; prove it." Some *primâ facie* evidence at all events must be produced, and the non-registration of the successful vaccination is at once the requisite *primâ facie* evidence. "The absence of the receipt of a certificate," says an eminent legal authority (a) who was consulted on this point by the Board of St. Thomas', Exeter, "is the only conceivable means by which a registrar can know whether the child has not been vaccinated. He can ascertain that he has not received a certificate; but he has neither power nor jurisdiction to examine in any other way whether a child has been vaccinated or not." This having been shown, the parent has to rebut this *primâ facie* evidence, in which if he fails, conviction follows.

But apart from, or antecedent to, any question of actual proceedings, it appears to me obvious that, for carrying out a law which requires that all children should, under penalty, be vaccinated within a specified period from birth, the local authority must know who have, and who have not, complied with the law. This is not a thing patent to all the world, like the case of a shop kept kept open at unlawful hours, or of a man smoking where smoking is forbidden, but it requires some legal mode of ascertainment. I can conceive no other machinery for this purpose than the registration by each parent, or by some one on the parent's behalf (as by the public vaccinator, when the vaccination has been done at a public station), of a Medical certificate of compliance, except, indeed, there were given to some competent person within the area of each local jurisdiction, a police power to examine the arms of children, whether parents would or no. Has any one who thinks registration a costly mode of proceeding, estimated what would be the expense of this alternative plan? It is not necessary that he should take that trouble, for the course is one which would never be adopted in this country. The people would not stand it; no Government will ever propose it, and no House of Commons will ever listen to it.

Now it is quite true that the registration provisions hitherto in force have not, except in comparatively few districts, given to local authorities complete information as to who had and who had not complied with the law, and hence the chief cause of the failure, so far as it has failed, of the Vaccination Act in England. But this failure, arising as it does from certain defects long ago ascertained, and which it is at length sought to remedy, is far from proving the impossibility of carrying out a registration which shall be sufficiently complete for all practical purposes. On the contrary, the success attending vaccination registration in those districts to which these particular defects did not apply, or in which they were obviated, shows clearly the soundness of the principle which makes the birth register the foundation for the working of a compulsory law. The Government Inspectors of Public Vaccination refer in their published reports to many districts—some of them of large area and population—the vaccination of which is virtually complete because either by the registrar himself, or by the public vaccinator on information supplied to him by the registrar, every birth entry was followed up until a certificate or some other account of it was obtained. Very opportunely I see published this week in the *British Medical Journal* an account of the successful working of the Act of 1853 in one of these districts—the large and populous district of Mold, in Flintshire. Dr. Hughes, the public vaccinator, who was also till lately the registrar, tells us that in this district every vaccination done since 1853, whether publicly or privately, has been registered, and every birth entry accounted for. But the question of the practicability of an efficient registration may be considered as quite settled by the results which have followed the system pursued in Scotland. The framers of the Act for Scotland were aware of, and profited by, the errors in the English Compulsory Act, and what has been the result? Why, out of 108,851 children born in Scotland in 1864, the Registrar-General for Scotland had on December 31, 1865, an account on his registers of every one but 2701; and of 113,129 born in 1865, all but 2681 were accounted for by December 31, 1866. Surely this is proof enough that, under proper regulations, the registration of vaccination may be made for all practical purposes complete.

I do not think it necessary to dwell on certain considerable disadvantages under which the Vaccination Act in Scotland has had to be worked as compared with England, because no doubt, on the other hand, there may be disadvantages of some other kind in this part of the kingdom which are not felt or are less felt in Scotland. But in reference to some objections which I see taken to that part of the Bill now before Parliament which would supply to parents the requisite forms of certificate, I ask that it may be noted that the Scotch Act is worked entirely by forms given to the parents on the registration of the birth, which forms, when filled in at the proper time, the parent has in every instance to lodge with, or transmit to, the registrar. The forms of certificate and the notice of the requirement of vaccination are all on the same sheet, so that each parent has but a single paper; and as, out of 221,980 such papers given to parents in 1864 and 1865, the Registrars have received their due account in all cases but 5382, and as there has never been, so far as I am aware, a single instance of suspicion of forgery, I cannot conceive the mischief that is to arise in England from giving these forms to parents. In fact, the framers of the Scotch Act have but availed themselves of suggestions which have again and again been made to the Government by individual registrars and registrars' associations, as well as by public vaccinators and other Medical men in England, as to the advantage which would arise from having the forms of certificate attached to the notices to parents.

There is a point connected with the systematic working of a compulsory vaccination act from the basis of the birth register to which I desire to call special attention. It is this:—In the majority of those districts in England which have been reported by the Vaccination Inspectors as completely vaccinated, proceedings before magistrates have not been necessary, and in Scotland also they have rarely been had recourse to. Generally it was enough that the people became aware that there was a machinery at work which discovered neglect, and that of this neglect they should be systematically reminded; and it was only in instances in which this warning or reminder was disregarded that proceedings were necessary or taken. I need scarcely say that wherever the warning was neglected proceedings were quite indispensable, or the whole machinery would have tumbled to pieces; but the fact is, as I have

(a) Dr. Russell, Author of "Russell's Commentaries."

stated, that they have rarely been needed. I think all must agree that this is a very satisfactory result, and that no one interested in the extension of vaccination would deem it desirable to have recourse to the magistrate oftener than is really necessary; and my own experience of the working of the law in all parts of the kingdom has satisfied me that it is only on the systematic discovery and following up of cases of neglect that any real reliance can be placed for the complete infantile vaccination of a district, and that, apart from this, prosecutions for the sake of example, when undertaken at all, are but of partial and temporary avail.

So much with regard to the practicability and the advantages of a complete system of vaccination registration; but it is a great mistake to suppose that, even under the present imperfect system of registration, the vaccination registers are of no use. If, indeed, you have, as the expressions used would almost lead me to infer, the Registrar-General's authority for stating that these books are never referred to, he can only have meant that they are not employed for a search or for extracting a certificate; but every one who has practically to do with public vaccination knows that they have other and most important uses. In very many districts, it is true, especially in the metropolis, the imperfections of the registers are, under the present law, so great as to deprive them of much or any practical utility; but in a large number of the districts of England they are quite available, and are in constant use for enabling the registrar himself or the public vaccinator to look up the cases for vaccination. Does any one suppose that without some inquiry of this sort there would be nearly the vaccination done that is done in England? No districts show even a tolerable amount of vaccination in which cases are not sought out; and in hundreds and hundreds of districts, including districts in some of our largest towns, these registers are regularly employed for the purpose.

In fact, the interest—though only of threepence per case—in the registration of certificates of successful vaccination has made the registrars in many places, and in many parts of the kingdom, most valuable helpers in the promotion of vaccination. To this all the Inspectors of Public Vaccination, without exception, bear testimony, and throughout their reports they express their earnest desire to see the valuable aid of these officers extended by correction of those defects in the law which, while they leave the registers imperfect, also deprive the registrars in great part of the remuneration which it was the evident intention of the legislature they should receive. Any one who will take the trouble to read the reports of Dr. Buchanan, or Dr. Sanderson, or my own, will see how entirely the following account by Dr. Stevens represents the Inspectors' unanimous judgment(b):—"They (the registrars) are the most valuable aids in the promotion of vaccination, and they can work in the cause with far greater freedom and with more propriety than can the public vaccinators. The people look upon the registrars as the authorised instruments of the law, whereas they often openly accuse an importunate contractor of interested motives, of desiring to do as much vaccination as possible to increase his emoluments. There is no such feeling against the registrar; therefore it is that vaccination flourishes in those districts in which the registrar looks well after the people; and this he does where he gets paid for his work." From my own experience I can hardly recollect half a dozen districts where the vaccination has been carried out with any degree of completeness without the registrar having materially contributed to this result, and I entirely concur with Dr. Sanderson that in the absence of help and information from that officer "the utmost zeal on the part of the contractor, and the best arrangements, failed to produce numerical completeness of vaccination; the only exceptions occurring where the Medical officer from long residence had become personally acquainted with every inhabitant of the district."(c) Would any government in its senses give up such aid as this?

There are some other uses of the vaccination registers and vaccination certificates, which render them, even in their present form, indispensable. But I think that I have said enough; and I confess it does not appear to me surprising that the Government (or I should rather say two successive Governments) and the Select Committee of the House of Commons, having the whole question before them, should have determined to amend, and not to repeal, the Registration Clauses of 1853. I apprehend it would be somewhat of a bold step to upset the whole foundation of an act which, whatever its defects, has diminished our rate of annual mortality from small-pox by at least one-third.

I see that I have taken up a great deal of your space, but not more, I venture to think, than the importance of the subject will justify. I cannot conceive any matter more pressing than the amendment of our vaccination laws. We have still in England, on an average, 4000 deaths a year from small-pox; still we have constantly recurring fatal epidemics—one in London just now of most formidable severity. Is this scandal and reproach always to remain? Are we to make no efforts to remove it, or is every effort to be frustrated by some misunderstanding or another? The Bill now proposed may not be a perfect measure; it may probably aim at so much as can be compassed rather than at all that may be desired; no doubt well-considered suggestions for its improvement will be thankfully received and duly weighed. But, even as it stands, it is, I venture to say, a great advance on our present legislation, and its effects in checking our small-pox mortality would in no long time be visible. In saying this, I am far from looking wholly to the means it will afford of increasing the numbers of vaccinations; I look as much or more to what may be done under it for improving lymph-supply, and to the securities that may be taken for rendering the performance of vaccination, and the consequent protection of the individual against small-pox, more thorough and more effectual.

I am, &c.

Athenæum, May 14. EDWARD C. SEATON, M.D.

(b) Sixth Report of Medical Officers of Privy Council, p. 182. The more recently appointed Inspectors, Dr. Hunter and Dr. Brodribb, concur, I have reason to know, entirely in this judgment.

(c) Fourth Report of Medical Officers of Privy Council, page 108.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, MAY 7, 1867.

JOHN SIMON, Esq., President, in the Chair.

THE PRESIDENT said that since the last meeting of the Society there had been a meeting of *savants* in Germany to discuss the subject of cholera, at which he had been present. The idea that cholera was due to the development of a peculiar vegetable parasite had even before this been upheld by Klobb and Thomé, but he had seen the latter gentleman, and had got some specimens from him which he proposed referring to Dr. Burdon Sanderson and Mr. Hulke for examination. He suggested that the report should not be handed in until after the recess.

Dr. WILKS then read a report, by Dr. Weber and himself, on

DR. PLAYFAIR'S CASE OF THROMBOSIS.

The reporters said that, judging from the character of the clot, they could not declare with certainty that it had formed during the lifetime of the patient and had been the cause of death. It did not present any peculiarities which enabled them to distinguish it from the ordinary coagulum which is found in the hearts of those who die slowly. They also added some general remarks in reference to the present unsatisfactory difference of opinion in the Profession with regard to the time or the occasion in which the usually found coagulum is formed. It seemed to them that hitherto the prevailing opinion had inclined towards the doctrine that these coagula were formed during life, and, if so, the conclusion was inevitable that in all cases of sudden death where clots were found, these were to be regarded as the cause of the fatal result. Drs. Wilks and Weber, however, reckoned themselves amongst those who believed that coagulation could readily take place after death, and, in proof of the opinion, alluded to cases of persons who had been suddenly killed by accident, and in whose hearts well-formed and ordinary-looking clots were found as usual. They suggested that members of the Society should make further inquiries in this direction, so that a good standard should exist by which doubtful cases could be compared. They did not wish to speak of well-marked cases of embolism in which, for example, a fibrinous mass had been carried into the heart from the vena cava, nor of the commonest of all cases in which a well marked ante-mortem clot is found—that dependent upon a simple stagnation of the blood itself from

disease of the heart or of the lungs. These cases, and those of embolism, were generally too well marked to admit of any doubt of their nature, but the case under notice was that above all others which presented great difficulties. It was a case in which it was suggested that the blood, from some inherent fault in its own composition, underwent spontaneous coagulation in the cavities of the heart. In order to have arrived at a positive conclusion to this effect, the reporters considered it necessary to have every circumstance of the illness and mode of death detailed, and also necessary that the clot should present such characteristic appearances which at the present time fail to be recognised.

Dr. Playfair said that no doubt in many cases coagula were formed during the process of dying, but they might also be the cause of death. He had collected many cases, especially in rheumatism and the puerperal state, where the coagula existed and no other cause of death could be made out. The lungs were healthy, and if the coagula had not brought about the fatal result, it was fair to ask what had.

Dr. Peacock brought forward, for Dr. Thurnam, a case of

DISEASE OF THE BRAIN,

which had produced aphasia. The specimen had been kept some time, and he only spoke from the notes furnished him. The patient was the wife of a labourer, and had ever after an attack of scarlatina manifested symptoms of mental derangement, which had been aggravated by a miscarriage. Fits and paralysis came on, there being imperfect right hemplegia. A blister to the nape of the neck did no good, for the muscles of deglutition and speech became affected, and she was sometimes convulsed, yet she knew perfectly well what was going on up to the day before her death. The brain was found to be tolerably healthy, except in the left frontal lobe, where the junction of the yellow with the grey matter presented a tough yellow appearance extending some distance inward. This was not confined to the external convolution, but it did not extend beyond the fissure of Rolandi.

Dr. Cholmeley said that the woman was paralysed, not truly aphasic. There would be great confusion were the results of the paralysis of muscles to be termed aphasia.

Mr. Balmanno Squire then exhibited a living specimen of a

CASE OF ALMOST COMPLETE ALOPECIA

in a girl aged 18. The baldness commenced in the usual way, in patches, at the age of six years. For the last four years it has been, as it is now, almost complete. There are a few scattered hairs on the scalp, and a part (the inner half) of either eyebrow remains. With these exceptions the head is completely bald. In a case exhibited by Mr. Squire on a former occasion, only one hair remained on the skin. This was a particularly stout hair, growing from the occiput. The man was 33 years of age.

Mr. Squire also exhibited a coloured photograph and specimens of the

HAIR FROM A YOUNG LADY AFFECTED WITH ACCIDENTAL LEUCODERMA.

The lady, aged 17, was accidentally hurt a year since by a comb, which wounded the occipital part of the scalp. A month after this a bald patch of the size of half a crown was noticed at the seat of injury. Soon after this perfectly white hair began to grow from the bald patch. There is now a large, thick lock of grey hair growing from a part of the occipital scalp, measuring six inches by four. The hair, excepting that it is white, is in every respect like the rest of the hair in regard of quality, but, being only of a year's growth, it is not more than a third of the length of the rest of the hair.

Mr. Hulke had seen several patches of white hair formed in a case of melanosis, at King's College Hospital.

Mr. Spencer Wells brought forward some

RENAL CALCULI TAKEN FROM A KIDNEY,

forming a large abdominal tumour, at first supposed to be ovarian. It was, however, situated on the left side, and ovarian tumours, by the time they became large, occupied both sides, and fluctuation in this case was not very distinct. A cyst under the left false ribs was tapped, and a yellowish pyoid fluid escaped. It again filled, and was again emptied, when, after it had again attained a considerable size, the patient, when out walking, fell, and the cyst broke. She was able to walk home, but died in twenty-eight hours. Much fluid was found in the abdomen. The anterior surface of the cyst was covered by peritoneum, and at its upper end it adhered to the pleura; it was large, and its walls were about half an inch thick. Other cysts were found, containing a thick jelly-like mucus and calculi. No blood or albumen had ever been detected in the urine.

Dr. Murchison exhibited for Mr. Leach the

DURA MATER WITH ARACHNOID AND THE LIVER

of a man aged 44. He had complained of pain in the lumbar region, and had ptosis of the left eyelid. The dura mater was thick, and adherent to the skull and arachnoid, which was also thickened. Yellowish masses were found in the liver and lumbar glands. Dr. Murchison suggested that the deposits were syphilitic.

Dr. Bastian said that the French had found in cases of cerebral hæmorrhage many

SMALL ANEURISMS ON THE CEREBRAL ARTERIES,

and that the blood was extravasated by the rupture of one or more of these. Examples of these aneurisms he had found in two cases by softening the brain in water, and washing the softened matter away by a stream of water; they varied in size. The arteries at the base of the brain were atheromatous or fibroid. In one case the blood was effused into the perivascular sheath of the vessel.

Mr. Spencer Wells asked if there was any headache, as that often accompanied atheroma.

Dr. Bastian said they were both moribund when admitted to the Hospital.

Dr. Schulhof said that he had dissected out similar aneurisms by the knife in a case which occurred in 1856.

Dr. Murchison exhibited the

INTESTINES OF PIGS WHICH HAD BEEN AFFECTED WITH CONTAGIOUS FEVER.

His observations were as yet immature, but he brought them forward partly because some of the exhibitors had failed to appear, and to direct attention to the subject. The disease known as the "red soldier," from the colour of the skin, was very common and fatal among pigs, especially in Ireland, and some twelve months ago had been prevalent near London. Professor Gamgee had shown him several cases. From the scarlet eruption on the skin, a kind of exanthematous rash, many had supposed the disease to be scarlet fever; besides this there were hard elevated horny scabs of an epithelial nature, the connexion of which, however, with the disease was doubtful. The fever lasted seven days or a fortnight, and was highly contagious; many of the animals died comatose. The disease had also been often likened to enteric fever, and probably many, if not all, of the cases reported as being enteric fever in the pig were really this disease. The intestines were certainly affected in some cases, there being elevations like limpet shells in the ileum and colon of an epithelial nature; but in all of the five cases which Dr. Murchison had examined the solitary and agminate glands had been perfectly healthy. There were also ecchymoses, especially beneath the mucous membrane of the stomach. There was nothing peculiar in the throat to show that it was scarlatina. Altogether, the researches were as yet in an unfinished state, but he hoped that the mention of these facts might excite inquiry.

Dr. Wilks said there was a great tendency to refer new diseases to known types, and in all such diseases there was an affection of the skin and mucous membrane quite *sui generis*.

Dr. Murchison added that Dr. A. P. Stewart had also examined the intestines of the pigs which he had dissected; that he quite agreed in the opinion that the lesions had no resemblance to those of human enteric fever, and had suggested that the elevations on the intestines rather resembled rupia than the lesions of enteric fever. Moreover, these lesions were not present in all pigs that died of the disease, so that Dr. Murchison was inclined to think that they might have nothing to do with the fever.

Mr. Nunn exhibited

CASTS OF THE LEGS OF A BOY AFFECTED WITH INCIPIENT DISEASE OF THE HIP-JOINT,

showing that the whole of the affected limb was atrophied, although the boy was able to move about well enough. In fact, he looked upon this as the first indication of the disease, and the affection of the head of the bone, the worst nourished part of the whole, to be its result. In cases where the trochanter was affected, the limb was not diminished.

Mr. W. Adams said the first stage of hip-joint disease might

last for years, fluctuating at various periods, and that this might account for the present condition of parts in Mr. Nunn's case. He believed the affection originated in the round ligament.

Mr. Holmes said he had made one post-mortem examination at an early period of the disease, and his views were the same as those of Mr. Adams. He was not certain that it was the round ligament, but quite convinced that it was the ligaments, not the bone, which were affected. Although the patient may move about, the muscles may not be used sufficiently to prevent atrophy.

Mr. Bruce said that in University College Museum there was a cast of one of Liston's cases where the disease was situated in the ligaments. He also suggested that the limbs were often unequal in size.

MEDICAL SOCIETY OF LONDON.

Monday, April 15.

Mr. Henry Smith, President.

A paper, by Mr. Weeden Cooke, was read on the

RELATIONS OF CANCER AND PHTHISIS.

Mr. Weeden Cooke considered that there were good reasons for believing that the two apparently distinct diseases, cancer and phthisis, have such alliances as would intimate that they are indeed interchangeable quantities; that whilst both are traceable only to a certain extent to hereditary predisposition, the flaws and gaps in the family history of each may be filled up by the recognition of facts bearing upon the association of these diseases, which have been verified in the antecedents of a very large number of cases of cancer. The occurrence of cancer and tubercle in the same patient may be an accident, which perhaps need attract little attention, since tuberculous disease is acknowledged to affect more than a tithe of the population of these islands; but if it be found that the offspring of a tuberculous parent become some cancerous and some tuberculous, and the offspring of a cancerous parent be affected in some instances by cancer and in others by phthisis, and that not in a few exceptional cases, but in a very large proportion, the seeker after truth will be compelled to admit these phenomena as factors in the great inquest as to the nature and origin and necessary resultant management of cancer. Mr. W. Cooke then referred to the pathology both of cancer and phthisis, and quoted from the writings of Virchow, Wedl, Velpeau, Paget, and others evidence and opinions which support the doctrine of the constitutional origin of cancer, and of its intimate alliance with tuberculosis. It is only since the beginning of 1864 that Mr. Cooke has been especially struck with the apparent alliance of these diseases, and in his work on cancer published in November, 1865, he was enabled to show that, out of seventy-nine cases of scirrhus of the breast, thirty-one could trace a positive hereditary tendency to phthisis; whilst many cases of well-known family history in persons of importance showed that the children of cancerous parents will often die of phthisis. Since then Mr. Cooke has collected from his private and Hospital patients, and in his paper related briefly, the particulars of thirty-six cases of scirrhus of the breast in whose family history a tendency to phthisis was manifested. In this inquiry Mr. Cooke purposely omitted all reference to those whose relations had previously been affected by cancer only. He had also rigidly excluded all cases in which there could be a possible doubt as to the nature of the tumour or disease from which the patient was suffering. He did not think that the recognition of the hereditary nature of cancer, whether as derived from a tuberculous or a cancerous source, pointed to the abandonment of excision or any other local treatment in suitable cases, but to the urgent necessity for constitutional remedies in all cases, whether submitted to operation or otherwise. The tonic and supporting system is that which Mr. Cooke approves. Iron, bark, hydrochloric acid, and their various combinations have been found more useful than arsenic, hemlock, and the fancied specifics of former days; but above and beyond all, or rather in addition to the tonics first named, Mr. Cooke has the greatest dependence upon the restorative power obtained from cod-liver oil. He believes that this remedy is quite as efficacious in cancer as it has been proved to be in phthisis. He concluded his paper with the relation of the particulars of several cases of scirrhus and epithelioma, all of the patients being now alive, and all taking cod-liver oil with the apparent effect of arresting the disease and improving the general health of the patients, although some of them had suffered from the disease for as many as sixteen years, and others had been operated on, and the disease had rapidly returned.

OBITUARY.

DR. JAMES BLACK.

We regret to have recently announced the decease of Dr. James Black, of Edinburgh, at the advanced age of 79, who formerly resided at Bolton, in Lancashire, where he was extensively known and generally esteemed. He was a graduate of the University of Glasgow, of 1820, a Licentiate of the College of Surgeons of Edinburgh, and of that of the Physicians of London, of which College he became a Fellow in 1860. Besides his Medical practice, and duties at one time as Physician to the Bolton Dispensary, he engaged in various scientific pursuits, but devoted himself chiefly to geology and antiquities. In these sciences his contributions were numerous, and in 1838 he was honoured with the Fellowship of the Geological Society, London. He joined the British Association for the Advancement of Science as an original member in 1832, and also the Provincial Medical Association at its commencement in 1833, and attended their annual gatherings frequently. When residing in Manchester he belonged to its leading scientific societies, both as a member and office-bearer, and contributed several papers to their *Transactions*. He was appointed Physician to the Union Hospital there, and Lecturer on Forensic Medicine at the Medical School. In the later part of his life, when he retired to Edinburgh, he belonged to the Medico-Chirurgical Society, and in 1857 was honoured by the Fellowship of the Royal Society of that city. Amongst his contributions to Medical literature may be mentioned publications on the "Nature of Fever," in 1826, on the "Capillary Circulation," in 1825, and a "Manual on the Bowels," in 1840; and he was selected in 1842 to deliver the "Retrospective Address in Medicine" for the Provincial Medical Association.

MEDICAL NEWS.

Royal Colleges of Physicians and Surgeons, Edinburgh.—Double Qualification.—The following gentlemen passed their first Professional Examinations during the May sittings of the Examiners:—

Andrew Lyall, Macduff; Daniel J. Lyne, Cork; George Hickson, Kenmare; Francis J. O'Reilly, Rathmore; John Wilson, Dumbartonshire; John Nyhan, Drimoleague; John J. Neville, Macroom; Thomas Power, Cork.

The following gentlemen passed their final examinations, and were admitted L.R.C.P. Edinburgh and L.R.C.S. Edinburgh:—

Michael Kennelly, Nenagh; William Little, Kilkenny; Thomas George Prytherch, Wrexham; Richard Ambrose O'Kelly, Limerick; Henry Ernest Hetling, Bristol; Leslie Jones, Cork; Philip Somerville Warren, County Cork; James Lindsay Howison Herbert Porteous, Ayrshire; John Meikle, Douglas; Alexander Hamilton, Dundee; George Ashmead, Northampton; James Clapperton, Queen's County; Richard Windele, Cork; John M'Gee M'Cormac, County Down; Daniel Heagerty, Passage West, Cork.

Royal College of Surgeons of England.—The following gentlemen, having undergone the necessary Examinations for the Diploma, were admitted members of the College at a meeting of the Court of Examiners on the 9th inst., viz.:—

Messrs. William Edward Stevens, Pewsey, Wiltshire; Charles Lewis, Blackheath; and James Thorne, Jersey (students of Guy's Hospital); Thomas Flower, Codford St. Peter, Wiltshire, and William Wilberforce Smith, Haverstock-hill (of the Middlesex Hospital); Henry Mann Fothergill, Newcastle-on-Tyne, and Walter William Spencer, Liverpool (of the Newcastle School); John Earp Burton, Lic. Fac. Phys. and Surgs. Glasgow, Liverpool (of the Glasgow School); Richard Albert Shipman Prosser, Birmingham; William Edmund Cant, Colchester (of St. George's Hospital); John Williams Pring, Festiniog, North Wales (of the Dublin School); Charles Wilson Milne, Wandsworth (of St. Thomas Hospital); George Fisher, Bawtry, Yorkshire (of the Leeds School); and Oliver Penfold, Blackmore-street, Lincoln's-inn-fields (of King's College).

The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Court of

Examiners on the 14th inst., and, when eligible, will be admitted to the Pass Examination :—

Messrs. Daniel George Rowlands, William Inglis Mason, Francis Day Atkins, James Cross, and William Butler, students of Guy's Hospital; James Williams Danaher, Charles John Jones, Henry Worsley, and Ellis Henry Ellis, of the Dublin School; William Agar Renshaw, Handel Ashworth, and Henry Davies Crighton, of the Manchester School; George Bolton, Thomas Benson, and George Rowell, of the Newcastle School; George Harrison Evans, Richard Nightingale Broughton, and William John Noel Bell, of St. Bartholomew's Hospital; Samuel James Davidson and William Hodgson, of University College; Edmund Williams Yorath, of Charing-cross Hospital; John Rowland Wright, of St. Mary's Hospital; William Edward Baylie, of the Middlesex Hospital; Alfred John Henry Crespi, of the Birmingham School; and Charles Henry Beardshaw, of the Leeds School.

The following passed on the 15th inst., viz. :—

Messrs. Charles McCann, Thomas Henry Colman, and Ferdinand Beadles' students of the Westminster Hospital; Ebenezer Nicholas and Charles Mead, of St. Bartholomew's Hospital; Robert Wilkinson and George Brack Johnson, of the Newcastle School; John Thomas Redmayne, of Guy's Hospital; George Woodward, of St. George's Hospital; Henry Watton, of Edinburgh; and Matthew Lorenz Bartholomewsz, of Calcutta and Edinburgh.

The next Pass or Surgical and Pathological Examination for the Diploma of Membership will take place on Saturday next.

NEW FELLOWS.—The following Members of the College, having been elected to the Fellowship at previous meetings of the Council, were admitted Fellows on the 16th inst. :—

Thomas Batten, Coleford, Gloucestershire, diploma of membership dated May 18, 1827, and Richard Jones, M.D. St. Andrews, Newtown, Montgomeryshire, member June 9, 1837.

At the same meeting of the Council, Mr. John Clay, of Birmingham, a member of the College, attended, and received from the President the Jacksonian Prize, awarded to him for his essay on Ovariotomy, Pathology, and Diagnosis of Cases suitable for this operation, with the best method of performing it.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—The following gentlemen passed their final Examinations, and were admitted Licentiates of the College, on the 3rd instant :—

James Finlayson, Glasgow; Cecil Rogers, London.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 9, 1867 :—

William James Bennett, Dorchester; Alexander Fox, London Hospital: Scudamore Kydley Powell, Newcastle-on-Tyne; John Lea Molyneaux, Upholland, Wigan.

On Saturday, May 11 :—

Edward Charles Anderson, Banham, Norfolk.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

ADAMS, W. P., has been appointed Junior House-Surgeon to the Charing-cross Hospital.

ANDERSON, C. L., has been appointed House-Surgeon to the North Dispensary, Liverpool, in the room of C. F. Loughnan, M.D., resigned.

BALFOUR, G. W., M.D., has been elected a Physician to the Royal Infirmary, Edinburgh.

BUCK, A. H., M.R.C.S., has been appointed Senior House-Surgeon to the Charing-cross Hospital.

BUSH, DANVERS WARD, M.D., has been appointed a Physician to the Bristol Hospital for Children and the Outdoor Treatment of Women, Royal Fort, St. Michael's-hill, Bristol.

COOPER, W., M.D., has been appointed Physician to the Suffolk General Hospital, Bury St. Edmunds.

FLOWER, THOMAS, M.R.C.S., has been appointed Junior House-Surgeon to the Middlesex Hospital.

NUTT, C., M.R.C.S., has been appointed Assistant House-Surgeon to the Royal Portsmouth Hospital.

STYRAP, Dr. JUKES, late Physician in Ordinary, has been appointed Physician Extraordinary to the Salop Infirmary.

BIRTHS.

BEIGEL.—At 3, Finsbury-square, the wife of Dr. Beigel, of a daughter.

CHARLTON.—On May 7, at Newcastle-on-Tyne, the wife of Dr. Charlton, of a son.

FOWLER.—On May 9, at Kennington-park, the wife of Dr. Fowler, of a son.

HARDESTY.—On May 5, at High-street, Lochee, Dundee, the wife of J. Jeffrey Hardesty, L.R.C.P. and S.E., of a daughter.

ILES.—On May 9, at Watford, the wife of W. Iles, M.D., of a daughter.

POPE.—On May 11, at Bootham, York, the wife of A. C. Pope, M.R.C.S.E., of a son.

WELLS.—On May 6, at Broadstone, Dartmouth, the wife of S. S. D. Wells, Staff-Surgeon H.M.S. *Britannia*, of a daughter.

MARRIAGES.

COCKS—JONES.—On April 30, at Goodrich, C. C. Cocks, M.D., to Mary Jane, second daughter of the late W. Jones, Esq., of Lugwas, Herefordshire. No cards.

KIRK—COOKE.—On March 14, at Zanzibar, on board H.M.S. *Highflyer*, John Kirk, M.D., H.M. Vice-Consul, Zanzibar, to Helen, youngest daughter of the late C. Cooke, Esq., Ledbury.

DEATHS.

BRIDGFORD, R. F., Assistant-Surgeon, R.N., H.M.S. *Trinculo*, at sea, off Corunna, on May 7, aged 28.

LAWTON, S., M.R.C.S.E., at St. Philip's-road, Sheffield, on May 7.

RYAN, J., M.D., L.R.C.S.I., at 18, Henrietta-street, Waterford.

VACANCIES.

HALIFAX INFIRMARY AND DISPENSARY.—Assistant House-Surgeon.

WEST KENT GENERAL HOSPITAL.—Resident House-Surgeon.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Builth Union.—Mr. David Davies has resigned the Abergwessin district; population, 3784; salary, £50.

Newcastle-under-Lyme Union.—Dr. George Barnes has resigned the Whitmore District; area, 7572; population, 1302; salary, £15 per annum.

APPOINTMENTS.

Axbridge Union.—Richard P. Tyley, M.D. St. And., M.R.C.S.E., L.S.A., to the Wedmore District.

Horsham Union.—Edward J. Bostock, M.R.C.S.E., L.S.A., to the Slinfold District.

Kingsbridge Union.—John Elliot, junior, M.R.C.S.E., L.S.A., to the Ninth District.

Pembroke Union.—Gwynne Harries, M.D. Lond., M.R.C.S.E., L.S.A., to the Fifth District.

Prescot Union.—John F. Little, L.R.C.P. Edin., L.R.C.S. Edin., to the Hale District.

Prescot Union—George Tobin, M.R.C.S.E., to the Rainford District.

Scarborough Union.—Edward R. Slingsby, M.R.C.S.E., to the Shirburn district.

THE COLLEGE LECTURES.—Professor Hancock will deliver a course of six lectures in the theatre of the College of Surgeons, commencing on Monday, June 3, on the "Anatomy and Surgery of the Foot."

WE understand that, at a late meeting of the Fellows of the Royal College of Physicians, Dr. Page was appointed treasurer of the College, and Dr. Risdon Bennett representative in the Medical Council, in the room of Dr. Alderson, their new President.

WE have authority to state that Mr. Seymour Haden has resigned both his Jurorship at Paris and Honorary Surgeoncy to the Department of Science and Art.

THE Marquis of Westminster has given a second £500 to the Yeatman Hospital at Sherborne, Dorsetshire.

THE firms of Bass and Co. and Messrs. Allsopp and Son have each offered £500, provided £2000 can be raised, for the erection of an Infirmary in Burton-upon-Trent.

THE Association for the Improvement of London Workhouses have appointed a committee "to consider in what manner the eminent services to the cause of the London sick poor of Mr. Ernest Hart should be best marked."

THE CATTLE PLAGUE.—Dr. Edward Crisp has published another of a series of letters to the Lords of the Privy Council on the prevention of this disease. He advocates the slaughtering of animals at the ports of landing, and the establishment of dead meat markets in large cities and towns.

THE trustees of the Margate Literary Society have given public notice that they are anxious to dispose by tender of the entire contents of their museum, which is said to be particularly rich in British and foreign birds, fossils and minerals, and weapons and trophies from the Antipodes.

THE name of Risk Allah Bey is again before the public. According to the *Levant Herald*, he had effected an insurance at Galata for £3000 on a "group" (of statuary, we presume), but on going up the ship's side with the insured article in his arms, the Bey, who is a good swimmer, fell into the water. Claim has been made for the insurance money, and

a diver employed to recover the lost treasure, but all that he has as yet succeeded in fishing up is a boulder.

THE Lord Chancellor has appointed George Willis, M.D., and Thomas Prosser, F.R.C.S., magistrates for the borough of Monmouth.

DEATH OF MR. BAILLIERE.—We are sorry to announce the death, on the 11th inst., of Mr. Hippolyte Baillière, the Medical publisher, of 219, Regent-street, at the age of 58.

AT a special meeting of the Committee of the Royal Free Hospital, held on the 9th inst., Mr. John Daniel Hill, for many years the Senior House-Surgeon, was unanimously appointed one of the Surgeons to the Hospital.

COLLEGIATE EXAMINATIONS.—At the last examination in Surgery and Pathology for the Diploma of Member of the Royal College of Surgeons, when fifty-nine candidates offered themselves for examination, it is stated that only seven of that number failed to reach the collegiate standard, and were consequently referred to their Hospital studies for a period of six months. At the Primary or Anatomical and Physiological Examinations on Tuesday and Wednesday last, when fifty-seven candidates presented themselves, it is stated that twenty-one were referred to their studies for three months.

CONVERSAZIONE AT THE PHARMACEUTICAL SOCIETY'S ROOMS.—This Society gave one of its pleasant entertainments on Wednesday evening. There was the usual display of objects of scientific interest, and, in addition, Mr. Baines, the African traveller, gave a lecture on his travels for the entertainment of the guests. The lecture was illustrated by views of the Victoria Falls, etc. Besides leading pharmaceutists and men of general science, we noticed many members of our own Profession, as Drs. Quain, Murchison, Leared, Hjaltelin, from Iceland, Mr. Brooke, F.R.S., etc.

AT the May meeting of the Odontological Society, the President, G. A. Ibbetson, Esq., in the Chair, Mr. Bridgeman, of Norwich, read a paper "On the Elements of Dental Nomenclature." The President announced that the next meeting would be held on Monday, June 3, when a paper will be read by Professor Owen "On the Structure of the Teeth of certain Fishes from the Coal-Measure."

MUNIFICENT BEQUESTS.—The late Mrs. George Smith, for many years a resident in Southampton, has left £1000 to the Royal South Hants Infirmary, £1000 to the Southampton Dispensary, and £500 to the Hampshire Female Orphan Asylum, free of legacy duty.

MEDICAL CHARITIES.—The friends of the following metropolitan and provincial Hospitals will be glad to see the announcement that the late Benjamin Cohen, Esq., of Asgell House, Richmond, has bequeathed, free of legacy duty, £100 to the Jews' Hospital (Beth-Holem) Mile-end. The late Alfred Staines Pigeon, Esq., of Westbourne-street, Hyde-park, has bequeathed to the London Ophthalmic Hospital, St. George's-circus, £50, and, on the death of his wife, £500 to the Surrey Dispensary, £300 to the Margate Sea-bathing Infirmary, and £100 to the Samaritan Fund of St. Thomas's Hospital. The late William Henry Marshall, Esq., of Berkeley-crescent, Bristol, has bequeathed £100 each to the Bristol Blind Asylum and the Royal Bristol Infirmary. The late James Day Cochrane, Esq., has also bequeathed £500 each to the London Fever Hospital, the London Cancer Hospital, and the Hospital for Consumption and Diseases of the Chest; and the late Mrs. Cox, of Lawford, in addition to the large bequests by her mentioned in this journal last week, has left £500 to the Essex Hall Idiot Asylum. The above represents £3250 left to Medical charities only, exclusive of equally liberal bequests to numerous other institutions, not strictly Medical, remembered by the donors.

THE JACKSONIAN PRIZES.—The Council of the Royal College of Surgeons has just announced that there will be two prizes offered for competition among the members for the above prize in the ensuing year—viz., Pyæmia after injury and operations; its pathology, causes, symptoms, prevention, and treatment. The other, on Amputation of the Limbs; the various modes of operation now practised, their relative advantages, and the methods of arresting primary hæmorrhage, and of dressing the stump. For the present year the following are the subjects:—The Injuries and Diseases of the Jaws, including those of the Antrum, with the treatment by operation or otherwise; and the other on the various Deformities resulting from severe Burns on the surface of the body, the structural changes occasioned by these injuries, the best modes of preventing deformities, and the treatment (operative or otherwise) adapted to correct them. At Christmas-day the subjects for the Collegial Triennial Anatomical Prize must be sent in. The subject is the Anatomical Structure of those parts of the Eyeball which are contained within the sclerotic and cornea, with illustrations drawn from each of the five great divisions of the vertebrata. The money value of these prizes is represented by one at fifty guineas and two at twenty guineas each.

SUMMONS GRANTED AGAINST ROBERT JACOB JORDAN.—At Marlborough-street the Hon. Alfred Thesiger, instructed by Messrs. Wilde and Co., solicitors to the Royal College of Surgeons, applied to Mr. Tyrwhitt for a summons against Mr. Robert Jacob Jordan, the keeper of an anatomical museum in George-street, Hanover-square, for holding himself out to the world as Surgeon, his name having been removed from the roll of members. Mr. Thesiger stated that in 1839 Mr. Jordan was elected a Member of the Royal College of Surgeons. In 1863, it having been brought to the knowledge of the managing body that he was the keeper of a disgusting anatomical museum, and also that he was publishing an indecent book, a correspondence ensued, the result of which was that by order of the College the name of Mr. Jordan was struck off the list of Members. The College subsequently demanded back the diploma granted to Mr. Jordan, but he refused to return it, and matters rested for a time; but this year, in consequence of numerous complaints, the College had determined to take some effectual steps in the matter, and had instructed him to apply for a summons under the 21st and 22nd Victoria, cap. 90, sec. 40. One of the pamphlets circulated by Mr. Jordan was handed to Mr. Tyrwhitt. The pamphlet was inscribed "Nervous Exhaustion," and on the title page Mr. Jordan was described as a Member of the Royal College of Surgeons, England. In another of his books the diploma, which had been recalled by the College of Surgeons, was set forth. Mr. Tyrwhitt granted the summons. It is stated that Mr. Ouvry has also applied for a summons on the part of the Royal College of Physicians of Edinburgh, and that both cases will be heard on Tuesday next at 3 o'clock.

UNIVERSITY COLLEGE.—The distribution of prizes in the Faculty of Medicine took place on Tuesday, when the Right Hon. E. Cardwell, M.P., presided. The Dean of Faculty read the report, which stated that a further increase had taken place in the number of students attending the school. During the Session of 1865-6 the total number attending the Faculty of Medicine was 209, of whom 70 were new students. The entries for the current session had been 221, of whom 82 were new students. It was hoped that a portion of the increased funds would shortly be made available for extending clinical instruction. The students had during the past year sustained the high character of the college. Seven gentlemen had taken the degree of Doctor of Medicine; seven had taken the degree of Bachelor of Medicine; five had passed the first examination for the degree of Bachelor of Medicine. A large proportion of honours had been awarded by the University of London to the students of the College. In addition to the prizes held out as inducements to exertion, the Council had thought it right to show their appreciation of the value of the education bestowed on the sons of members of the Medical Profession at the Royal Epsom Benevolent College by establishing four free scholarships for foundation scholars of that institution who should have passed the matriculation examination of London. This had emanated from a suggestion made by Dr. Carr, a late student of the College, who had also suggested that assistance should be extended to the sons of deceased members of the Medical Profession, or of those who were prevented by calamity or sickness from providing for the education of their families, and he had offered to raise a fund sufficient for the maintenance of those gentlemen during their student career, he himself contributing £1000. The following prizes were then distributed:—Chemistry—Gold medal, Arthur Richard Saunders; 1st silver medal, Alexander Gray; 2nd silver medal, David Arthur Davies. Certificates—4th, Alexander Muirhead; 5th, W. G. Watson; 6th, Charles Henry Carter; 7th, Lewis Lewis; 8th, Sidney Coupland; 9th, Ebenezer John Ramsey; 10th (equal), M. A. Tarkhadakar and Walter Rigden. Anatomy and Physiology.—Gold medal, R. L. Roberts; 1st silver medals (equal), R. T. Smith and H. Newell Martin; 4th certificate, Alfred Shewen. Anatomy.—Gold medal, Stanley Peacock; 1st silver medal, William Joseph Scott; 2nd silver medal, Ethelrid Dessé; certificates—4th, Enoch Snell; 5th, J. G. E. Bolton. Junior Class.—Silver medal, James B. Ball; certifi-

cates—2nd, Alfred Henery Carter; 3rd, Charles Henry Carter; 4th, George J. Gray. Medicine.—Gold medal, Henry Clifford Gill; 1st silver medal, George V. Poore; 2nd silver medal, L. Le Grand; certificates—4th, J. W. Langmore; 5th, Thomas F. Hopgood; 6th (equal), Tempest Anderson and E. W. Minter; 8th (equal), Charles Frederick Groom and Edmond W. Symes; 10th, Thomas Charles Lloyd. Surgery.—Gold medal, T. R. Loy; 1st silver medal, Thomas F. Hopgood; 2nd silver medal, Edward Collett Shoppee; certificates—4th, Tempest Anderson; 5th, L. Le Grand; 6th, David Havard; 7th, R. Williams. Comparative Anatomy.—Gold medal, Sidney Coupland; 2nd certificate, Lewis Lewis. Special Class of Clinical Medicine.—First Prize, L. Le Grand; second prize, Thomas F. Hopgood; certificates—3rd (equal), Henry C. Gill and W. R. Gowers; 5th, John D. Thomas.

Yellow Fever in the Mauritius.—A correspondent, writing from St. Louis, says:—"For some weeks we have had fever raging to a great extent among the Indian and Creole population, from which few of them recover, as their system is so low from living on rice and fish. The average of deaths last year in Port Louis was 10 per day, and now it is from 95 to 100 per day, and for the whole island about 200 per day, which for the whole of last year would make 12,347. Quinine, the principal remedy, has attained a great price; one ounce last week was sold for 137 dollars, or £27 8s.; and a person I know paid £5 for 12 quinine pills; in fact, there are now only a few ounces of quinine in the island. Temporary Hospitals are being erected everywhere, in town and country. The Governor has subscribed liberally for the relief of the poor, and everything is being done possible under the circumstances. The Surgeon of the Royal mail steamer *Saxon*, during its stay, has given his services, as well as the Surgeon of a French ship. A notice has been issued from the post-office for the letters to be called for, as the letter-carriers are nearly all sick. This is the case with every public department. It is one continual procession of funerals passing our place the whole of the day, and the coffin-makers' establishments are surrounded by people waiting for them as they are made. A friend of mine buried a child last week at five in the evening; there were then seven coffins on the ground waiting for the grave-diggers. In fact, it is almost impossible to find hands to do work of any sort. The public conveyances are nearly all still, from the drivers being sick."

Cattle Plague Inquiry.—The week ending May 4 has been characterised by three fresh outbreaks of cattle plague, embracing ten attacks. On April 28 the disease appeared in London, among a stock of ten cows in George-street, Limehouse-fields, in the Tower Hamlets District; four of these animals were attacked and were killed by order of Inspector, and the remaining six were slaughtered healthy to prevent the spread of the disease. On May 2 an outbreak occurred in Leicestershire, at Ashby Parva, in the Petty Sessional Division of Lutterworth; in a stock of three heifers, two were attacked, of which one died and the other was killed; the remaining animal was slaughtered healthy. On Saturday, May 4, another outbreak was reported in London, among a stock of nineteen cows, in New North-road, Islington, in the Finsbury District; up to the date of the return, four of the animals had been attacked, of which one died and three were killed. For the week ending May 11, seventeen attacks of cattle plague have been reported, being an increase of seven on the last return. On the premises in New North-road, Islington, infected on May 4, three additional attacks have occurred, and the animals have been killed by order of the Inspector, as were also ten healthy cows. Four fresh outbreaks of the disease have been reported; one in Shepperton-mews, New North-road, Islington, on premises belonging to the owner of the stock above mentioned; of four animals, one bull and two heifers were attacked and killed by order of the Inspector. Another outbreak occurred in a stock of thirty cattle at Stoke Newington-green, in the Finsbury District; nine animals contracted the disease, and were killed by order of the Inspector, and the remaining twenty-one were slaughtered healthy. The same Inspector reports that he found a cow suffering from cattle plague in Mare-street, Hackney, which he ordered to be killed and buried. The remaining outbreak is reported from Blyth, near Retford, Nottinghamshire; in a stock of fourteen animals, one cow was attacked and was killed by order of Inspector. The total number of cattle reported to have been attacked in Great Britain since the commencement is 278,561, and 56,598 animals have, in the aggregate, been slaughtered healthy to prevent the spread of the disease.

Anecdotes of Naegele.—Professor E. von Siebold, while on a visit to Naegele, the illustrious Professor of Obstetrics at Heidelberg, accompanied by a favourite pupil, was invited by him to take a country ride in order to see a patient. The charming scenery of the neighbourhood, which formed a principal reason for accepting the invitation, was, however, lost upon the party; for no sooner had the three left the town in the carriage than Naegele began plying Von Siebold's pupil with questions relating to all the deepest topics of the obstetrical art and science, just as if he were undergoing an examination for his diploma. Von Siebold saw plainly enough that many of the questions were but sly hits at himself, as the Professor went on developing to the pupil his views on the pelvis, the mechanism of parturition, and other matters. Every time the pupil gave an evasive reply, or one not in accordance with Naegele's principles—stating views he had naturally imbibed from Von Siebold—he would exclaim, "How is it possible, sir, you can advance such an opinion in the presence of two Midwifery Professors?" Some years later the two Professors were present together at the Mannheim theatre, and while Von Siebold, an adept in music, was in ecstasies at the singing of Schroeder-Devrient in Fidelio, and the whole house rang with applause, the Heidelberg Professor contented himself with exclaiming, "Very good, very good!" and then added in an undertone, "My dear friend, do you really believe that the child's head is ever placed during delivery in the antero-posterior diameter of the entrance of the pelvis?" Nothing annoyed Naegele more than tedious discourses, and speaking one day of a colleague who was somewhat of a sinner in that way, he exclaimed, "That man's place in the Materia Medica is immediately after opium. He possesses within himself the narcotic principle in the highest degree."—*Von Siebold's Lettres Obstétricales traduites par Stoltz.*

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

A Country Fellow.—The next senior member of the Council for a seat at the Examining Board, is Mr. Samuel Solly, Surgeon to St. Thomas's Hospital.

Medicus.—If a contract has been entered into by you, your right in this matter depends upon the terms of such contract. If no contract exists, you are bound, by Article 206 (No. 1) of the Consolidated General Order, to supply these in the same manner as other medicines, unless a special arrangement has been made by the Governors and approved by the Poor-law Board.

A Member.—Examinations for the L.M. of the London College do not take place so often. It is stated there will be a meeting on the 29th inst. The fee to members is three guineas.

A Third-year's Student.—On application to the President of the College, you will no doubt receive permission to attend Professor Hancock's lectures.

Argus.—There are others of the same class of gentry whom the College authorities are about to bring within the meshes of the law. The individual engaged at the museum mentioned is a member of the College. His name, like that of Abercrombie at another museum, will, on removal from the College list, be struck off the register as possessing the title.

Theophilus Mason.—The early volumes of the *Gentleman's Magazine* contain several instances of experiments on criminals. On Saturday, January 2, 1731, Charles Ray, a malefactor, was reprieved in order to discover by experiment whether deafness could be cured by purging. The tympanum was accordingly cut, but with what result is not stated. *The Daily Post-Boy* of December 29 of the same year gravely suggests the castration of criminals guilty of rape and unnatural crime, in order to prevent them leaving any pernicious breed behind them; and Hector Boetius affirms that the ancient Scots performed the same operation on such as laboured under madness, or infectious distempers, which they thought might be communicated to their offspring.

A Fellow, Ely.—The person named was a Fellow of the College. His name will be removed from the Calendar and Register.

Stanhope Reynard, M.D.—You are hard on "Our Own Old Fool" of *Punch*, who wants you to tell him why a gregarine is like the French Exhibition. You give it up? Because it is a parasite (Paris sight).

Nugæ Canoræ.

Here lieth Margaret, otherwise Meg,
Who died without issue, save one in her leg.
Strange woman was she, and exceedingly cunning;
For whilst one leg stood still the other kept running.

A Branch Surgeon to the Society.—The late William Hawes, M.D., established the Royal Humane Society.

M.D. St. Andrew's.—The University of which you are a graduate takes precedence of those named by you, and immediately follows that of Cambridge, as you will see from the following list of Universities of the United Kingdom, with the dates of their foundation:—Oxford, 886; Cambridge, 1110; St. Andrew's, 1413; Glasgow, 1450; Aberdeen, 1494; Edinburgh, 1582; Dublin, 1593; London, 1836; Durham, 1837; Queen's University in Ireland, 1850. In the colonies—University of Sydney, 1858; and University of Melbourne, 1859.

Position in Protracted Labour.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The result of a fifteen years' use of the practice enables me to attest the great value of an upright position in certain cases of labour. Very frequently have I been enabled thereby to avoid the forceps; and those protracted cases which weary by their long continuance, although the natural powers may perhaps be equal to the occasion, I have often been able to shorten very considerably, in a manner, too, so evidently due to the means chosen as to excite great surprise in the attendant women. I have to thank Mr. R. Hardey, the author of the paper alluded to by Dr. Brunton, for explaining to me the great value of this method; and, as his nephew, I regret to say that his successful career in obstetrics was closed by death last year. Had this not been so I am sure he would have been among the foremost to vindicate Mr. Clarke in a practice which is not only proper, but in certain cases quite indispensable.

I am, &c. E. G. Wake, M.D.

Collingham, Newark, May 13.

The Position of Licentiates of the Royal College of Physicians of London.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Does it not seem an act of self-depreciation that a body holding the highest professional status in England, and therefore in the world, should object to the admission of its own licentiates to examination for membership and fellowship, whilst recognising the right of colleges of lesser rank to attain to such honours?

It is but a just tribute to the Examiners of the Royal College of Physicians of London to presume that their certificates of competency are not inferior to those of any university in the world; and naturally it might be expected that their own adopted sons would receive at their hands a position of equality with strangers. I am, &c. L.R.C.P. Lond.

Sacral Pain after Parturition.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Will some of your readers kindly enlighten me as to the exact nature of, and treatment for, the following case of severe pain at the extreme end of the sacrum after parturition, and persisting for nearly two years?

A lady was delivered of her fourth living child in June, 1865; labour natural, the last stage very rapid; she made a quick recovery with the exception that, ever since, she has suffered continual and severe pain at the extreme end of the sacrum, especially on first sitting down and rising from the recumbent posture; no pain whilst lying down or walking. A Physician who was consulted at first thought it depended on ulceration of the bowel, but on examination the rectum was found free from that or internal piles. Opium suppositories have alone afforded even temporary relief, but affect the head and general system, and the pain still continues.

I am, &c. Medicus.

Natural Science Examinations at Oxford.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I enclose a set of papers given in our examination for a scholarship in natural science. The scholar elected was Mr. W. T. Goolden, from Magdalen School. Mr. E. R. Smart, of Jesus College, was also elected to an exhibition. I am, &c.

Edward Chapman, Lecturer in Natural Science.

Merton College, Oxford, May 9.

Physiology.—I.

1. Upon what points in inorganic and organic nature are the characters of any two different landscapes dependent?
2. Enumerate the cranial nerves, and classify them according to their function.
3. Describe the digestive tract of a bird, enumerating the several points which it possesses of distinctive differences as compared with the analogous system in other subkingdoms.
4. Give an account of the anatomy of the common earth worm and snail.
5. What arguments can you bring to show that animal tissues possess a power of drawing blood through the capillaries analogous to that possessed by vegetable cells?
6. What are the points of structural difference between Rodentia and Carnivora, Insecta and Arachnida, Batrachia and Reptilia, Brachiopoda and Lamellibranchiata?
7. Give the characteristics of the Arthropoda (Articulata), specifying the points in which they contrast with the Annelida, and enumerating their main subdivisions.
8. What are the microscopic characters of elastic tissue, voluntary muscular fibre, nerve centres, bone?
9. Write an account of the anatomy of the human ear, and state what modifications are observed in this organ as we descend the scale of animal life.
10. Describe the physical, chemical, and structural characters of mammalian blood, and state what you know of the development of the red corpuscle.

Physiology.—II.

1. To what points of structure, function, and habit would you look to determine whether any two animals—as, for instance, a fox and a dog—were or were not of the same species?
2. State some of the chief differences between plants and animals.
3. What advances in natural science are associated with the names of Harvey, Linnæus, Jenner?
4. Give the characters of any two of the following natural orders, specifying any members of each which are employed in the arts:—Solanaceæ, Cruciferæ, Compositæ, Liliaceæ, Coniferæ, Lichenes.
5. Give a short sketch of the class ganoid fishes, with an account of their distribution in space and time.
6. Explain, with illustrations, what is meant by the terms subjective sensation, reflex action, rete mirabile, hybernation, metamorphosis.
7. Upon what elements in our food does the saliva act? Does comparative anatomy throw any light on the function of this secretion?
8. What are the characteristics of the Australian and South American mammalian faunæ?
9. What parts do you consider essential, what accessory, to an organ of vision?
10. Give an account of the changes undergone by an insect from the egg to the imago state. Classify insects according to the metamorphosis which they undergo.

Anatomy and Physiology.

Practical Examination.

1. Give a description of each one of the specimens numbered i.—vii., referring them to their several subkingdoms.
2. Write a description of the bone placed before you, stating the several purposes it subserved during life.
3. Describe the several plants put before you numbered i.—iv., specifying the distinctive characters of the natural orders to which they belong.
4. Give an account of the object under the microscope.

(1.) Specimens from the seven great subkingdoms.
(2.) Lower jaw of a cat.
(3.) Cruciferæ, Compositæ, Liliaceæ, Urticaceæ.
(4.) Section of tooth.

Physics.—I.

1. Describe the French system of measures and weights, giving the relations between the units of the system.

If 1 gram = 15·432 grains, and
1 metre = 39·37 inches, determine how many pints there are in 1 litre.

2. What is meant by the *resultant* of a system of forces, and a *component* of a single force?

A particle (A) rests on a smooth circle, and is attached to it by three unequal strings, AB, AC, AD, forming chords of the circle. If the tensions in AB and AC be given to be proportional to their lengths respectively, determine graphically the tension in AD, and the pressure of the particle upon the circle.

3. Describe the screw, point out carefully its connexion with the inclined plane, and hence deduce the expression for the mechanical advantage of the screw.
4. Describe the construction of a delicate balance, and explain how the centre of gravity of the beam is made susceptible of slight adjustment.

What process is adopted in using a balance to insure accuracy in spite of inequality in the length of the arms?

5. Define the velocity of a moving particle, and state how it is measured when uniform, and hence deduce the measure of velocity at any instant when variable.

What number expresses in metres and seconds a velocity of 10 yards per minute?

6. Describe the construction of Attwood's machine, and explain the method of determining by it the accelerating effect of the force of gravity.

Each of the weights of an Attwood's machine is 50 oz., and the extra weight is 1 oz. In consequence of motion being communicated to the wheelwork, an additional weight of 6·3 oz. must be considered to be set in motion by the extra weight. If the extra weight be removed after it has fallen from rest during 5 seconds, it is found that, in the next 2 seconds, each of the equal weights describes 3 feet. Determine the accelerating effect of the force of gravity.

7. What is meant by elasticity of torsion? Define the coefficient of torsion of a material, and describe some method of determining it.
8. Describe an experiment in illustration of the principle that the apparent weight of a body, when immersed in a fluid, is less than its true weight by the weight of the fluid displaced by the body.
9. A piece of cast iron, the specific gravity of which is known to be 7·2, is suspected to have internal cavities. Its weight is found to be 203·04 grams, and when suspended in water at 4° C. it is found to weigh 171·84 grams. Do any cavities exist, and, if so, what is their total volume?
10. Describe the common barometer, and point out the principles on which its action is based.

What is the effect of capillary action on the reading of the common barometer?

11. Describe the construction and explain the action of the common pump.
12. How is the sound caused in an open flute organ pipe? What series of notes can be produced from the same open pipe; and what is the condition of the vibrating column of air corresponding to each of these notes?

Physics.—II.

1. It is found that a ray of light passes through a plate of a refracting medium without angular deviation; what does this teach us?

It is also found that a ray of light, after passing through any number of superposed plates of different media, has suffered no angular deviation; what do we learn from this observation?

2. Describe the construction of the astronomical telescope with Huyghens' eye-piece, and trace a pencil of light through it.

The focal length of the object-glass of such a telescope is three feet, that of the field-glass is three inches, and that of the eye-glass is one inch; what is its magnifying power to an eye capable of seeing with parallel rays?

3. Describe some method by which the velocity of light has been determined.
4. Describe the phenomenon known as Newton's rings, and the circumstances under which it is produced.

Give some explanation of the formation of these rings on the principles of the undulatory theory of light.

5. Describe the process employed by Dulong and Petit for determining the absolute expansion of mercury.

The height of the barometric column is observed to be 765·6 m.m., and the temperature 15° C.; what would be the height of the barometer on this occasion if the temperature were 0° C.?

Coefficient of expansion of mercury 0·00018.

6. Define the specific heat of a substance.

What is the general principle of the method of determining the specific heat of a substance known as the method of mixture? Give a formula for determining the specific heat of a body from the observations made in this method.

7. A brass vessel, weighing 65 grams, contains 400 grams of water at 10° C.; a piece of hot iron, weighing 100 grams, is placed in the water, and the common temperature assumed by the vessel and its contents is 12° C. If the specific heat of iron be 0·1137, and that of brass 0·0939, what was the initial temperature of the iron?

8. Describe some experiments illustrating the very bad conductibility of water.

Is water absolutely a non-conductor of heat? Describe an experiment deciding this point.

9. State the laws of electrical attraction, and describe some method by which they have been verified.

If a charged sphere attract a very small uncharged sphere at a considerable distance, show that the force of attraction is approximately proportional to the radius of the latter, and inversely proportional to the cube of the distance between the centres of the spheres.

10. Describe the electrophorus, and the way of using it; and give an explanation of its action.

11. Describe the construction of a cell of Grove's battery, and point out fully the action which takes place in it when the poles are connected by a wire.

12. If a straight electro-magnet be placed inside a coil of insulated wire, the ends of which are connected, state the mutual actions which take place between the different parts of the apparatus when a current of electricity is allowed to pass through the wire of the electro-magnet, and is afterwards stopped.

CHEMISTRY.—I.

1. Describe briefly the various methods used for preparing nitrogen.

2. Why are the substances produced by neutralising acids with ammonia regarded as salts of ammonium?

3. What is the aim of qualitative analysis, and how may its methods be classified? Consider separately the cases of the analysis of a mixture, and of the analysis of a single substance.

4. From what source and by what process is the element selenium obtained?

5. A portion of carbonic acid has been collected in a jar over mercury. How can its quantity be estimated?

6. By what means may ferrous salts be converted into ferric salts, and *vice versâ*.

7. State the evidence in favour of the existence of certain metals in the solar atmosphere.

8. What explanation may be given of the formation of a precipitate produced by the mixture of two salts in solution?

9. Write a short account of the element bromine and its principal combinations.

10. What facts have been established with reference to ozone?

CHEMISTRY.—II.

1. If a volume of oxygen weigh a gramme, what is the weight of the same volume of the following gases:—Carbonic oxide, ammonia, chlorine, nitrous oxide, nitric oxide, steam, marsh gas?

2. What compounds does carbon form with sulphur and with nitrogen? How are these substances prepared?

3. Write a short account of the acids of phosphorus.

4. What changes occur when a solution of silver nitrate is added to a solution of sodium hyposulphite?

5. Describe a method of estimating the value of a sample of bleaching powder.

6. How is aluminium obtained?

7. Explain the process by which silver is extracted from galena.

8. What is meant by "nitro-substitution" compounds?

9. What is the formula of carbolic acid? To what other chemical substances is it most nearly related?

10. Write down equations representing reactions in which alcohol is formed.

COMMUNICATIONS have been received from—

MEDICUS; Mr. E. CHAPMAN; L.R.C.P. LOND.; Mr. W. MARSLAND; Mr. BRODHURST; Dr. A. ROBERTSON; Mr. EASTES; SCALPEL; Mr. P. MANSON; Dr. WAKE; Dr. CRISP; Dr. MUDGE; Mr. J. ROBERTSON; Mr. J. R. SHORTE; Dr. FOTHERBY; Mr. C. HUNTER; Mr. BLACK; Dr. SEATON; Dr. HUGHLINGS JACKSON; Dr. B. W. RICHARDSON; Mr. WALTER TYRREL; Dr. DEWAR; Dr. LIONEL S. BEALE; Dr. MURCHISON; Mr. J. CHATTO.

BOOKS RECEIVED—

Code of Medical Ethics adopted by the American Medical Association—Jones on the Management of Labour in Contracted Pelvis—Beale's Archives of Medicine, Part 16—The New York Medical Journal, April—Memoir of the Works of the Havre Medical Society—Kidd on Cephalotripsy—Shaw's Medical Remembrancer—Fox on the Air of Scarborough.

NEWSPAPERS RECEIVED—

Laboratory—Gazette Hebdomadaire—Medical Press and Circular.

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 11, 1867.

BIRTHS.

Births of Boys, 1119; Girls, 1029; Total, 2148.
Average of 10 corresponding weeks, 1857-66, 1862·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	642	593	1235
Average of the ten years 1857-66	618·6	615·1	1233·7
Average corrected to increased population..	..	..	1357
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,388	5	4	6	..	10	11	5	..
North ..	618,210	5	2	3	6	9	13	4	..
Central	378,058	4	4	..	2	3	3	..	..
East ..	571,158	6	3	7	1	8	10	1	..
South ..	773,175	10	7	8	2	11	12	2	..
Total ..	2,803,989	30	20	24	11	41	49	12	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·703 in.
Mean temperature	63·4
Highest point of thermometer	83·6
Lowest point of thermometer	43·7
Mean dew-point temperature	52·4
General direction of wind	S.E. & S.W.
Whole amount of rain in the week	0·36

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, May 11, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending May 11.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending May 11.	Temperature of Air (Fahr.). Highest during the Week.	Temperature of Air (Fahr.). Lowest during the Week.	Temperature of Air (Fahr.). Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	2148	1421	1235	83·6	43·7	63·4	0·36	36
Bristol (City) . .	165572	35·3	120	74	‡81	80·0	48·4	59·5	0·72	73
Birmingham (Boro')	343948	43·9	269	167	132	81·8	47·3	60·8	0·23	23
Liverpool (Borough)	492439	96·4	357	285	252	75·8	48·0	60·5	0·57	58
Manchester (City) .	362823	80·9	262	205	‡208	76·5	51·0	61·3	0·39	39
Salford (Borough) .	115013	22·2	100	58	62	75·5	50·0	59·8	0·33	33
Sheffield (Borough).	225199	9·9	198	119	99	74·1	47·1	59·7	0·65	66
Leeds (Borough) .	232428	10·8	270	118	103	71·3	41·8	58·2	1·36	137
Hull (Borough) .	106740	30·0	99	49	51	..	..	..	..	..
Newcstl-on-Tyne, do.	124960	23·4	78	66	67	72·0	44·0	54·5	0·94	95
Edinburgh (City) .	176081	39·8	142	85	124	67·7	42·0	51·6	1·20	121
Glasgow (City) .	440979	87·1	412	257	247	65·3	43·2	52·7	1·31	132
Dublin (City and some suburbs) .	319210	32·8	210	‡157	165	68·6	47·0	57·4	1·32	133
Total of 13 large Towns . . .	6187764	34·8	4665	3061	2826	83·6	41·8	58·3	0·78	79
					Week ending May 4.	Week ending May 4.				
Vienna (City) . .	(1863) 560000	..	..	..	349	..	..	§55·9	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·703 in. The barometrical reading decreased from 29·90 in. at the beginning of the week to 29·33 in. on Saturday, May 11. The general direction of the wind was S.E. and S.W.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 51·5°.

APPOINTMENTS FOR THE WEEK.

May 18. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

METROPOLITAN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH, 7½ p.m. Meeting.

20. *Monday*.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

21. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ETHNOLOGICAL SOCIETY OF LONDON, 4 p.m. Anniversary Meeting.

PATHOLOGICAL SOCIETY, 8 p.m. Meeting.

ROYAL INSTITUTION, 3 p.m. Prof. Miller, "On Spectrum Analysis."

22. *Wednesday*.

Operations at University College Hospital, 2 p.m.; St. Mary's, 2 p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.

HUNTERIAN SOCIETY, 8 p.m. Dr. Hughlings Jackson, "On Difficulties in the Diagnosis of Coma from Cerebral Hæmorrhage, Uræmia, Intoxication, &c."

23. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Prof. Huxley, "On Ethnology."

24. *Friday*.

Operations at Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8 p.m. Prof. Herschel, "On the Falling Stars of the Years 1866-7."

CHOCOLAT-MENIER.

(Manufactured only in France.)

ANNUAL CONSUMPTION EXCEEDS 5,000,000 lb.

The healthiest, best, and most delicious Aliment for Breakfast known since 1825; defies all honest competition, unadulterated, highly nutritious, and pure.

Sold in Half-pound Packets.

Wholesale, MENIER, 23, Henrietta-street, Strand, London.

Retail by all respectable Houses.

WHY NOT USE THE BEST?

"MAIZENA"

Is the ONLY "PRIZE MEDAL" CORN FLOUR. It was also reported by Jury of 1862, London,
"EXCEEDINGLY EXCELLENT FOOD."

It is superior to the est Arrowroot; makes in short time, and at trifling cost, delicious Blanc-mange, Puddings, Cakes, Omelets, Creams, and scores of other dishes, and is always an invaluable Food for INVALIDS and CHILDREN. Sold in Packets, with directions, by Chemists, Grocers, &c.
N.B.—The price is *no more* than for inferior articles.

TRY IT ONCE.

LIEBIG'S FOOD FOR INFANTS & INVALIDS.

Prepared strictly from the Formula of
Baron Liebig, by

HOOPER,

OPERATIVE CHEMIST,

Sold in Tins, 1 lb., 1*s.*; 3 lb., 2*s.* 6*d.*; 6 lb., 5*s.*,
by all Chemists and Druggists,
and direct from Mr. HOOPER'S Establishments,

7, PALL MALL EAST,
And 55, GROSVENOR STREET.

Wholesale of Barclay, Edwards, Newbery, all Patent Medicine Warehouses, and Wholesale Druggists.

CHOLERA, DIARRHŒA, &c.—EARL RUSSELL sent to the College of Physicians a communication received by him from Manilla (where Cholera has been raging fearfully), to the effect that, of all remedies tried, Chlorodyne was the most effective.—See "Lancet" and "Brit. Med. Jour.," Dec. 31, 1864.

TOWLE'S CHLORODYNE.

OF KNOWN COMPOSITION AND UNIFORM STRENGTH.

A Surgeon from New York writes:—"It only requires to be known to be appreciated. . . I have no hesitation in characterising it (viz., Towle's Chlorodyne) as the most useful medicine that has appeared during the present century. In diarrhœa, colic, ague, spasms, I have found it to relieve more pain and cause more joy than any other article that can be named."

NOTE.—The Profession is warned against *inferior*, *secret*, and *cheap* compounds now in the market. Each genuine bottle bears a fac-simileof Proprietor s signature on the stamp outside. Price, 2 oz., 2s. 9d.; 4 oz., 4s. 6d.; and 10 oz., 11s.

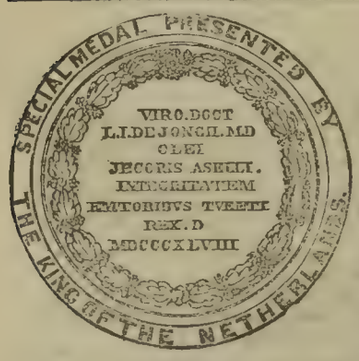
Liq. Chloroformi Co. (vel) Chlorodyne *sine* Ol. Menth. Pip.

Each Bottle bears the Proprietor's Signature, without which none is genuine.

A. P. Towle

Price, 2 oz., 2s. 6d.; 4 oz., 4s.; and 8 oz. stopped bottles, 8s.

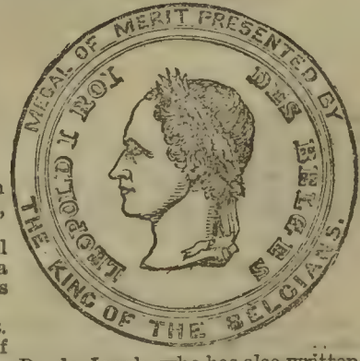
Sole Manufacturer—A. P. TOWLE, STOCKPORT-ROAD, MANCHESTER.



DR. DE JONGH'S

(Knight of the Order of Leopold of Belgium)

LIGHT-BROWN COD-LIVER OIL



SELECT MEDICAL OPINIONS.

Sir HENRY MARSH, Bart., M.D., Physician in Ordinary to the Queen in Ireland:—"I consider Dr. de Jongh's Cod-liver Oil to be a very pure Oil, not likely to create disgust, and a therapeutic agent of great value."

Dr. BARLOW, Senior Physician to Guy's Hospital:—"I have been well satisfied with the effects of Dr. de Jongh's Cod-liver Oil, and believe it to be a very pure Oil, well fitted for those cases in which the use of that substance is indicated."

Dr. LANKESTER, F.R.S., late Lecturer on the Practice of Medicine, St. George's School of Medicine:—"I consider that the purity and genuineness of this Oil are secured in its preparation by the personal attention of so good a Chemist and intelligent a Physician as Dr. de Jongh, who has also written the best Medical Treatise on the Oil with which I am acquainted. Hence I deem the Cod-liver Oil sold under his guarantee to be preferable to any other kind as regards genuineness and medicinal efficacy."

SOLE CONSIGNEES AND AGENTS,

ANSAR, HARFORD, & CO., 77, Strand, London, W.C.

ORIGINAL LECTURES.

LECTURES ON EXPERIMENTAL AND PRACTICAL MEDICINE.

By BENJAMIN W. RICHARDSON, M.A., M.D., F.R.C.P.,
Senior Physician to the Royal Infirmary for Diseases of the Chest.

ON THE INFLUENCE OF EXTREME COLD ON NERVOUS FUNCTION.(a)

(Concluded from page 519.)

On the Influence of Extreme Cold on the Cerebrum.

If, when an animal is placed in a state of deep torpor by freezing the superior surface of the cerebrum through the parietes, the cold be sustained and the mass of the brain be made to come more effectually under the influence of the cold, the excitability of the spinal column, even of a warm-blood animal, is greatly increased. In frogs this excitability is quickly developed, as I have already shown; but in rabbits, more time being allowed, it is equally well demonstrated. In a young rabbit profoundly stupefied by the act of deep freezing of the cerebrum, Dr. Sedgewick, with me, watched this phenomenon of spinal excitability for more than an hour. The animal reclined on the side, and breathed much as a man who is suffering from apoplexy. There was no consciousness whatever, and, when let alone, the body was quiet; but the merest excitation, even the passing of a current of air over the body, brought on the most determinate convulsive movements—movements quite unconscious, quite painless, but at the same time co-ordinate, showing still the governance of the cerebellum, and confined to the voluntary muscles, showing plainly the spinal nature of the excitation. By letting the cerebrum thaw the convulsive movements readily ceased.

In all these experiments it is best not to expose the brain substance directly to the cold, but to let the influence be exerted through the walls of the skull. When, however, the animal is quite insensible to pain, it is easy to remove the bony parietes, and to act directly on brain matter. In this manner we may freeze sections of brain-matter, tracts, and special organs. In this way, by care in the experiment, the cerebrum may be removed altogether without destroying the action of the heart or the respiratory power. In these cases, of course, no attempt has been made to keep the animal alive, but when the facts required were obtained it has been made to sleep to death. Still there can be no doubt that a vegetative existence could have been sustained.

An observation was made by Majendie that when the corpora striata were ablated or injured there were violent forward movements of the animal body. He accounted for this by assuming that the forward propulsive movements of the body were generated in the cerebellum and in the medulla, while the governance of the backward movements of the body was derived from the corpora striata. When, then, the influence of the corpora striata was cut off, the balance of power was destroyed, and, the action of the cerebellum and medulla coming into undue force, there were movements forward which the animal could not control.

In destroying the functions of the cerebrum in pigeons by means of cold, Mitchell, in one of his experiments, made the freezing go so deep as to influence the region of the corpora striata, occasioning, he says, "the violent forward movements which Majendie originated by ablating these parts."

In my own researches, when pigeons were under observation, I have repeatedly observed the same forward movements when the cerebrum was frozen. Sometimes the movements are rapid, but more frequently they are nodding forward acts, the same as are commonly observed in persons who fall very soundly asleep in a chair. These phenomena fully sustain Majendie's view as to the influence of the corpora striata in so far as pigeons are concerned. These are the principal facts in reference to the action of extreme cold on the cerebrum. One or two other observations have been made, and are of interest: thus in one instance Dr. Sedgewick noticed that when one half of the cerebrum was frozen all the irritability of the same side of the body was destroyed, while the other side seemed to show some degree of irritability. But I do not dwell on this or other points, because I am not prepared to speak with the certainty which further experiment will supply.

Influence of Extreme Cold on the Cerebellum.

To affect the cerebellum by cold, it is necessary to direct the ether spray much lower than when the cerebrum is to be influenced, and at a point more posterior. It is difficult to freeze the cerebellum without freezing the cerebrum, but it is more difficult to freeze the cerebellum without to some extent affecting the medulla oblongata. Hence I can scarcely affirm that a pure and simple suppression of the function of the cerebellum has been obtained; at the same time the phenomena are very nearly correct, and such divergence from the simple facts as does occur will not in the main modify the result. When we freeze the cerebellum of a pigeon, there is always produced a certain degree of stupor. This is attended after a little time with flapping of the wings and movements backward. The backward movements occur in distinct paroxysms, and are very steady in the mode of their occurrence. I have not seen backward somersaults from the operation—phenomena which Mitchell particularly describes—probably because I have observed at times when the temperature of the air was low and the reaction slow; but the backward movements have been very definite, and they may be induced in the same bird over and over again without in any way interfering with its general health or condition. On this point Mitchell's observations agree entirely with my own.

In rabbits the phenomena, according to my judgment, are not the same as in birds. The cerebellum of these animals has been frozen alone, and the cerebellum with the cerebrum; but in no case have backward movements been noticed. There has always been stupor, and there has always been convulsive movement of the limbs, when the cerebellum was reached, but I could not say that there was deficient co-ordination. Mitchell, in speaking of the same animal, says, in regard to the experiment of freezing the cerebellum, that there was "apparent temporary want of power to co-ordinate the muscles," but on all other points he appears to hold the same opinions as I have expressed above. I think it probable that the construction of a quadruped for locomotion, as compared with that of a bird, may account for this difference of action when the function of the cerebellum is cut off; or it may be that in these animals the cerebrum may be more readily influenced, and that the corpora striata may be involved in the process, by which there would be negation of action in the two contending parts.

In considering the phenomena that are observed in birds when the cerebellum is temporarily destroyed by cold, there is one fact which beyond others stands forth as deserving of special notice. It is this fact, that the symptoms, the active symptoms presented, are due, not to any action progressing in the part really acted upon—the cerebellum—but to over-action in the cerebrum, in the corpora striata, in those parts which balance, if I may so speak, the cerebellum. The animal without the cerebellum shows evidence of backward movements—which means that, the controlling or compensating power of the cerebellum being cut off, that part of the cerebral organism which commands backward movement is allowed undue play and overcomes volition or will. Thus on one side volition or will looks as if it were an independent something—spirit or entity—standing away from the organism, and balancing one part against the other; while on the other side it looks as if it were an actual and simple physical property of the parts, inoperative in parts bereft of force, and over-operative in parts which *ought* to be balanced by the structures that have been rendered temporarily inactive.

When we see, therefore, an animal fall backwards or walk backwards, because its cerebellar functions are positively in abeyance, we see the action of the great anterior cerebral ganglia. Conversely, when we see an animal pitch forwards because the cerebrum is rendered inert, we see in play the unchecked forward propulsion of the cerebellum.

Do we ask for any further proof of this law? We have the proof laid plainly before us in the course of the experiment previously to the act of freezing, and in the course of recovery. In freezing the cerebellum, as in freezing other portions of the body, we have, if we proceed slowly, a stage of preaction. Well, during this stage of preaction, or, if we like so to call it, of pre-excitement, we call the cerebellum into undue power, and for that brief interval we get as a consequence forward movements. Again, in recovery there is in the stage of reaction, if that be sharp, a period when there is once more undue force from the cerebellar centre, and then

(a) Delivered on Tuesday, May 7, 1867.

again there are forward propulsive movements, by which, in fact, recovery is first marked, and on the cessation of which the restoration of equilibrium of action and perfect volition is demonstrated. To take another illustration of similar import, we find sometimes in freezing the cerebrum that there are manifestations of backward movements, as though the cerebellum, which has not been influenced, were reduced in power. These movements are due to the stage of preaction in the corpora striata; they give way to forward movements when the freezing is complete, and they recur during recovery if there is a marked stage of reaction.

I shall not dwell on this subject further upon the present occasion, but it could not as matter of experimental evidence be passed by because it illustrates beyond dispute how unnatural nervous phenomena may have their centre in a part not primarily and indeed not organically affected, but disturbed in function by the disorder of another and distant part.

Influence of Extreme Cold on the Medulla Oblongata.

When the medulla oblongata of a pigeon or of a rabbit is subjected to the influence of extreme cold by means of volatile spray, there is developed in the first place the phenomenon of disturbed respiration and symptoms of apnœa. In pigeons Mitchell has seen backward movements with alternating periods of stupor, and final recovery, but I have not seen recovery. In my experiments, whenever the medulla became so far influenced that the animal moved backwards and fell, it died from arrest of respiration. I have also in freezing the cerebellum killed a pigeon accidentally by the extension of freezing into the substance of the medulla. At the same time, Mitchell's experiments show definitely that some portions of the medulla may be frozen, that the animal may recover, and that the phenomena produced by the freezing are those of backward movement and of stupor.

In rabbits, when the cerebellum is subjected to cold, we see first a period of excitement in which the muscles of respiration specially share. The respiration is at first sharp and rapid; this is succeeded by firm contraction, and the contraction again is succeeded by paralysis and death. These are the symptoms when sufficient time is permitted for their proper manifestation, but it is quite possible to bring the cold into such effective action as to destroy respiration instantaneously. If the cerebrum be first frozen, and then the cerebellum, one jet of spray thrown on the medulla will suffice to kill.

The condition of the lungs, after freezing the medulla and so stopping the respiration, varies according to the period of action. If the cold is moderate and prolonged, the lungs will be left intensely congested, the course of the blood having been partly but not at once effectually interrupted by the mechanical embarrassment of the respirating machinery. If the cold is rapid in action and intense, so as to destroy the medulla at once, then the lungs are left collapsed, perfectly free of blood, and white in their structure as snow. These same conditions of lung occur, according to the rapidity of the process, after death by apnœa from mechanical obstruction of the trachea. The same varying conditions of lung also follow death from injuries of a mechanical kind, such as blows or stabs inflicted upon the medulla.

Influence of Extreme Cold on the Spinal Cord.

In frogs, when the spinal cord is frozen, there may be a stage of preaction accompanied by active movements of the limbs. But this stage, always very brief and often passed over altogether, is followed by paralysis and stupor. The stupor is first to clear away, and then motion returns, but at first not in the natural way. As Mitchell very correctly puts it, "After a few minutes the frog is able to crawl, but does not recover the power to leap, its usual mode of progression, until a longer time has elapsed. Recovery is always perfect, and there are no backward movements."

In rabbits the effect of freezing segments of the cord is first to produce active movements of the limbs connected directly with the part frozen; afterwards, when the inertia is complete, there is paralysis of the limbs, and, according to the extent of surface frozen, prostration. Another marked phenomenon, especially when the freezing is in the cervical region, is stupor.

In pigeons and chickens freezing of the spinal cord in the cervical region leads to backward movements, as when the cerebellum is frozen, with intervening fits of stupor, but with perfect recovery. Dr. Mitchell has fixed on the point in the spinal line where the backward movements cease to be elicited by cold. His observations are thus stated:—"It results from these experiments and others that at or about the fourteenth vertebra, counting from above downwards, we cease to notice the backward spasms and stupors, and see only signs of weakness or of tetanic rigidity in the legs; usually, these phenomena come on some time after the freezing, and reach a maximum within ten minutes."

Summing up the facts as to the effects of cold, Mitchell also adds:—"It appears thus far that in pigeons the application of cold to the cervical spine occasions, after a brief period, peculiar backward movements resembling those which have been previously produced by mechanical injury to the cerebellum. These abnormal actions are, in extreme cases, backward somersaults, followed by spells of backward walking, and accompanied with spasmodic movements of the head, to be fully described hereafter. In milder cases only the backward walking occurs. Both of these forms of constrained movement are met with when the cerebellum has been chilled. A further series of experiments determined that it is immaterial whether the spine be acted on behind, at the side, or in front."

In this lecture, gentlemen, I have endeavoured to confine myself to the recital and the demonstration of simple experimental truths. In my next lecture I shall view this subject from its practical rather than its experimental side. Meanwhile, and before we approach any theory or connect what we have seen here with what we have seen in disease, let us epitomise the facts we have learned. These are as follows:—

1. Nerve tissue in living animals undergoes the process of freezing at 16° Fahr.
2. In the process of freezing any nerve structure the cold acts primarily on the vascular system of the structure, causing, firstly, a stage of pre-action, or exaltation of action; secondly, a stage of inertia, or temporary death; and thirdly, in recovery, a stage of reaction, also with an exaltation of action.
3. Nerve substance, when so reduced by cold as to be incapable of conveying sensation, may yet convey an electrical current; but when nerve structure is absolutely frozen through in every part it ceases entirely to act as an electric conductor.
4. The cerebrum of a living animal may be frozen. In this state the consciousness of the animal is lost, but the functions of organic life remain the same. The animal thus placed is in a state of artificial hybernation from which it may recover. On recovery the brain does not seem to have lost any power. The phenomena are those simply of awaking from profound sleep.
5. The cerebellum may be frozen, and afterwards complete restoration of its functions may be secured. In birds, freezing the cerebellum produces backward movements; in rabbits, convulsive muscular action.
6. Complete freezing of the medulla kills by destroying the respiratory power.
7. The spinal column may be frozen and restored. In birds the process of freezing the cervical part of the column produces backward movements with intervals of stupor.
8. By destroying, under the influence of cold, one part of the nervous system, we may pervert the function of another part. Thus, by arresting the functional activity of the cerebral mass, we can exalt the function of the spinal cord; and by destroying the function of the cerebellum, we can exalt the function of the anterior cerebral ganglia, or *vice versâ*.

In our next lecture, to be delivered on June 4, we will endeavour to trace out the practical meaning of these experimental and demonstrable teachings.

The French Academies.—In the Academy of Medicine, M. Hardy has been elected into the Section of Therapeutics and Medical Natural History; and in the Academy of Sciences, MM. Siebold, of Munich, and Pictet, of Geneva, have been elected Corresponding Members in the Section of Anatomy and Zoology.

Improvement in the Stethoscope.—Dr. Hogeboom, of New York, suggests the use of a "compressing membrane" as an improvement to the stethoscope. He stretches a piece of bladder across the pectoral extremity of the instrument, enabling sounds to be communicated not only through the rim of the instrument, but also from the parts lying beneath its concavity, while the "roaring" noise heard in the stethoscope is diminished. The tension of the bladder may be restored, when lost in drying, by moistening it with a solution of tannin—ten grains to the ounce.—*Boston Journal*, April 18.

ORIGINAL COMMUNICATIONS.

ON INJURIES OF DIAPHRAGM,

ILLUSTRATED BY A CASE IN WHICH THERE WERE ALL THE SYMPTOMS OF LACERATION OF THAT MUSCLE, BUT, AS THE PATIENT HAS RECOVERED AND THE EVIDENCE OF SUCH SERIOUS INJURY ENTIRELY PASSED AWAY, IT REMAINS DOUBTFUL UPON WHAT INJURY THOSE SYMPTOMS DEPENDED.

By SAMUEL SOLLY, F.R.S.,

Senior Surgeon to St. Thomas's Hospital, etc.

Laceration of the diaphragm is uncommon, but can hardly be called very rare. Not is it in itself immediately fatal, but the visceral injury with which it is usually complicated soon terminates the life of the sufferer. There are several cases on record where a large hole in the diaphragm has been discovered after death, where no such serious lesion has been suspected during life.

At St. Thomas's we lately had a case of this kind, under the care of Dr. Peacock. The patient was 50 years of age. He died from fever. The previous history of the case is not so complete as I could wish. It was stated by the woman with whom he lived that two years and a half before his death he had been squeezed, in his employment as a railway porter, between the buffers of two railway carriages. He suffered great pain and difficulty of breathing for some time, but he had no Medical advice, and apparently soon got tolerably well again; but he suffered so much from depression of spirits and inability to work with his former health, that he became intemperate, and ultimately a confirmed drunkard. His thirst became so inordinate—which is not an uncommon concomitant of ruptured diaphragm—that he used to drink, in addition to beer, large quantities of water.

Post-mortem, as regards the Phrenic Lesion.—In the left thoracic cavity, the lung, compressed to about the size of a man's fist, was bound by strong adhesions to the upper and posterior part of it. The stomach and all the small intestines, except a few inches of the ileum, transverse and descending colon, a considerably enlarged and softened spleen, with a large portion of the small intestines occupying the rest of that side of the thorax, were the cause of the compression. There was a rent in the left side of the tendinous portion of the diaphragm sufficiently large to allow the hand to pass through. The abdominal cavity contained only the lower portion of the ileum, the cæcum, with a portion of the ascending and descending colon with its sigmoid flexure; also the kidneys, pancreas, and liver.

In the excellent article in Holmes's "Surgery," by George Pollock, on injuries to the abdomen, rupture of the diaphragm is treated of, but no cases detailed, or even suggested, of recovery, with a return of the extruded viscera from the chest. The case which I am about to relate had all the symptoms of the ruptured diaphragm, but the complete recovery of the patient, and the complete removal of all symptoms indicating as in the first instance, hernia of the stomach in the thoracic cavity, have caused me to doubt whether this lesion ever existed. If there was no rent in the diaphragm, then there is only one other explanation, and that seems almost as improbable—namely, paralysis of that side of the diaphragm from laceration of the phrenic nerve; not laceration by the end of the fractured rib, as the nerve and rib did not approach; but the violent lateral bending of the chest across the railway bars, and by which violence the ribs were broken.

It was suggested, when the case was very imperfectly discussed at the Medical and Chirurgical Society, that the abdominal resonance arose from pneumothorax, but there really was scarcely a symptom of that disease. The whole history of the case was opposed to it; and when such pathologists as Dr. Pavy and Dr. Walshe, who saw the case, and whose opinion I now add, pronounced against it, I do not think that the theories of any Physician, however talented, are of much value when not founded on personal observation of the case.

I have not related this case *in extenso*, as the daily details are unnecessary.

A. C., lieutenant in the mercantile marine, aged 29; weight 10 st. 6 lb., with a great capacity of chest and good muscular development. At the time of the accident, which occurred in the forenoon on September 22, 1864, he was in rude health.

While engaged on board a ship in the Victoria Docks superintending the loading of a cargo, he missed his footing, and was precipitated down the hold, a depth of twenty feet, falling with great force on his left side across some iron railway bars. Immediately after the accident he was conveyed to the Poplar Hospital, where it was found he had sustained a fracture of the base of the radius (Collis's), and a fracture of two of the lower ribs on the left side, but no injury to the abdominal viscera was then apparent. After being bandaged, he was removed to the house of a friend in Bedford-place. On his arrival, he was attended by Mr. Clapton, of Queen-street, Cheapside, from whom I have derived some of these particulars.

Mr. Clapton found him very ill, great oppression of breathing, with a painful, anxious, livid countenance. Mr. Clapton at once removed the bandage from his chest. This afforded great relief, for after its removal he was able to walk up two flights of stairs with assistance. He was immediately placed in bed; Mr. Clapton gave him some brandy and applied bottles of hot water to the feet, which were deadly cold. By these means his oppressed circulation was restored; in about an hour's time the pulse rose to 80, and the respirations, though not hurried, were chiefly abdominal.

He expressed himself much relieved, and seemed tolerably comfortable till 10 p.m., when on swallowing he complained it hurt him and gave him a burning pain in the region of the stomach, and upwards in the course of the phrenic nerve to the left supra-clavicular region. This pain in swallowing was at that time the only indication of injury to the abdomen, the pulse and respirations remaining the same.

Under these circumstances Dr. Pavy was called in, who agreed with Mr. Clapton in regarding this last symptom with some suspicion. He was now so ill that they doubted whether he would live through the night. He rallied, however, and was a little better the next morning, but on the following evening was again much worse; pulse 140, surface cold, and I was sent for.

I met Dr. Pavy and Mr. Clapton in consultation. I found him in a state of partial collapse, great difficulty of breathing, with a feeble fluttering pulse.

The impression on my mind then was that he was sinking from internal hæmorrhage, possibly from rupture of the spleen, but he was so ill that we were not able to make any examination of the chest. We ordered ice to be applied to the left side, and to take it in small quantities internally. Small doses of acetate of lead and opium were prescribed.

On the following morning, when I saw him again, he was a little better; pulse 120; pain in the side and on swallowing somewhat relieved.

Third day.—Skin warm; pulse 120; breathing difficult; palpitation, but no cough or affection of the lungs. On the fourth day patient still better, and able to be removed on to an Alderman's couch; but this change, though conducted with the greatest care, nearly proved fatal, from the amount of dyspnœa that it produced.

Fifth day.—Arm examined, and found to be progressing favourably; general appearance of patient better, but towards evening became worse; palpitation increased, with feeling of suffocation; pulse nearly 130; breathing 30; great weakness. On examining his chest there was abnormal resonance extending upwards to the left side as far as the nipple, and from thence in an arched form to the centre of the sternum, from whence a tympanitic sound was given out on percussion. The apex of the heart found tumultuously and distinctly beating above the left nipple, the displacement being apparently due to the same cause that occasioned the abnormal tympanitic resonance referred to.

On the sixth day the extent of unnatural resonance had somewhat lessened, and the patient improved; but in the evening he was much worse, and was in a worse state than on the second night. Pulse 135; breathing 30, very faint; voice feeble, only able to whisper. The abnormal resonance increased, and the arch higher. Patient passed a dreamy and restless night, but had improved in the morning; pulse 120; arch of resonance slightly diminished.

Seventh day.—During the day, on slightly exerting himself in moving, he was rendered almost pulseless, but slowly recovered. Resonance slightly increased at night, but had diminished in the morning (eighth day), and from this time the patient generally improved, and was able to bear a bandage on his ribs on the tenth day. This increased the difficulty of breathing for a time, but at the end of a fortnight he had improved; was able to raise himself in bed; appetite better; breathing almost natural; pulse 96. All the time that the

abnormal resonance was noticed, the breath-sounds were absent below the nipple anteriorly, and in the same part posteriorly there was tubular breathing and bronchophony, and there was displacement of the heart upwards and slightly towards the right side; there was also at this time an inability to yawn or sigh, the patient having suddenly to stop in the middle of either. Nor could he swallow more than a wine-glass of liquid without complaining of over-distension of the stomach, and the same remark applied to solid food. From this time he gradually but slowly recovered.

On October 12 (the twentieth day), I find the following note of his case:—

Examination of the Chest with Dr. Pavy.— Tympanitic resonance on the front of the chest as heretofore, as high up as a line drawn transversely across just one inch below the nipple on the left side. At the back of the thorax, on the same side and the same level, there is distant bronchophony and tubular breathing, as if from a compressed lung.

The abnormal resonance which I have described was closely watched day by day, and gave rise to the fear that the diaphragm was rent, and that the stomach was thus allowed to escape into the cavity of the chest. This suspicion was in some measure confirmed by the pain in the course of the phrenic nerve on the reception of solids or fluids in the stomach; also the inability to take more than a very small quantity at a time, and the distressing sense of oppression and weight which its pressure occasioned. The length of time that it took for fluid to reach the stomach was ascertained by making the patient swallow, and listening for its passage into it. The tympanitic resonance was exactly that given by a distended stomach. On the other hand, the steady improvement in his condition, so that he was able to leave his bed and walk about without much dyspnœa, his ability to take more food without inconvenience, made me doubt whether such a serious lesion as rupture of the diaphragm could have taken place; and, though he improved every day in general health, the physical signs changed very little. The line of tympanitic resonance descended a little, but not more than an inch and a half.

Under these circumstances it was necessary to give his parents some idea as to the probability of his being able to resume his active duties as a sailor, and we sought the assistance of Dr. Walshe in consultation.

This took place exactly four weeks after the accident. When Dr. Walshe met us, we explained to him our doubts and difficulties. The first impression was, that if rupture of the diaphragm had taken place, he could not have been so well; but after a most careful and prolonged examination Dr. Walshe said that he thought that the hypothesis of a ruptured diaphragm was the only one that met all the symptoms of the case; and during his examination he found that fluid on being swallowed took longer time than natural in reaching the stomach, taking apparently a circuitous course before its arrival at the stomach, and seemed to fall there with a splash. The probability of its being a case of pneumothorax having been suggested, I have obtained from Dr. Walshe his reasons for not entertaining that opinion when called in for consultation:—

"37, Queen Anne-street, Cavendish-square,
"April 2, 1867.

"My dear Sir,—In reply to your inquiry, I beg leave to inform you that, as far as my recollection of the case goes (I took no notes), the following were the facts and arguments which led me to infer that the unnatural resonance of the left side of Mr. C.'s chest was not due to pneumothorax:—

"1. The absence of the special extra-resonance at the top of the chest. 2. The absence of any such notable dilatation of the side as must have existed had excess of resonance so marked depended on gas in the pleural sac. 3. The position of the heart, the organ being carried above its natural site, and not pushed out of its place to the right (there being no evidence from past history of interfering adhesions). 4. The amphoric quality of the percussion—not truly tympanitic or drum-like. 5. The impossibility of detecting any difference of quality between the percussion-note of the portion of thorax concerned, and that of the part of the abdomen immediately adjoining (that is, the stomach region). 6. It seemed difficult to believe that pneumothorax could have existed so long without being followed by pleuritic effusion.

"You will remember, however, I doubt not, that I declined to give a positive opinion as to the nature of the case.

"Samuel Solly, Esq." "I am, &c. "W. H. Walshe.

The patient left London the following day for his father's country seat. While there, all his difficulty of breathing subsided, and he perfectly recovered at the end of three months from the time of the accident. He resumed his duties in the mercantile marine, and has been in perfect health ever since. Exactly how his chest was restored to its normal condition I have not been able to discover; but when I examined his chest, eight months after the consultation with Dr. Walshe, I found the heart in its normal position, all tympanitic resonance gone, and the breath sounds throughout the thorax perfectly natural in quality and position. I will conclude with this note from Dr. Pavy, dated June 16, 1865:—

"My dear Mr. Solly,—I have just seen and examined our old patient C., and I thought you would like to hear the result. The apex of the heart is now beating in its proper place. Dulness, also, on percussion, from the substance of the heart, extends to about an inch and a half below the nipple. Below this there is tympanitic resonance from the stomach. Anteriorly there is a feeble but distinctly appreciable respiratory murmur to be heard over the base of the left lung. Posteriorly, the resonance is natural, and the respiratory murmur distinct over the left lung. He is well in health, and suffers no inconvenience in any shape, he says, from his accident, with the exception of a little stiffness of the wrist. "Yours faithfully, "F. W. Pavy."

Taking all the circumstances of this case into consideration, I am forced to the conclusion that the idea of a ruptured diaphragm was erroneous, and that one of my first theories—for we had several—was correct—namely, that the phrenic nerve on that side was torn, causing paralysis of that side of the diaphragm.

In its paralysed and flaccid condition, no longer resisting the pressure of the abdominal viscera, the stomach was thrust up under the ribs, occupying the position of the heart and the lower part of the lungs, without being actually in the cavity of the thorax. It may be argued, however, that it was merely an excessively distended stomach, from nervous shock; but if such had been the case, I think that this deformity would not have lasted four weeks.

SULPHUROUS ACID MEDICATION.

By JAMES DEWAR, M.D.

The following cases, as illustrating the advantages of this mode of treatment, will no doubt prove so interesting as to induce others to submit the system to the test of intelligent experiment, and so judge for themselves.

The Rev. —— for fifteen years had suffered from disease of his throat, rendering preaching laborious. General health "below par;" obliged to change his "underclothing" between services, so uncomfortable was he from perspiration; had tried everything, without good result; began the sulphurous acid inhalation (besides "fumigating" twice or thrice a day); improvement immediately commenced, and a cure was speedily effected. General health has since greatly mended, and finds his duties now no burden.

Rev. —— called for me to inquire about sulphurous treatment of throats. He had suffered from his ailment for many years, which made him quite pluckless, and afraid to undertake duty, from a feeling of nervousness. I examined his throat, and, without any remark, applied the spray. He instantaneously felt relief, and said that he could command his voice in a way he had not done for long. He asked me what I had used, and was surprised to learn that it was sulphurous acid, as he had believed that the remedy of which he was in search was sulphur *pur et simple*. The last accounts I had from him were satisfactory.

Rev. —— had been a victim to this malady for twenty years; found himself very ill able to discharge his duties, from want of vigour and unconquerable nervousness, which especially laid hold of him when he had occasion to pronounce words containing certain consonants. Was in a state of agitation at the idea of having the spray applied, but, nevertheless, he at once clapped his hands, and exclaimed "Delightful!" At the end of a month he returned to London, and is now in perfect health, and fit for any duty. He conjoined fumigation with the use of the spray. It is interesting to note that each of these gentlemen used the same figure to illustrate the feeling of relief which they had obtained, which was, "that something which for years had been loose

It is clear that a few short sittings once a year must leave matters very much as they have been for years past, and the chief object of the Council of Education and Registration must remain unattained. The Committee have laboured zealously, but their labours, unfortunately, have as yet had little result.

That the Medical Profession is not held in the estimation which it is desirable it should be, is a fact which must be admitted and lamented. There are exceptions, but, as a rule, the Medical man is not calculated, educationally or socially, to take that place in society and exercise that influence which it would be for the benefit of the community that he should. Why is this? Because his general education, and, as a necessary consequence, his Professional education, are deficient. This is felt in society every day. It is felt also by the government of the country, who have been compelled to examine men for the various services, finding they cannot trust the education upon which they have received their diplomas from the present examining bodies. It is felt by members of the Council, one of whom has acknowledged "that if the character of the Profession is to be raised, it will be by raising preliminary education;" "that the one blot is the insufficiency of general education." It is felt by the educational bodies of the country, who practically acknowledge the want by introducing portions of what ought to be preliminary into the professional courses, and thus encroach on the time which is wanted for professional subjects. It is felt in the Council, but the Council, as at present constituted, is powerless to carry out the necessary changes.

But what is "preliminary education?" Surely not school education only, not the rudimentary work that every boy should go through, on the small details of which the Committee last year expended much anxious, but, let me add, misplaced labour. The work they so strenuously took up should be left to the schoolmaster. He knows how much arithmetic, how much algebra, how much Greek a boy should learn to fit him for his destination, whatever that may be. If he is to enter college, his school education must fit him for it; but many, very many young men undertake their professional study even without enough of this rudimentary preparation, to say nothing of the proper preliminary information to be derived from a course in arts. It seems an anomaly that, while for lawyers and clergyman a college education is deemed necessary to fit them for their work and for their position in society, for Medical men it is not; and thus the Profession which wants such preparation most is the only one for which it is not provided. Not to go further, anatomy and physiology, the foundation of all Medical study, gives us an illustration. How can the student properly comprehend the mechanism of the skeleton, the action of the muscles, the functions of the blood-vessels, of the lungs, the senses, etc., who is ignorant of the principles of mechanics, hydraulics, and hydrostatics, chemistry, optics—the sciences, in fact, all applicable to the study in hand, which constitute a part of the preliminary education which he has *not* gotten?

Until such preliminary education be made the necessary passport to Medical study, and the present undue facilities to entering the Profession—due to the rivalry in issuing diplomas at a temptingly low rate to partially educated men—be abolished; until educational bodies look alone for success to the superiority of their teaching, the Profession must be content with its present position, and the community with a much less proportion of enlightened scientific service than it might have.

I am, &c.

May 22. HIBERNICUS.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 14, 1867.

MR. SAMUEL SOLLY, F.R.S., President, in the Chair.

DR. JOHN HARLEY read a paper on

A CASE OF CYSTICERCUS CELLULOSÆ OF THE BRAIN; AND A CASE OF DERMOID CYST OF THE OVARY.

The paper consisted simply of a pathological record of the two cases. The subject of the first-mentioned disease was a boy aged 15, who died comatose after a week's illness from rheumatismal pericarditis and meningitis. A single cyst was found embedded within the surface of the right corpus striatum. It contained the retracted head and neck of the larval form of tænia solium (cysticercus cellulosæ). The boy had enjoyed good health until within two months of his death. During this period he complained of frontal headache, and was frequently oppressed with an uncontrollable tendency to sleep. These were the only cerebral symptoms exhibited, and, from our imperfect experience of these cases, it remained doubtful whether they were to be ascribed wholly, or even in part, to the presence of the parasite. The other case was that of a married woman, aged 35, the mother of five children. A tumour weighing twelve ounces was found appended to the outer end of the right ovary. It was composed of a fibrous bag enclosing a mass of solid yellowish fat, pervaded by a quantity of hair. The scalp tissue, from which these secretions were derived, formed a rounded projection into the interior of the cyst at that part where it was attached to the ovary. A second smaller projection, of the same nature, lay contiguous to the former, and adjacent to both was a bicuspid tooth enclosed in a sac. Projecting from the opposite surface of the sac, and attached to a lamina of bone developed within its walls, was a second well-formed bicuspid tooth. The left ovary contained two corpora lutea of the same age. Excepting a small long-stalked polypus attached to the posterior lip of the os uteri, and a small follicular cyst of the same part, the rest of the sexual organs were quite healthy, and the passages open.

DR. EDWARD BALLARD read a paper entitled

A STUDY OF THE INFLUENCE OF WEATHER AND SEASON UPON PUBLIC HEALTH, MADE UPON ABOVE 217,000 CASES OF SICKNESS NEWLY OCCURRING AT VARIOUS INSTITUTIONS FOR THE RELIEF OF THE SICK POOR IN ISLINGTON DURING THE NINE YEARS 1857-65.

I. THE INFLUENCE OF ATMOSPHERIC TEMPERATURE.—In his introductory remarks the author states that during the nine years 1857 to 1865 he has collected statistics of sickness, week by week, from the books kept by the parochial Medical officers, and at several institutions where the sick poor are treated in the district of Islington. Altogether he has in his possession the record of 217,000 cases of sickness, which he proposes to make the subject of a numerical analysis, with a view to determine the influence of season and of the several conditions which constitute what is known as "weather" upon their occurrence. The present paper is devoted to the consideration of the influence of temperature, other influences being only taken into account in a general way. The method of inquiry adopted consists in noting the correspondence of variations in general sickness week by week with the variations of mean weekly temperature occurring in the same periods. The number of cases available for this purpose was 158,721, distributed over seven years, 1859 to 1865. The author discusses first the correspondence of rises in temperature, and next the correspondence of falls in temperature, with the fluctuations in the weekly amount of sickness. The following are some of the more important conclusions arrived at as stated in the summary of results:—I. *Rises of Mean weekly Temperature.*—1. In the majority of the 196 weeks in which a rise of mean temperature occurred, it was associated with an increase of general sickness. The general result of the inquiry is that increase of sickness is the normal effect of a rise of temperature. 2. In the remaining weeks (with one exception, in which no alteration in the amount of sickness took place) decrease of sickness was observed, attributable to the predominant antagonistic operation, direct or indirect, of antecedent or concurrent meteorological conditions. 3. Increase of sickness was, on the whole, observed to occur more frequently in the weeks in which the extent of the rise of temperature was great than when it was comparatively small. Rises of temperature are divided by the author into "slight" (under 2°), "moderate" (2° and less than 5°), and "considerable" (5° and upwards). 7. The excess or deficiency of the final gain by way of increase of sickness in the weeks of rise of temperature must be held to be dependent upon the force of operation of those supplementary meteorological conditions which assist or antagonise the operation of rises of temperature. In the weeks of rise of temperature, taken altogether, the force of these antagonistic conditions was such as to reduce the increase of sickness below what would have resulted had not these antagonistic conditions predominated in the course of the 196 weeks over the assisting conditions. In the seventy weeks of *slight* rise of temperature the antagonistic conditions predominated sufficiently to reduce

the final gain of increased sickness to what it might have been expected to be if the mean extent of the rises had been 0·18° less than their actual extent. In the seventy-three weeks of *moderate* rise the reduction of increase of sickness from these causes was still more marked; but in the fifty-three weeks of *considerable* rise the co-operating influences, on the contrary, so far predominated over those that were antagonistic to increase that the increase of sickness was augmented to an amount such as might have been looked for had the mean extent of these rises been 1·25° above their actual extent. 8. The mean amount of increase of sickness in those weeks in which increase took place was greater than than of decrease of sickness in the weeks in which decrease of sickness took place. 9. The mean amount of increase of sickness in the weeks in which it occurred was greater the greater the extent of the rises of temperature with which it was associated. 10. In those weeks in which increase of sickness took place in association with rise of temperature of all degrees of extent, the greater part of the increase (2674 out of 4246 cases) was due to the influence exerted by other predominating supplementary causes assisting the operation of the rises. 11. In those weeks of slight rise in which increase of sickness took place, this operation of supplementary causes of increase was most marked. Out of 1163 cases by which sickness was increased, 1043 cases resulted from the predominating influences of these supplementary conditions. 12. In those weeks of moderate rise in which increase of sickness took place, the amount of increase attributable to the supplementary conditions promotive of decrease was still disproportionately large. Out of 1295 cases, 860 are to be thus accounted for. 13. In those weeks of considerable rise in which increase of sickness took place, although the operation of the supplementary causes of increase was still marked, it was no longer in excess of the operation of the rises themselves, since only 772 out of 1785 cases of increase are thus referred. 14. Thus, according as the extent of the rises with which increase of sickness was associated was greater, so the share taken by the rises themselves in producing the increase was also greater, and the share taken by the other supplementary conditions promotive of increase was less. 15. The mean amount of decrease of sickness, when it occurred in association with rises of temperature, was less in the weeks in which the rises of temperature were more extensive, and greater in those weeks in which they were less extensive. 21. The greater the extent of the rises of temperature with which decrease of sickness was associated, the greater was the proportion of the antagonistic force expended in neutralising the rises, and the less was that expended in producing manifest decrease of sickness. II. *Falls of Mean Weekly Temperature.*—1. In the majority of the 193 weeks in which a fall of mean temperature took place, the fall was associated with a decrease of general sickness. The general result of the inquiry is that decrease of sickness is the normal effect of a fall of temperature. 2. In the remaining weeks (with four exceptions, where no alteration in the amount of sickness was noted) increase of sickness took place—attributable to the predominant antagonistic operation of antecedent or concurrent meteorological conditions. 3. Decrease of sickness, on the whole, was observed to occur more frequently in the weeks in which the extent of the fall of temperature was great than when it was comparatively small. 7. The excess or deficiency of the final gain by way of decrease of sickness, in the weeks of fall of temperature, must be held to be dependent upon the force of operation of those supplementary meteorological conditions which assist or antagonise the operation of falls of temperature. In the weeks of fall of temperature taken together, the force of the co-operating conditions was such as to raise the amount of decrease of sickness above what would have resulted had not these co-operating influences predominated in the course of the 193 weeks. In the 58 weeks of *slight* fall of temperature, supplementary antagonistic conditions, however, predominated to such an extent as to produce a final result of increase in place of decrease of sickness, similar to what might have been anticipated, under average circumstances, had no fall of temperature at all taken place, but, in lieu thereof, a weekly rise to the mean extent of 0·12°. In the 87 weeks of *moderate* fall of temperature, co-operating supplementary influences predominated to such an extent as to augment the decrease of sickness in a manner similar to that which would have resulted from a further mean weekly fall of 0·18°. In the 48 weeks of *considerable* fall, co-operating supplementary influences predominated so as to augment the decrease in a manner similar to what might have been anticipated from a further mean weekly fall of 1·84°. 8. The mean amount of decrease of sickness in those weeks in which decrease of sickness took place was greater than that of increase in the weeks in which increase of sickness took place. 9. The mean amount of decrease of sickness in the weeks in which it occurred was greater the greater the extent of the falls with which it was associated. 10. In those weeks in which decrease of sickness took place in association with a fall of temperature of all degrees in extent, by far the greater part of the decrease (3159 out of 4538 cases) was due to the influence exerted by other predominating supplementary causes assisting the operation of the falls. 14. According as the extent of the falls with which decrease of sickness was associated was greater, so the share taken by the falls themselves in producing the decrease was greater, and the share taken by the other supplementary conditions promotive of decrease was less. 15. The mean amount of increase of sickness, when it occurred in association with falls of temperature, was less in the weeks in which the falls of temperature were more extensive, and greater in those weeks in which they were less extensive. 21. The greater the extent of the falls with which increase of sickness was associated, the greater was the proportion of antagonistic force expended in neutralising the falls, and the less that expended in producing manifest increase of sickness. The paper concludes with some general observations upon the distribution, in the weeks of rise and fall of temperature, of the force exerted by the supplementary conditions which have been shown to modify so remarkably the operation of the fluctuations of temperature. The chief of the supplementary conditions so operative are thus enumerated:—The daily range of atmospheric temperature; variations in the amount of atmospheric humidity; the frequency and amount of rainfall; the direction and force of the wind; and the antecedent occurrence of increase or decrease of sickness, dependent either upon changes of temperature or other causes. The paper is provided with tables showing the several results arrived at, and illustrated with coloured diagrams, exhibiting for each of the seven years the line of fluctuation of general sickness, and of the more important concurrent meteorological conditions.

Mr. Haviland asked if Dr. Ballard had taken notice of the prevalence of special diseases at particular periods, such as pneumonia during summer, scarlatina and measles in autumn. Such researches were especially valuable with regard to a disease like cholera, the severity of which can almost be foretold if the nature of the weather be known. Temperature, he thought, however, had not so much to do with this as the direction of the wind, the disease being always worse when the wind was N.E. or E.

Dr. Ballard had tabulated many cases of special disease, but had not recorded them in the present paper. He wanted to show that, while the total amount of disease was increased by increase of temperature, the general mortality was lessened.

Dr. A. F. Stewart said that the notions brought forward in Dr. Ballard's paper were quite opposed to all his ideas with regard to typhus, which was favoured by cold; typhoid, on the other hand, being commonest in warm weather. In 1865, however, typhoid of a very severe type prevailed as late as December.

Dr. Cholmeley remarked on the difficulty of discussing such a paper when the key, in the form of the tables, was wanting. The speakers seemed to mistake the drift of the paper, which dealt with the whole mass of sickness not with special diseases.

The President asked if the rainfall had been noticed, and remarked that, when speaking of a north-east wind increasing cholera, one would require to know in which direction cholera was most prevalent.

Mr. French said that the dryness, rather than the direction, of the wind influenced cholera, during the existence of which the barometer was high. The impurities of drinking water thus became concentrated, and produced disease, which in their more dilute form they might not have occasioned. Rain washed away the poison.

Dr. Ballard said that the fall of rain, when considerable, threw down disease, as in 1860, in a remarkable manner. In 1863, again, which was dry, the amount of sickness was quite exceptional.

The President suggested that the value of these observations would be increased if the rainfall in the country and in towns could be separated.

Mr. Haviland said that it was not the direction of the

in the windpipe had suddenly been 'braced up,'" which, doubtless, was no inaccurate explanation of the real change which was effected upon the vocal chords.

Miss ——— came home from London last season, changed somewhat in her appearance, and showing symptoms which naturally made her parents anxious. She had lost flesh, had a tickling cough, and a tendency to flush. Upon examination, the chest proved all right, but the condition of the mucous membrane of the pharynx and larynx was evidently sufficient to account for the cough at least. The spray was applied a few times, when the disease was quickly eradicated, and a return to her wonted health has been the satisfactory issue.

Mrs. ——. This lady had for several years been obliged to winter in a southern climate, on account of liability to catch cold, and general delicacy of health. I saw her early last summer, and, from the satisfactory state of her chest, was led to believe that she was likely to be benefited by "sulphurous acid medication." Both processes were adopted with immediate advantage. She rapidly regained her health, and when I last heard of her, she was taking on flesh, and felt strong and well. She had persistently put in practice the plan recommended, and was to continue it during the present winter.

Miss ——. Last autumn I was asked to see a young lady from Edinburgh, whose general condition had recently given her friends much anxiety, and when I visited her it seemed to me that her appearance, coupled with what I was told were her symptoms, fully justified the apprehensions entertained concerning her. The family history being somewhat ambiguous, I was fully prepared to find something wrong in the chest, but in this I was very agreeably disappointed. The appearance of the fauces, however, was such as to account for everything, as I thought, and accordingly the spray was applied with the usual good effects, and under the influence of this and fumigation the patient has progressed marvellously. I have not seen her again, but the last report said that she was so well as to think confinement to the house at night unnecessary and very irksome.

A very interesting case of cure of an obstinate laryngeal affection of many years' standing has lately passed under my observation. Mrs. —— had long suffered from this disease, which had baffled all attempts at remedy, although she had consulted the most eminent Medical men in different parts of Europe. Some weeks ago I had occasion to see her, and took the opportunity of recommending and applying the spray. I left the apparatus with her, enjoining its use four times a day, and she writes me to say that her throat is quite well, and that she enjoys a sense of returning vigour which she had not hoped to attain.

Last week a young lady, who used to sing very nicely, called for me to ask whether I thought the remedy in question would benefit her, as for months she had been unable to sing as was her wont, and besides had suffered from uneasiness in the chest, which naturally gave her some concern. Her case appearing to be a suitable one, the spray was applied at short intervals during a *séance* of five minutes, and she arranged to come again each morning to have the process repeated a few times. When I next saw her, she joyously said that she was quite relieved of every feeling of discomfort, and "that she had sung as well last night as ever she had done!"

Chronic Bronchitis and Emphysema.—In this class of diseases sulphurous acid medication is attended by speedy and signal benefit. In whatever stage I find my patient, I at once proceed to apply the spray, which, by loosening the expectoration, facilitates its expulsion, so that the chest can be wonderfully cleared of it in a few minutes. Cough is no doubt excited, but this does not deter patients from its use, finding, as they do, that they are more than repaid for the temporary inconvenience.

— F., now a post-runner, formerly a miner, has been asthmatic for many years. In January last his condition became much aggravated, and, after ten weeks' struggle, he was obliged to abandon his duty. I found him terribly oppressed, his attempts at expectoration being distressing because unsuccessful. The spray enabled him at the outset to begin the process of clearance; his improvement under the conjoined remedies was progressive, and in the course of five days there was scarcely a râle to be heard in his chest. The spray was applied twice a day, and his room was filled with "fumes" every four or six hours. He has long since gone back to his work, and he told me yesterday (April 10, 1867) that he is in better "wind" than he has been for ten years.

J. P. had been ill for weeks before I saw him, his breathing difficult, and his efforts at expectoration almost fruitless. I persevered, pumping in the spray at intervals for some twenty minutes, until his chest was much relieved and almost noiseless. Next day this was repeated, which completed the cure.

I could easily multiply the number of cases such as those just detailed, but this is quite unnecessary, as like favourable advantages have many times accrued in individuals *otherwise* abandoned to hopeless suffering. That this agent exercises a *really curative* influence upon the pulmonary mucous membrane, the rapid improvement in the health, and the comparative immunity from other attacks of bronchitis in those so operated upon, sufficiently testify, while the simplicity and perfect safety with which the process can be employed render it peculiarly suitable for the desired purpose.

In consideration of the many hygienic advantages which this system has proved itself equal to bestow, it will appear less irrational to hope that even "phthisis" may not be beyond the pale of its salutary influence; and cases have during the last year occurred—some under my more immediate observation, and others under that of friends and correspondents—wherein the circumstances regarding either the true nature of the disease, or the beneficial effects of the plan adopted, could not well be questioned.

The highly satisfactory results of this mode of treating diseases of the respiratory organs have a very important bearing upon the present question, and the two following cases are good examples of what this system can accomplish under equivocal and very unpromising circumstances. In both there was an obvious and inveterate "tendency to death," through pulmonary disease of long standing, attended by cough, breathlessness, irritative fever, and progressive emaciation.

Last summer I was asked to see a girl of 13 who had been ailing seriously for twelve months, and who had been brought to this neighbourhood for "change of air" as a *dernier ressort*. I learned that her illness began in diphtheria, from which she never recovered, but gradually passed into her *then* condition with symptoms which led her friends to believe that she was far gone in "decline." I certainly formed the worst opinion of her prospects, but, nevertheless, advised the fumigation to be fairly tried with her. This was done four times a day for two weeks, and I thereafter lost sight of her, and, indeed, made no inquiry after her, as she had been taken home, and I scarcely doubted that she was dead. Judge of my surprise, therefore, when, eight months afterwards, a man stopped me upon the road, and asked me if I did not recognise his daughter, who was standing by his side. This I could not possibly do, for here was my patient transformed into a healthy plump girl, without a trace of any illness about her. Her father said that her improvement commenced as soon as the process was begun, and that the latter had been continued for six weeks.

Last autumn I saw, along with a Professional friend, a young married woman who for some months had laboured under progressive disease of her chest, which at last had confined her entirely to bed. Her original disease had evidently been pleurisy resulting in empyema, and there was a sinus near the edge of the scapula, from which pus occasionally spurted, but oozed constantly. There were loud râles over every part of the chest, to which the air could get access; her cough was very harassing; and her strength was fast failing her.

As I had lately seen some instances in which this agent showed that in some unaccountable way it seemed to exercise control over the existence of pus, I was somewhat more hopeful about her case than my previous experience would have warranted, and accordingly fumigation was instituted several times a day, and the spray was applied regularly by inhalation. I heard nothing more of her for some months, when I was gratified to hear that she was so far recovered as to be able for the discharge of her ordinary domestic duties.

I am glad to have it in my power to adduce a few cases of a more definitively phthisical character as having been diagnosed by others and communicated to me by them, or by the patients themselves.

A young Scotch servant girl in London was sent to the Brompton Hospital on account of disease in her chest, where the opinion of the family Physician as to her being in phthisis was confirmed. After having been some short time there, she was recommended to seek her "native air," and accordingly she came down to this part of the country, as the words of my informant, the clergyman of the village, express it, "she was sent home to die." Fortunately for her, however, this gentleman had great faith in the effects of fumigation, from what had passed under his own immediate observation, and he without loss of time set her vigorously to work at the experiment, and his later report bears that she has greatly

improved, and is now able to undertake the superintendence of her father's home.

Some months ago, a man whom I never saw, a cabinet-maker, sent his sister to me with a letter, a portion of which ran as follows:—It stated that after having been some months off work he had gone a second time to consult Dr. ——, a well-known Hospital Physician in Edinburgh, who had advised him on account of the unsatisfactory state of his chest to pass the winter in the south of England. He says "that it was after going home (October) that I first heard of the fumigation," which was immediately and statedly practised, and "now (December) I am well and fat and able for my work." A neighbour's wife also, who had lost several near relations by consumption, he reports, was trying it with good effect.

The Medical gentleman referred to told me, upon inquiry, that he had no doubt that this man had tubercular disease.

Dr. Halliday Douglas informs me that some time ago he had a letter from a gentleman resident in Wales, where he had been advised to winter by an eminent London Physician who had found him to be phthisical. After having been there for some time he discovered that his comfort depended greatly upon the direction of the wind, and that he was always best when it was in a certain quarter. It was not, however, until after he had heard of sulphurous fumigation that an explanation of this enigma was afforded him, when it turned out that the wind that blew "fair" for him passed over some adjacent "smelting furnaces," the emanations from which are partly constituted of the agent under consideration. He immediately had recourse to the regular employment of the remedy, from which he says that he has derived great benefit.

A Medical gentleman writes me in regard to the wonderful improvement which his sister has experienced since she began the fumigation, to the extent that she has this winter been able to dispense with her respirator, and to be abroad in all weathers. He says that he has tried it in two other cases of phthisis also, with beneficial results."

A friend asked me lately about his brother, who, he said, was going down very fast under disease of one lung, which was said to be consolidated. The remedies which those Medical men who had seen him had prescribed had no effect in checking the progress of his complaint, which was looked upon as phthisis. As he was desirous that sulphurous medication should have a trial, I gave him the necessary instructions, which were forthwith carried into practice; and the report to me was that, after three weeks' experience, he found his condition decidedly ameliorated. I have not heard anything of him since.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

BIRMINGHAM GENERAL HOSPITAL.

CASES OF PARALYSIS INDUCED BY EXHAUSTION OF THE SPINAL CORD.

(Under the care of Dr. RUSSELL.)

In a paper published in this journal, October 31, 1863, I detailed some cases of paraplegia, in which the disease appeared due to simple exhaustion of the cord, resulting from excessive functional effort. I have been gratified to find that Dr. H. Jones assents to the explanation I offered of the cases in question, and I now present some additional examples in further illustration of the same subject.

Dr. Jones has given an able exposition of the various influences which tend to lower the functional energy of the cord; some acting upon the nervous tissue in common with the rest of the body, others exerting their power upon the nervous tissue exclusively. Among the latter class none are more potent than those to which my remarks especially refer, such, namely, as are associated with functional activity of the nervous tissue, operating by producing exhaustion through excessive functional effort—in other words, through over-exertion.

The functions of the cord are so much less complex than those of the brain that the causes of exhaustion through excessive effort are much fewer in the case of the cord than in that of the brain. In the latter case the large and complex series of mental operations lend their quotum to swell the list of cerebral exhaustions. With the cord, on the other hand, circumstances are different. Its functions are fewer and more simple, and few and simple in proportion are the causes which exhaust its power through unhealthy functional activity.

My former paper exhibited one group of influences, by far the most energetic of the whole number—viz., excessive sexual indulgence, and especially masturbation. I shall be able, on the present occasion, to adduce other causes of a somewhat different character.

I need hardly dwell upon the importance of an accurate diagnosis in such cases, nor insist upon the close connexion which subsists between our treatment and our opinion as to the nature of the disease. This consideration was most forcibly presented to my own mind in the second of the following cases, in which the patient obstinately withheld the information of which I was in search. I would further remark, in corroboration of the correctness of this remark, that prolonged asthenia of the cord implies continued malnutrition of its tissue, and may end finally in hopeless organic change, as, indeed, was demonstrated by one of my former cases. On the other hand, there is every encouragement to anticipate a favourable issue, even in cases having at first sight a very unpromising appearance, provided that appropriate treatment is commenced at a sufficiently early period.

Among the cases in my former paper is one in which the paraplegia manifested itself in a manner closely allied to the state of syncope, the paralytic symptoms coming on suddenly whilst the patient maintained the erect attitude, but subsiding as soon as he assumed the recumbent posture. The first case of my present series seems of the same character. A double influence was in operation—imperfect circulation in consequence of an enfeebled state of the heart, and extreme anxiety and fatigue.

Case 1.—A. B., aged about 60, a gentleman of gouty habit, has suffered from great feebleness and irregularity of his heart's action, and has had more than one attack of sudden vertigo. His urine is healthy. He has besides been subjected to many causes of worry and anxiety, which have greatly depressed his nervous energy, and for the last year or two his day's work has produced a very disproportionate amount of mental and bodily fatigue. For a week before the occurrence to be now detailed he had undergone very special anxiety, and had been subjected to a call for considerable exertion. It was whilst obeying this demand one evening that he was suddenly seized with mental confusion, and with considerable difficulty in walking, so that he was at last compelled to lean against a wall for support. The arms appear to have been quite unaffected. Before reaching home the difficulty of walking rapidly increased, and was accompanied by severe lumbar pain and a sense of dragging down his spine. He crept along, leaning against a wall, till the pain became intolerable and the difficulty of walking so great, that at last he "let himself gradually down" and lay in the road, when the pain instantly ceased, but returned on rising. He afterwards dwelt specially on the suddenness of the pain and the relief instantly afforded by the recumbent posture. With great difficulty he got home, and on arriving was quite unable to support himself, or even to rear himself after he had lain down. I did not see him till the next morning, when he had perfectly recovered, only remaining feeble, though it was some days before he could walk with his usual freedom.

The remaining cases exemplify the more usual form of the disease, where it is more gradual in its approach, and presents the character of asthenia. I would draw attention, in a diagnostic relation, to the entire absence, or very subordinate importance, of many of those symptoms, some or other of which ordinarily attend paraplegia, from organic disease—I mean especially spasmodic action of the muscles and various modifications of sensation. With regard to the latter symptom, I am well aware that perversion of sensation constitutes a variable function in organic disease of the cord not implicating the trunks or roots of the nerves. Still I think it is unusual for paraplegia occasioned by organic disease to attain the severity and continue for the length of time observed in the following cases without being attended to a greater extent with other symptoms of spinal disorder than mere loss of motor power.

Case 2.—B. M., aged 27, single, grinder; admitted August 18, 1865. His history indicated gradual failure of muscular power since Christmas, manifested at first by unusual exhaustion after labour, and then by his arms and legs occasionally "giving" in his work. Three weeks before admission the paralysis of his lower extremities underwent considerable

aggravation, and he became unable to empty his bladder unless it were in a state of distension. He had occipital headache and vertigo, and, during the last week or two only, some pain in his loins. On admission he was almost completely paraplegic. He could but just raise his legs, stiffly extended, as he lay in bed. His arms, too, were somewhat enfeebled, though to a much less extent. During the preceding fortnight he had suffered from cramps in his legs, and had some startings. His arms also were slightly affected in the same manner. The muscles responded normally to the interrupted current. Tactile sensibility was entire. He complained of pain, evidently of a purely muscular character, running from the sacral region to the left scapula. He had also less severe pain round his chest and in the calves of his legs. In all other particulars his nervous functions were in a normal state, and during his prolonged treatment he soon ceased to make any mention of the superadded symptoms. His urine was merely feebly acid. His bowels were much constipated. His pulse at first was quick and irritable. The temperature of the axilla and perineum was alike—viz., 98° on one and 97·8° on another occasion. He had a healthy apppearance. His muscles were plump, though flaccid. All his other organs were healthy. The obstinate denial on the part of the patient of any cause capable of explaining his symptoms compelled me for three weeks to treat him "on general principles," with a most unsatisfactory result. At the end of that period, having gained his confidence, I succeeded in obtaining the confession that he had practised masturbation excessively for several years, even twice or thrice a day; that he had also been addicted to venery, sometimes having lain with two women at once; and he added that he now preferred solitary indulgence to intercourse. He was immediately ordered to begin using his legs (he was, of course, in bed) for ten minutes at a time twice a day, gradually increasing the period of exercise; to shampoo vigorously, and to take mineral tonics. He at once began to mend. In ten days he was able to walk a little with a stick; but his convalescence was slow, and was retarded by excessive timidity. It was characteristic of his disease that the amount of nervous power varied considerably at different periods. On October 17 he was sent to the Convalescent Hospital; but this resumption of a more active life proved premature. Feebleness of the muscles again increased, and his legs began to swell. He was again confined to bed, and thenceforward recovered steadily. He is still an inmate of the Hospital (six months from his admission), but I fear more from indolence than from necessity.

Case 3.—I do not think it necessary to enter into the particulars of this case, as they are essentially identical with those of the case just detailed. The only difference was, that the paralysis was less complete, coinciding, apparently, with less intensity of the cause; but the disorder had been in existence for a much longer period, and a state of general debility coexisted with it. In consequence, recovery was less entire, though the amendment was very marked.

In the next case the cause of the spinal exhaustion observed in the patient consisted in excessive bodily labour, entirely disproportioned to the patient's physical power; and the nervous system had laboured under a peculiarly depressing influence—viz., the poison of lead, which had had the effect of diminishing his already inadequate stock of nervous energy, but not, I think, of acting as the immediate cause of the symptoms presented by the case. The character of the paralysis was not that which is usually the consequence of lead, nor was the muscular atrophy conformed to the type of plumbism, but it is interesting to observe that, as the patient recovered, the true lead paralysis became apparent, though only to a moderate extent. On this supposition it is interesting to note that the paralysis affected the arms and shoulders principally, the parts of the body chiefly employed in the patient's work. I may refer to a similar case detailed by Dr. Gull (*Guy's Hos. Rep.*, 1856, p. 180) in which the poison of lead had predisposed the nervous centres to succumb under a very trifling amount of exudation occasioned by inflammation. The contrast between the symptoms of organic disease in Dr. Gull's case, and those of my own, will, I think, confirm the view I have taken of the case now to be described.

Case 4.—J. A., aged 22, single, quarryman, admitted July 22. He presented the following symptoms. Of very small make, he was evidently ill adapted by nature for the very laborious work in which he had been long engaged. He had perfect loss of muscular power in both shoulders and in both upper extremities, so that the limbs hung loosely as foreign bodies. The movement of the ribs was free, though he panted in speaking; but I afterwards learnt that defective power had once been observed in the respiratory muscles. In walking, he moved his legs with evident clumsiness, and dropped his feet heavily. Micturition and defecation were normal. There was perfect absence of any other symptom connected with the nervous system; the muscles were sensitive to the current; the temperature of the mouth and axilla was 98°. All the muscles of the body were small, but there was marked atrophy of the muscles of the arms, but most especially of the deltoids and scapular muscles; the muscles along the spine also, especially in the upper segment, had wasted considerably; those of the hand were not particularly atrophied. A faint lead line was perceptible in the gums. The patient's history revealed the presence of lead in his drinking-water, but did not present any evidence of plumbism. It also announced excessive labour for ten hours in the day, as lifting heavy masses of stone, and wheeling them in a barrow, and much exhaustion at night, with sleep disturbed by cramps in the legs, the result of excessive labour. It may also be noted that a fellow workman was in the Hospital at the same time with palpitation, apparently from overwork; his gums were free from lead. Three months before admission the patient had lost the use of his right arm for a week, but recovered it; and on the day preceding that on which he was taken ill, he did his ordinary day's work; on the following day he was in the condition in which we found him, but without any other symptom to explain the suddenness of the attack. He has always been temperate, has had no illnesses, never had syphilis. It is questionable whether he has lived well. All the organs are healthy. The treatment consisted of full doses of iodide of potassium with steel and very small doses of strychnine and cod-liver oil, good diet, continued support to the arms by a sling carefully adjusted, thorough shampooing, and carefully graduated exercise. When the patient came first under notice, the case had a most unpromising appearance, and for some time he made but little progress, but he then began steadily to mend. The nutrition of the muscles, especially of the deltoids, improved. On September 5, he walked much better; on the 23rd he could put his thumb in his mouth, and soon after he began to feed himself. On October 17, he raised his arms at the shoulders to a right angle. It is noteworthy that, as this amendment went on, wrist-drop became apparent, the extensors not regaining power with the others. At the present time, however, even this remnant of the paralysis has disappeared, and the patient has regained the full use of his arms.

The following case, with which I conclude my series, though not strictly belonging to the present subject, will illustrate the same principle as applied to the muscles. It exhibits complete paralysis of a particular group of muscles, induced, apparently, by overwork in a patient of feeble constitutional power.

E. L., aged 17. He is a very delicate-looking lad; he has never been strong, and the least exertion "takes all the use out of him;" no special cause of ill-health, however, could be discovered. Eighteen months or two years ago he first began to lose the power of flexing his left foot; this loss of power has lately much increased. He has had some pain across his instep, but not of long duration. With this exception there has been entire absence of any other nervous symptom. We found complete paralysis of the left tibialis anticus and extensor digitorum, with so much wasting of the muscular tissue as to produce very obvious flattening in the front of the leg and a diminution in the circumference of the limb of one-third of an inch as compared with the leg of the opposite side. Sensation was entire. The muscles of the calf of the affected limb were somewhat flabby. There was not the smallest evidence of any disease connected with the nerves or with the nervous centres, nor was there any lead line in his gums. The disease appeared to be due to continual use of the left leg in working the treddle of a lathe for nine hours during the day. He had been thus employed for nine months before his paralysis came on. He then went to a different branch of his business, but continued to employ his leg in the same manner, though only for about ten minutes in the day. The treddling produced much fatigue, and he suffered from cramps in his legs and across his toes. He could not state how soon it was after the use of the limb in the manner I have mentioned that the paralysis was discovered, but the failure of power does not appear to have followed immediately.

I conclude these cases with one remark. The subject I have been discussing has an important bearing upon the pathology of organic disease of the spinal cord. It is obvious that a state of protracted asthenia in the cord must dispose it to succumb to such an amount of organic disease as, under more favourable circumstances, would have exerted a comparatively trifling influence upon its functions. In such a condition a small amount of inflammatory exudation, for example, may be attended with a large amount of paralysis, really due to the pre-existing state of asthenia. Observations to this effect are, indeed, made by Dr. Gull in his valuable series of paraplegias published in *Guy's Hospital Reports*. In several of the cases of organic disease therein related, the amount of structural change is quite out of proportion to the functional disturbance; but the apparent discrepancy is amply reconciled by the depressing influences under which the patient had been labouring for a considerable period anteriorly. Dr. Gull does not forget to note the important bearing which a knowledge of this fact must exert upon treatment.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0

Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

Terms of Subscription for India, £1 15s. per annum.

The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.

Post-office Orders and Drafts on Army or Navy Agents, should be made payable to Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d.	A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d.	A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, MAY 25, 1867.

UNIVERSITY REPRESENTATION.

The rapid progress of the Reform Bill leaves no doubt that soon, for weal or woe, its provisions will become the law of the land. What will be its ultimate effect on society—whether it will lead to universal anarchy, bankruptcy, and collapse, or inaugurate a golden age of virtuous self-government—we shall not inquire. It is enough for us to point out to the Medical Profession, and especially to those of its members who are graduates of the London and Scottish Universities, the measure of power and influence they will acquire under the new Bill.

The enormous increase of votes implied by household and lodger suffrages deprives professional franchises, at least in arge towns, of much importance or value. The proportion of the clerical, Medical, legal, and scholastic professions, who are neither householders nor lodgers, must be infinitesimal; and although the principle asserted by these fancy franchises is excellent, the real effect produced by professional votes in boroughs will be, we should think, wholly unappreciable. Special professional representation in the House of Commons being out of the question, we should hope but little for the interests of Medicine and the allied sciences from the changes now in progress, were it not for the University representation granted by the Reform Bills. The Profession of Medicine has never been adequately represented in the House of Commons. No man of commanding influence and acknowledged superiority in Medical or natural science has ever been heard in that House, either on the great questions affecting the health and well-being of the people, or on the minor ones relating to the status and requirements of Medicine. Whilst the professions of divinity and law, engineering and architecture, the two public services and the interests of trade, banking, and manufacture, have never lacked adequate supporters, all matters relating to Medicine and its collateral sciences have at best been expounded second-hand through the medium of a Secretary of State. To this condition of things are mainly due the long list of grievances of which the Profession complained under the late Government. To this we may trace the present moribund state of the Naval Medical service, the deep-rooted discontent amongst British and Indian Army Medical officers, which is only slowly disappearing under late liberal measures, the inadequate payment of the Poor-law Medical service, and, as at present, the enormous difficulty of obtaining from Government and Parliament any measure of Medical legislation, however palpable may be its necessity and great the public benefit to be derived from it. Now, however, for the first time, adequate Parliamentary representation will be within the grasp of large bodies of Medical men. We would therefore urge upon those of our brethren who will form the large majority of the constituencies of the Universities of London, Edinburgh, and St. Andrew's, to concentrate their force upon the one object of the due representation of Medicine in the House of Commons. We do not think it absolutely necessary that their representatives should be Medical Practitioners, although, would they allow themselves to be nominated, there are men amongst us the influence of whose judgment on public, scientific, and social questions would be enormous. Glad indeed should we be to see one so honoured and so honourable as the late President of the Royal College of Physicians representing a British University in the great council-chamber of the realm. But at least the successful candidate should be a man of high attainments in natural science, trained in a like school with students of Medicine, accustomed to their society and sympathising with their tastes and habits of thought. If possible, he should be a graduate of the University which he represents. At any rate, in addition to character, means, and position—for, in spite of Mr. Lowe's forebodings, we believe that these will still have their legitimate influence, even in so democratic an assembly as the new House of Commons—he should have achieved a well-grounded celebrity in Medicine or its collateral sciences, and should be possessed of sufficient oratorical powers to influence and instruct a popular assembly.

It is known that the graduates of the University of London are already on the alert, and the claims of various possible candidates have been freely canvassed. Amongst them we have heard named several Medical men of high standing, and others conspicuous in arts or sciences. For instance, Drs. Gull, Sibson, Tyler Smith, and Professors Miller and Odling have been mentioned. The first-named gentleman, however, has declined to be nominated, and we do not know what may be the feelings of others who have been talked of in reference to the matter. We hope, however, that when the time comes no mere considerations of a political nature will, by splitting the Medical constituency, neutralise its influence. If a mere political partisan, the representative of the University of London will possess far less influence than the representative of a metropolitan borough; but acting independently, as the leader of the scientific interests of the day, and the representative of the Profession of Medicine, he may be a great power in the House, and exercise a lasting beneficial influence on the body returning him, and on the social and hygienic condition of the whole population.

CATTLE PLAGUE.

Cattle plague has evidently revived, and we have to face what is clearly a new outbreak. It has appeared in Leicestershire and Nottinghamshire, as well as in the metropolis, during the course of the present month. We have already referred to the outbreak in Limehouse, and at Mr. Rance's shed in Islington. Since then, in the week ending May 11,

nine animals contracted the disease at Mr. Jordan's sheds at Stoke Newington, and a cow was found ill in Mare-street, Hackney. On Friday or Saturday last the disease appeared in the extensive dairy premises of Messrs. Harvey, in Duncan-street, Islington. This firm has two sets of sheds upon the two sides of the street—one a very fine, lofty, airy shed, now containing 50 cows, on the north side of the street; and the other a complicated series of old sheds, but in otherwise good sanitary condition, on the south side. It was at the distant end of these latter sheds that the sick cows were discovered. The number of cows in these sheds was ninety-five, and no new ones had been introduced since March. We have made strict inquiries as to the chances of any communication with Rance's premises, and all we can learn is, that none of Rance's people had been in Harvey's sheds, but that they had been in the office, which is apart from the sheds, for the purpose of purchasing milk. If, then, the contagion found its way thus into Harvey's sheds, it must have followed a very circuitous course. But, considering that foreign cattle pass Harvey's premises frequently, it is quite as probable that the contagion was derived from them, or from their manure, dropped on the road, and blown as dust into the premises. The direction of the wind, and the fact that the sheds on the north side are even now as we write exempt, favours in a degree this supposition. The inspector of the district ordered twelve diseased beasts to be slaughtered on Monday, and thirteen more on Tuesday, marking with ochre several more in whom he found an elevated vaginal temperature. On visiting the place on Wednesday we found that positively this is all that had been done to check the progress of the disease, and that of the thirteen slaughtered on Wednesday five carcases were still on the premises, and it was stated that four were actually lying with the healthy in the shed itself, *having been left there all night*. To us it looks very much as if somebody was not in earnest in stamping out the disease here. Why, we should like to know, were not the cattle found to be incubating the disorder slaughtered as well as those actually ill? Is it the fault of the inspector, or of the local committee with whom he acts? We have heard it said that the latter decline to order the slaughter of any but animals *actually* diseased. Is this to save expense? If so, nothing can be more absurd or short-sighted. To a certainty, this method of procedure can only end in the attack and death of the entire herd. Why, again, are not the animals which are yet healthy separated from those which are incubating the disorder? The sheds are large, and the premises extensive enough for this, for they are adapted for some 300 or 400 cows. Or why, if this be held impracticable, is not the entire herd slaughtered? As it is, the premises are a focus of infection of a most dangerous character. To prove our statement, we need only describe the mode in which slaughtering is managed. It appears that the beasts are killed by knacker's men from an establishment situated at Belle Isle and close under the wall of the Metropolitan Cattle Market, into and through which these men necessarily are likely to pass; and it is to the same establishment that the carcases are taken for destruction. Can any one wonder that the disease extends itself when such a locality as this is selected? Within a day or two a cow has been actually seized with the disease in the shed attached to a public-house close to the market and knackery. This shows the danger which is being incurred. Another thing we cannot comprehend is the obstinacy with which, in this part of the metropolis, the report of the Commissioners in favour of carbolic acid as a disinfectant in this disease is so completely ignored. Mr. Crookes's admirable and almost conclusive experiments seem either to be unknown or forgotten; whereas Mr. Crookes has shown that premises in which it is freely used may stand unscathed with cattle plague raging all around them.

The Duke of Marlborough bore testimony, in the House of Lords on Tuesday last, to the excellent results which had followed the practice of slaughtering for the purpose of stopping the disease—a practice to which he was originally opposed. He also remarked that the restrictions laid upon the movement of cattle from place to place had not only promoted the arrest of cattle plague, but incidentally also had checked other diseases, and that this was specially the case with pleuro-pneumonia. Still the orders of the Privy Council have been evaded to a considerable extent; so much has this been the case in the metropolis that a new and more stringent order has been promulgated, which came into force yesterday. It provides that no cattle shall be brought from any place to the Metropolitan Cattle Market without a licence from the Commissioner of Police, such licence to be delivered up to a proper officer at the market, whose duty it will be to preserve it. Again, no cattle are to be permitted to leave the market without a pass, stating upon its face the name and address of the owner or purchaser, a description of the cattle, the name and address of the slaughter-house to which they are being removed, of the drover, and the route to be taken. On the cattle arriving at the slaughter-house, the pass is to come into the hands of the butcher, who is to deliver it up at the end of the week at the police station of his district. One remarkable fact was stated by the Duke of Marlborough which is certainly encouraging in the view of a renewed outbreak and the necessity for adopting active measures of repression—namely, that those already adopted had not had the effect of raising, as was apprehended, the price of meat. Probably this has been due in part to the large importations from abroad, and partly to the indirect operation of the restrictions in lessening, if not neutralising, other maladies.

Since writing the above we learn that fourteen more cows have been attacked at Harvey's shed and slaughtered, and that another establishment—that of Mr. Mills, in the Roman-road, Islington, containing over sixty cows—has been invaded. This shed is in the ordinary cattle-driving route, and within a quarter of a mile of the Metropolitan Cattle Market.

THE METROPOLITAN POOR.

Section 73 of the Metropolitan Poor Act provides that "the relief of the poor of every Union or parish in the metropolis governed by a local Act shall, from and after a day to be stated in an order of the Poor-law Board, in relation to each Union or parish, be, notwithstanding anything in such local Act, administered by a Board of Guardians, elected according to the Poor-law Acts, and in conformity with an order of the Poor-law Board." This section applies to twelve parishes in the metropolis, and in all of them, with one exception, the body entrusted with the administration of relief has been appointed, not by the ratepayers, but by the vestries. There are apparently no circumstances which justify the continuance of these exceptional arrangements, at least, if the opinion of the Select Committee of the House of Commons on poor relief is entitled to any weight. That Committee expressed the opinion that it was necessary that the parishes under local Acts should be brought under the operation of the general law; and, although the governing bodies were themselves well satisfied with the manner in which they had discharged their duties, and were naturally unwilling to be superseded, the Legislature adopted the recommendation of the Select Committee. The effect of this is to confer on the Poor-law Board powers which are equivalent to a repeal of the local Acts in the metropolis, so far as they relate to the relief of the poor.

On the 7th instant, the Poor-law Board issued to the parish of St. Pancras their first order under the Act. In that parish a Board of Directors has hitherto acted, under the authority of the statute 59 Geo. III., cap. 39. The order directs that, from and after June 10 next, the laws for the relief of the poor in St. Pancras shall be administered by a Board of Guardians;

*

that the parish shall be divided into eight wards, each ward to be considered, for the purposes of the election of Guardians, a separate parish. Eighteen Guardians are to be elected, each with a rental qualification of £40 a year. Some fit and competent person, being a barrister-at-law, is to be returning officer, and the elections are to be conducted in the same manner as the present elections of Union Guardians.

We understand that the pupils of St. Mary's Hospital have applied to the Directors of the Poor of the parish of St. Marylebone for permission to be accorded to the students of the Hospital to visit the wards. The Directors stated in reply that until they knew what steps the Poor-law Board intended to take under the Metropolitan Poor Act they could make no arrangement of the kind. Fortunately their doubts in this respect seem in a fair way to be set at rest. On the 15th instant the Board issued an order combining the several unions and parishes in the metropolis into a district, to be termed "The Metropolitan Asylum District." The Asylum District is to be for the reception and relief of the poor who may be infected with fever or small-pox, or who may be insane. There is to be a Board of Management representing the different unions and parishes in the following proportions of members, viz.:—City of London Union, two members; Paddington; St. George, Hanover-square; St. Mary, Islington; St. Marylebone; and St. Pancras parishes, two members each; the remaining unions and parishes, one member each, In addition to these elected members there are to be fifteen nominated by the Poor-law Board. For the elected members the qualification is a £40 rating. The first elected board is to serve till March, 1868; subsequently the members are to hold office for three years.

The steps indicated in the above summary of orders are intended merely as forming the initiative to the subsequent proceedings which the Metropolitan Poor Act renders necessary. In first forming a Board of Management the Poor-law Board has evidently in view the desirability of obtaining from "outsiders" recommendations as to the number of asylums to be built, and of officers to be appointed to them. We cannot give the Board better advice than, when nominating their share of the Board of Management, to name the Medical men in each district whose class of practice brings them most often into contact with those whom the asylums are intended to receive. As often as not these will be the Union and Parochial Medical Officers, and provided the law admits of their acting in both capacities, we see no way in which better advice could be secured for the Central Board. They have dealt with the sick and the suffering till they cannot choose but know what is required to improve the condition of each.

It appears probable that further legislative powers are likely to be sought, in order to give full effect to the intentions of the framers of the Metropolitan Poor Act.

VACCINATION IN SCOTLAND.

The Twelfth Annual Report of the Registrar-General of Scotland contains the second official report on the working of the Scottish Vaccination Act (26 and 27 Vict. cap. 108), from which it appears that "the success of the Act has been great, inasmuch as upwards of 96 per cent. of all the surviving children of 1865 have been successfully vaccinated, the remainder consisting of children whose vaccination had been postponed from ill-health or other causes, and children whose parents, being of wandering habits, had been lost sight of by the Registrar. The people, as well as the Registrars, seem to have done everything in their power to carry the intentions of the Legislature into effect; though it cannot be denied that a few amendments would remove most of the hardships at present complained of."

The Act requires that every child born in Scotland shall be accinated within *six* months from its birth by a qualified Medical Practitioner, and the fact of the operation having been performed is entered on the register of births kept in each parish or district under the Registration Act, which makes the registration of all births compulsory. The duty of seeing that the child is vaccinated is thrown on the parent or guardian, under a penalty, or imprisonment in default of payment, in the event of non-compliance with the law. Vaccination is only gratuitous to children of paupers, the fee, varying in different localities from 1s. 6d. to 3s. 6d., being payable by the parent or guardian, and this is felt, among the poorer classes of the population, as a very heavy burden. The Medical Practitioner is required to deliver to the parent or guardian a certificate to the effect either that (1) the operation has been successfully performed, that (2) it has been postponed, or that (3) the child is insusceptible of the disease; and this certificate, when transmitted to the Registrar, is entered on the birth register as a permanent record. There is no enactment to provide for an examination of children on the eighth day, or any day whatever, for the purpose of ascertaining whether the operation has been fully and satisfactorily performed; nor does it appear, either from the Act or the Registrar-General's Reports, what steps are taken for determining this very important point.

There were born during the year 1865 in Scotland 113,129 children, of whom 9366 died before vaccination could be performed, and of the 103,763 survivors 99,648, or 96 per cent., are returned as successfully vaccinated. Of the remainder 474 were found insusceptible of the vaccine virus, 34 had already had small-pox, and 207 had been previously vaccinated by clergymen, midwives, or others. This would give a total of 100,363 children (96·7 per cent.) protected as far as may be from the ravages of small-pox, and of the small residuum not so protected about 2·4 per cent. had been removed from the districts before vaccination could be enforced, or were otherwise accounted for.

The proportion of successfully vaccinated children for 1865 is slightly higher than that of the previous year, and is, we should imagine, about the highest obtainable under any system. Nevertheless, Dr. Stark is sanguine enough to think "that even that proportion might be increased were it enacted that all children born in towns with populations of 2000 and upwards should be vaccinated within three or four months after birth, instead of allowing, as at present, six months to elapse before the vaccination can be enforced under penalties. $2\frac{1}{3}$ per cent. who at present escape in consequence of removing from the district in which the birth occurs, belong to that low wandering class who are never long in one locality," and who, we may add, will probably contrive to elude the grasp of the vaccinator under the most stringent system likely to be devised. No doubt the roaming habits of this class are calculated to disseminate the infection of such a disease as small-pox, and it would be highly conducive to the public safety if they could be brought within the operation of the Vaccination or any other Act for the prevention of disease. The mortality among the children of the vagrant and migratory population is very high, and it is assumed that perhaps half of their cases of non-vaccination have arisen from deaths within the prescribed limit of age. Dr. Stark is in favour of early vaccination—"the earlier, the better for the child"—because of the desirability of getting the operation over before teething gives rise to an irritability that often prevents the success of vaccination, and is a common cause of repeated failure and consequent troublesome postponements. "Small-pox," says Dr. Stark, "like other epidemics, has its alternate periods of prevalence and decline, and these periods occur with such regularity that they resemble the successive flow of waves—the period when the mortality is greatest resembling the crest of the wave; that when the mortality is lowest, its trough."

The Scotch Act has been so short a time in operation that any conclusions as to the full amount of benefits derived from it must be drawn with caution. It may be that it is a "great

success" in one respect, without being so in another. Certainly a perusal of the remarks of the District Registrars on the working of the Act would seem to indicate that things do not work quite so smoothly as could be wished. A few examples must suffice to show the nature of the difficulties attending vaccination, even when enforced by stringent legislation:—

"The working of the Act is still very unsatisfactory, and gives much trouble and anxiety to the Registrar on account of the great carelessness of the people concerning it." . . . "The Act has not worked well in this parish hitherto; the people have now got so used to threatening notices that they now pay very little attention to them." . . . "The Registrars are most inadequately paid for their services and trouble in the matter, seeing that it requires more attention and watchfulness than the Registration Act itself." . . . "The requirements of the Vaccination Act are still very unsatisfactorily attended to; the parochial board and the vaccinator appointed by them are the real defaulters, and not the poor parents, who must be often reported as such." . . . "There being no Medical Practitioner located within the parish, the people complain very much of the grievances connected with the working of the Vaccination Act: after going nine or ten miles to the nearest vaccinator's, they frequently have to return without accomplishing the purpose of their journey, either from not finding any of the vaccinators at home, or because of the want of vaccine matter; and even when they get the vaccine matter put on, they have to carry their children so far in their arms that the matter is frequently rubbed off before they get home, and thus all their trouble and expenses are for no purpose—they may have to perform such journeys several times before they have complied with the terms of the Act." . . . "The Vaccination Act is a source of greater trouble to the Registrar than all the duties of the Registration Act put together: it is with the greatest difficulty that parents and guardians are got to transmit the schedule within the statutory time, and ofttimes, in the multiplicity of schedules, they get bewildered." . . . "The great difficulty is getting in the certificates of vaccination from the Medical officers." . . . "A supply of fresh matter is not always to be obtained in the rural districts."

THE WEEK.

TOPICS OF THE DAY.

The forthcoming election to the chair in the Court of Examiners of the College of Surgeons, made vacant by the resignation of Sir William Lawrence, is exciting some little interest. As the examiners are elected from and by the Council, public opinion can only indirectly influence the result. In the majority of instances the member of the Council next in seniority to those already in the Court succeeds to the vacant chair; and we believe that the ordinary rule will obtain on the present occasion. Mr. Solly, the candidate in ordinary succession, will, we believe, be elected, although, it is said, not without opposition. Next to him are Sir William Fergusson and Mr. Adams, of the London Hospital. If there is to be no infusion of a younger element into the Examining Board on this occasion, we hope that the wholesome rule of seniority will not be departed from. Comparison of the claims of the seniors in the Profession must be specially invidious, and we can readily believe that Sir William Fergusson would instinctively shrink from taking precedence of a highly esteemed colleague. If the choice is to be limited according to precedent, we can only hope that the senior candidate will win in a canter, and be henceforth weighted with all the dignities, labours, and rewards of an examiner.

The session of the Medical Council which is to commence on the 29th of May will, we hear, be signalised by a banquet on the 31st, in the fine old hall of the Apothecaries' Company, to which the Council have been invited by their colleague, Mr. Cooper, the present Master of the Society. We fear that, unless the reformed House of Commons have less railway proclivities than the present, the hall will not witness many more civic or scientific festivities. Nothing but the semi-moribund financial state of the London, Chatham, and Dover Railway has respited it during the past year. The building dates from the Great Fire, and has preserved the Caroline aspect better than most metropolitan structures of the same period. Of course a new hall near at hand will supply its place.

From railway companies to boa constrictors is a natural transition. If a good instance of literary bubble-blowing were wanted, the correspondence which has been going on in the *Times* on the subject of Humanity *versus* Serpents might furnish it. The public appetite for sensation topics is as exacting as that of the abused boa constrictor, whilst the mode in which it is gratified is certainly less justifiable. It is really too bad to bring a charge against a scientific society of exhibiting "several times a day," to all comers—especially to nurserymaids and their charges, to say nothing of charity schools—the edifying spectacle of the agonised despair of hapless rabbits trembling before their final seizure and deglutition "by the most loathsome and terrific of all creatures;" and this under the pretence of cultivating a taste for physiology and natural science, whilst the real end is the increase of the money taken at the gate. Of course, after the bubble has been kept up a sufficient time for public amusement, it is allowed to collapse, and the truth comes out that the serpents are only fed at long intervals, in the evening, and with closed doors, the only spectators present being those admitted by special order from the superintendent. We doubt whether any but men having a scientific end in view would willingly witness such an exhibition; but it is rather too bad to charge the soft-hearted British nurserymaid with being a voluntary spectator, and the Zoological Society mercenary exhibitors of what is undoubtedly a revolting sight.

All parties seem to unite in condemning Mr. Pennethorne's Italian-Gothic design for the University of London, which they agree is only less ugly than his original classical one. We hope that the Senate will have their opinion fairly represented in Parliament when the money vote is to be taken. It is said that the interior of the building is to be commodious enough, and there can be no reason, in face of the successful example of the building for the public records in Fetter-lane, to say nothing of the Houses of Parliament, why a really handsome and useful Gothic structure should not be raised. We hear that the authorities of University College have determined on an effort to add the long-talked-of wings to the College. Each wing, it is estimated, will cost about £15,000, and one or two sums of £1000 and £500 have already been subscribed by wealthy supporters of the Institution. The southern wing, which is required for the purposes of the school, is to be added first, and we believe that an appeal will be made to the past students of the school for help. It is worth remarking that University College, although established to vindicate different principles, has been almost equally successful with King's College in alienating many of its old students. The principle of general competition for vacant offices is undoubtedly a good one to be adopted in the early stage of a Medical school, but after thirty or forty years it may imply not only a slight upon former students, but a confession of failure in the educational body which adopts it.

The visitation of examinations has borne fruit both at the College of Surgeons and the Apothecaries' Hall. At the former examinations in the application of bandages and Surgical apparatus and instruments are carried out in the theatre of the institution. Four operating tables are placed in the theatre, on each of which a living male subject is extended, and is submitted to the operation of being more or less artistically bound hand and foot by the candidates for Membership. At

the Hall examinations in testing morbid specimens of urine and other animal fluids, and the examination of diseased structures, together with microscopic specimens of the healthy tissues and urinary deposits, have been made a prominent part of the examination. We believe that these facts will be noticed with approval in the forthcoming report of the visitors.

The question asked in the House of Lords on Tuesday night by the Earl of Carnarvon had reference to the case of Dr. Tofts, which has already been discussed in this journal. It will be remembered that Dr. Tofts received an order to attend a pauper late in the afternoon, without any special intimation of urgency. He, however, saw the man the same evening, who, it proved, had received an extensive injury of the bladder. The patient died four days after the accident, and the Guardians suspended Dr. Tofts on the ground of neglect. He, however, was reinstated by the Poor-law Board on the report of Dr. Markham. The terms of the petition, reflecting, as it does, on the capabilities of the Medical inspectors of the Poor-law Board, and the tone of his Lordship's speech, together with the prominence given to the case by a Parliamentary inquiry, are instances in proof of how necessary it is that Medical interests should not be unrepresented in the Legislature.

SIR WILLIAM LAWRENCE.

The Profession will be glad to hear that the venerable Baronet has had no relapse. He is able with assistance to walk across his room, but his power of articulation has not yet been recovered.

THE MUSEUM OF THE COLLEGE OF SURGEONS.

The museum at the Royal College of Surgeons has lately acquired some valuable additions illustrating both pathology and comparative anatomy. Amongst the former is Mr. Toynbee's valuable and unique collection illustrating aural pathology, a catalogue of which was published a few years ago by Messrs. Churchill. We believe it had been Mr. Toynbee's intention to present this collection to the College, and that his widow would willingly have carried out his wish. The terms, however, of the will not permitting it, the whole was sold to the College at a mere nominal price.

In the large hall which is devoted to comparative osteology, there are a number of new objects of interest. One of the most striking is the skeleton of the male narwhal or sea unicorn (*Monodon monoceros*). The length of the entire skeleton is twelve feet, that of the visible portion of the tusk is six feet. The left tusk alone is developed. Contrasted with this marine mammal is the sword-fish (*Xiphias gladius*), in an adjoining case. Popularly, the narwhal is often confounded with the sword-fish, although, zoologically, they are very far apart. The latter is, in fact, a large mackerel. The tusk of the narwhal is a projecting incisor tooth. The "sword" of *Xiphias* is a rostral prolongation formed of the bones of the face. Still there is a great external similarity of form between the two creatures, and one cannot help guessing at some one teleological hypothesis to account for the prominent feature of both.

The very indifferent and badly articulated skeleton of the ox, which was for a long time the sole example of the osseous structure of recent or ancient domestic cattle to be seen mounted in London, has been replaced by the skeleton of a magnificent bull of the large Italian breed. It is all that now remains of an animal that was presented a few years ago to the Zoological Society by the King of Italy. The poor brute fell a victim in the recent epizootic of cattle plague.

Another object of great interest is the skeleton of the sea lion (*Otaria jubata*) of the Falkland Islands. It is, of course, a kind of seal, but it is a curious modification of the phocine type. It is nearly allied to the animal which has lately been attracting attention at the Zoological Gardens, and also to the species which yields the seal fur of commerce.

THE PATHOLOGICAL SOCIETY.

The Pathological Society closed a very active and fruitful session on Tuesday evening. The list of specimens was an unusually long one, and as it is a rule of the Society that no arrears of business shall be left to stand over to the next session, they were got through in, perforce, a somewhat hurried manner. Amongst the more interesting specimens was a preparation of a horse's leg which had been killed five or six years after the operation of nerving, exhibited by Dr. Crisp. The operation of nerving consists in cutting out about an inch of the principal nerve which supplies the foot. It often has the desired effect of removing lameness, but the nutrition of the foot frequently suffers. The hoof often separates, and the animal, not being able to wear a shoe, is only useful for work on soft ground. In Dr. Crisp's case, however, the horse continued to work for several years on London roads, until one day suddenly the flexor tendon snapped, and he became incurably lame. The cut ends of the nerve had become bulbous. Dr. Williams, jun., narrated the case of an old lady who for a great number of years had taken daily a small dose of some mercurial preparation. He exhibited a portion of the large intestine, under the mucous membrane of which there was a black deposit, which chemical analysis proved to be sulphide of mercury. Dr. Anstie related a case of regurgitant aortic disease depending on atheroma and dilatation of the commencement of the vessel, in which the use of the sphygmoscope had materially contributed to the diagnosis. But for full accounts of these and other cases of interest we must refer to our forthcoming report. At the close of the business the President, Mr. Simon, dismissed the members of the Society for the recess, remarking that "as, in the wisdom of the founders of the Society, it had been determined that pathological studies could not be advantageously prosecuted in hot weather, we must pass into a state of suspended vitality for the ensuing five months; but after that period, during which I hope the members of the Society may enjoy many happy holidays, we shall, I trust, meet again with accumulated pathological materials and invigorated pathological appetite."

THE UNITED HOSPITALS ATHLETIC CLUB.

A new Club with the above name has been formed for the purpose of holding "an annual athletic meeting" at which the students of the various Hospitals are to compete for prizes. The design, of course, is the very laudable one of encouraging Medical students in the use of active exercise, and of promoting a friendly intercourse between the young men of various schools. The members of the Club must be either past or present students of one of the metropolitan general Hospitals. A first meeting is arranged to take place at Brompton on May 31 and June 1. Sir William Fergusson is the President of the Society, Mr. W. B. Holderness the Treasurer, and Mr. S. Edwin Solly the Honorary Secretary. The Committee will include a gentleman from each Hospital. We hope the Club will prove a success. Its object is an exceedingly good one, and it has our best wishes.

ADAM *v.* COULTHURST.

We should not have noticed this case did not we think it a striking instance of the distinction between law and justice. The defendant, Mr. Coulthurst, was formerly a lecturer on anatomy at Bristol; but this fact had no bearing whatever on the case. He was churchwarden to the parish of Chew Magna, and in his capacity caused to be made or mended a path across the churchyard. In doing this, a certain portion of soil and, as it was alleged, of human remains were thrown on an adjoining meadow. Mr. Coulthurst, whose motives were unquestioned, has been mulcted in the Court of Arches in the sum of £100 for having proceeded without a faculty from the Ecclesiastical Court. Now, we cannot be easily surpassed in our wish that the remains of the dead should be inviolate;

but all we say is, that in this country such remains are really not so. When we recollect, for instance, the wholesale desecration at St. Pancras, the history of many of the City churches, and the short work made of the churchyard where King's College Hospital now stands (and which furnished so valuable a collection of syphilitic skulls and other bones to the future Museum), we can only think that Mr. Coulthurst has been hardly dealt by. What is making a foot-path through a village churchyard to a railway cutting through one of the oldest and fullest of the historic churchyards of London? But Parliament gave its sanction to the latter. So be it—*summum jus summa injuria.*

HEALTH OF LONDON.

The Registrar-General's Return for last week conveys the gratifying intelligence that London is enjoying a degree of health which is almost unprecedented. The births were 258 above and the deaths 193 below the average for the corresponding week of ten previous years corrected for increase of population. The actual deaths registered last week were less than the number recorded in any week since the middle of July, 1862, and their ratio to the population was at the extremely low rate of 19 per 1000 per annum. The deaths from zymotic diseases were 197, the corrected average for the week being 310. Small-pox was fatal in 38 cases, measles in 15, scarlatina in 12, and typhus in 37. In the aggregate the chief towns of the United Kingdom show the comparatively low death-rate of 22 per 1000, the extremes of lowest and highest mortality occurring in Bristol (17 per 1000), in Newcastle-on-Tyne (30 per 1000), and in Dublin (31 per 1000). It would be a sad mistake if any one were to draw from the favourable returns of last week the conclusion that our sanitary condition must be perfect whilst such results are possible. We may be indebted merely to fortuitous circumstances for a death-rate only 2 per 1000 in excess of the "natural" standard of Dr. Farr's healthy districts; but we may safely generalise to the extent of saying that this Weekly Return affords a strong argument against the impossibility of approximating town death-rates to a mortality of 17 per 1000.

THE CORRELATION OF THE MENTAL FORCE.

In a recent Friday evening lecture at the Royal Institution, Professor Bain attempted to show the possibility of bringing mental force into correlation with the physical forces. Commencing with a brief exposition of the theory of correlation, he at once admitted vital force as a member of the group, which he proceeded to classify into molar or mechanical force, molecular force (heat, light, electricity, magnetism, and chemical affinity), vital force, of which nerve force may be taken as the type.

The laws which govern the correlation of the first two groups are easily reducible to exact numerical representation. Thus the mechanical equivalent of heat may be expressed in so many foot pounds, and from a knowledge of this law we may say that the complete combustion of one pound of carbon would produce sufficient force to raise an ordinary man to the highest peak of the Andes. Passing, then, to the lower forms of vital force, we find that as much heat is absorbed during the growth of plants, during the deposit of carbon in their tissues, as is evolved on combustion of the same; whilst, during the life of animals, the mechanical and nervous energy displayed is derived from the combustion of the food, which is, primarily at least, of a vegetable nature; and there can be no doubt, that if we could exactly measure the products of this combustion, we should be able to represent the amount of force produced by a mechanical equivalent. Mental force is to be considered as the noblest representative of nerve force in its highest development, and it is therefore subject to the same laws. Aristotle proposes three classes of the *νοῦς*—

The soul of plants, without consciousness.

The animal soul, body and mind inseparable.

The human soul, consisting of two parts—

The passive intellect, body and mind inseparable.

The active intellect, perfectly separate from matter.

The school of Thomas Aquinas and his followers, till the time of Butler, extended the immaterial part to all the souls of Aristotle. Of the existence of mind, however, apart from body, we know nothing; we can only study the effects of their mutual reaction upon one another, and in this respect the phenomena of mind differ from those of external nature. We have a series of mental phenomena, and parallel to these we find a series of physiological facts. Or their relation may be somewhat different; thus, an external condition may give rise to a mental phenomenon, which, in its turn, produces a new physical condition, and so we have, as it were, two shores of the material separated by straits of the immaterial. The question has often been asked—Has the mind its seat in any or in every part of the body, or is the entire being required for its perfection? Can we, by tapping or removing any part, let out the mind? Such questions are simply illogical, as the union of mind and body is not one of place, their qualities of "extension" being opposed. In studying the connexion of mind with brain, we must put away all ideas of connexion of place—must, in fact, pass from the extended to the unextended, and consider their relation to one another in succession of time.

The chief organ through which mind acts on body is the brain, consisting as it does of an infinitely complex web of nerve-fibres, and subject to the ordinary laws of development, nutrition, and degeneration; action is accompanied by waste, waste necessitates renewal; and so, within certain limits, by increasing the amount or the richness of the nutriment supplied, we are able to increase the nervous power; whilst if an undue proportion of nourishment has been required to replace the waste produced by mental exertion, we find the general *physique* below par. If, then, mental phenomena be proportional to physical supports, a numerical relation must exist between the intensity of a sensation and the nervous waste produced thereby; in other words, a sensational equivalent may be obtained. Physicists and physiologists have hitherto declined to assign even an approximate value to this equivalent; they object to the uncertainty attending the rise and fall of mental activity, and to the want of a standard by which mental force may be measured. The problem is doubtless a difficult one, but probably not an impossible one; considering the attendant physiological waste as the index of the intensity of the activity, it only remains necessary to classify and define mental phenomena with sufficient care to enable them to be recognised and ticketed with their exact value.

Although severe intellectual labour is incompatible with bodily exertion, and although we find, as a rule, that men of a highly developed *physique* rarely display the highest mental qualities, yet much may be done by a careful and judicious expenditure of the available force, and by the employment of means to attain any required end with as little loss as possible. Here it is that the educated man has the advantage over the uneducated even in the performance of those labours or sports which might be considered the undoubted province of the latter. In all cases, however, in which mental and bodily exertion take place simultaneously, the total waste of the system will be proportionately high, and an increase in the quantity or quality of the nourishment supplied must be forthcoming to prevent the individual from suffering degeneration.

The correlation of the mental with the physical forces is then so far proved, that the production of mental phenomena is accompanied by a loss of force in the animal economy, and that this loss must be replaced by a further supply of force obtained in the form of food capable of assimilation and of subsequent oxidation.

The lecturer then proceeded to consider the correlation existing among the various manifestations of the mental force, sensation, volition, and ideas. A distinct limit being assigned to the amount of energy capable of being developed, the various forms taken together must not exceed the supply. The force may be distributed equally amongst them, or one may obtain more than its true share. Since every throb of pleasure costs something, and two throbs cost double, it becomes important to ask what forms of pleasure are most economical, what most costly. In general we may reply that artificial stimulants to pleasure rank high in the scale, whilst the more natural pleasures stand proportionally low; the agreeable sensation derived from the consciousness of bounding physical health and vigour is, perhaps, the least costly of all. Pain will be found to be proportionally more destructive than pleasure. The most economical condition in which a man can live is one in which there is a gentle glow of pleasurable sensation, occasionally settling into indifference, and only rarely rising into ecstasy.

The exercise of the will is attended by a variable degree of waste, a conflict of desires being particularly costly—as when a miser has to pay a high fee to the Surgeon who has restored his sight. The intellectual faculties, however, draw the heaviest drafts upon the reserve fund of available force. The constant mental exertion required by the exercise of the attention, as in listening to an indistinct speaker or in following an involved argument, is, perhaps, one of the most extravagant ways of expending our strength; but even this falls short in destructiveness of the exercise of the creative faculties, especially when they are exercised in the higher branches of literature, art, or science. And, in conclusion, it may be stated that the greater the number of different employments in which the mind is engaged, the greater and more serious the loss of force, and consequently the greater the necessity for a liberal supply of aliment. The moral susceptibilities of the individual exercise a powerful influence over the effect produced by mental labour. A man whose mind is occupied with lofty ideas, possessed of a tender conscience, which obliges him carefully to consider and reflect upon his motive for every action, will necessarily suffer greater nervous waste than one possessed of a happy indifference to the opinions of others, or capable of reckless assertion and impulsive action. It behoves us, then, carefully to consider our modes of life—whether we maintain the requisite balance between the supply and demand, always allowing a slight margin in favour of the former with a view to provide against unforeseen emergencies—and whether the exercise of our faculties be regulated with a due regard to the greatest economy of force, and to the most ready and rapid means of replacing it after its expenditure.

A GOOD SUGGESTION.

Our late contemporary the *Day*, just prior to its subsidence into night, made a suggestion that steps should be taken at the termini of the metropolitan railways for collecting newspapers which are frequently left in the carriages by gentlemen who buy a morning or evening journal for perusal during their daily ride into and out of town; the proceeds of the collection to be distributed weekly among the inmates of our Hospitals, to whom they would be a great boon. The *Pall Mall Gazette* believes that this suggestion is capable of being carried a good deal further than the reclamation of fugitive newspapers from railway carriages—that an immense amount of periodical literature is purchased for mere temporary perusal, and then thrown aside to lie dormant and encumber the rooms of literary, professional, and commercial men, which might be had for the asking, and would be well employed in lightening the tedium of Hospital existence. It is, therefore, proposed that gentlemen who are willing to assist in this philanthropic scheme should, at stated intervals, set aside whatever newspapers or periodicals they may have to spare, and that the Hospital authorities should organise a system of calls at those houses where they are encouraged to hope for contributions. We very heartily commend this charitable scheme, which is in every way worthy of consideration, and we shall rejoice to hear that it is in full operation.

ROBERT JACOB JORDAN.

At last the body from which Robert J. Jordan described himself as possessing diplomas have seen fit to interfere with him and his practices, and the case on behalf of the Royal College of Surgeons of England came for adjudication before Mr. Mansfield, stipendiary magistrate, at Great Marlborough-street, on Tuesday last, but was not concluded until Thursday. We need not enter into the details of the evidence; the nature of it was simple enough, proof being laid of the expurgation of his name from the lists of the College of Surgeons for unprofessional conduct, and of his continuing to use the name and title of member of the College after having been thus expelled. Other points were raised up by Mr. Keane, Q.C., who defended Jordan (the Hon. A. Thesiger appearing for the prosecution), but they were put aside. The arguments were very long on either side, but they did not serve to elucidate anything more than the extremely unsatisfactory character of the present Medical Act. Mr. Mansfield observed that the issue, as given above, was clear enough; and, with regard to the disputed points of law, a magistrate sitting in petty session was not the one to settle them. He therefore, without any further observations, found Jordan guilty, and fined him the full sum of £20. Notice of appeal was given, and Jordan entered into his own recognisances for £100 to prosecute this appeal. The case on behalf of the Royal College of Physicians of Edinburgh should come forward next week, but it may be that they will be satisfied with this verdict until the matter is settled in a higher court. To say that we are glad of this move on the part of these bodies is to say little. We have long striven to keep the Profession pure and unspotted, but such an incubus as Jordan is not easily got rid of. At last, however, the two Colleges seem to have become awake to the disgrace attaching to further supineness, and we hope that as Jordan's case is one of the most flagrant, being that of a man who had every aid and inducement to do well, but would not, so the example afforded may be efficacious in ridding the Profession of all such excrescences. That quacks and quackery will cease to exist we cannot even hope, but we can at least show the world at large that between them and the body of honourable Medical men there exists nothing in common.

FROM ABROAD.—THE PARIS CONGRESSES—A PROJECTED STUDENTS' JOURNAL—PROFESSOR ROMBERG'S JUBILEE.

Congresses of every description, social, economic, and scientific, are about to be held at Paris, and those likely to prove of interest to our own Profession are among the most prominent. It may be questionable, however, whether many visitors to Paris in the dog-days, during a limited and expensive stay, and surrounded by every variety of derivative temptation, will feel disposed to shut themselves up in lecture-halls and *salons* for the purpose of re-arguing the various knotty points that await solution. However, we may again remind those having the congregating element sufficiently developed that the International Medical Congress will commence on August 16, and continue open for a fortnight; a committee, made up in great part of men known to European fame, having constituted itself to give a hospitable reception to their provincial and foreign *confrères*. We have not heard that the invitation has been responded to to much extent in our own country, but in Germany it seems to have been warmly taken up. Professor Virchow, in the last number of

his *Archiv*, vigorously supports the projected meeting, while he suggests some expansion of the programme that has been issued.

"We can characterise the idea of this Congress," he says, "as a most happy one, and heartily wish that all countries will participate in its realisation. Medical science, more and more founded in its development on a healthy empirical basis, relies in an increasing degree upon direct demonstration, whether by means of anatomical preparations, pictorial representations, or experiment; and it can only contribute to the more rapid approach of a general agreement upon difficult questions for the Practitioners of different countries to endeavour, by immediate intercourse, to come to an understanding upon the chief points in question. Germany is in a more favourable position for coming to such an understanding than any other country, since for a long period she has welcomed without jealousy the works of other countries, investing them with even a kind of preference, and naturalising the accumulated contributions of all peoples. May she be worthily and numerously represented at this Congress!

"As to the questions proposed to be discussed at the Congress (vide *Medical Times*, Oct. 13,1866, p. 399), we can fully approve of some of them, as, for example, those relating to tuberculosis, to Surgical accidents, the influence of alimentary substances, and the metamorphoses of the entozoa. Other questions, such as menstruation and acclimatisation, are little suited to oral debates, since all of importance relating to them may be communicated in the written form. Nevertheless, these questions having been raised, we hope that abundant material will be forthcoming. In our opinion, puerperal fever, cholera, typhus, leprosy, the organisation of Hospitals, and the drainage question, are topics which ought to have figured on the programme, and it is to be hoped that the Congress will yet place them on the order of the day."

Among the other congresses bearing upon Medicine—such as those of the Psychological Society, the Pharmaceutists, and the Veterinarians—we may notice the programmes of two others. One of these, that for "Pre-historic Anthropology and Archæology," will be held, under the presidency of M. Lartet, on alternate days from the 18th to the 28th of August. The other, under the presidency of the Duke de Fezensac, will be a congress of all societies occupying themselves with the care of the wounded in battle, whether on land or at sea. All Medical Practitioners and philanthropic persons in general are invited to give their co-operation. The whole subject of the care and protection of the wounded is to be thoroughly discussed, and the grounds for an amendment of the Genevese convention, the insufficiency of which during the late war was demonstrated, are to be stated at length. The programme of this congress is given at length in the *Gazette des Hôpitaux* for May 16.

As if journals did not already abound in sufficient numbers, some enterprising youths have determined to establish a new one at Paris, having the now fashionable "international" character, to be entitled *l'Etudiant*. It is to advocate the interests of students in general, and thus assist in establishing "fraternal relations among students of all countries." With a prudence not always found at their age, the projectors have decided not to launch their journal until subscriptions sufficient to defray all expenses have been received, the subscribers to be reimbursed gradually as the journal succeeds.

The celebration of Professor Romberg's jubilee recently in Berlin, on the occasion of his completing the fiftieth year of his Doctorate, was observed with an extraordinary enthusiasm. Long in possession of an immense consulting practice, he seems to have endeared himself to all those of the Profession with whom he came into contact by his admirable bearing towards them, especially at the commencement of their careers. He unites in an eminent degree practical talent with scientific devotion, and his famous work on nervous diseases is as familiarly known by means of translations all over Europe as in his own country. The festivity became almost a national one, so many persons arriving from all parts of Germany to take part in it. A choral festival in the Cathedral opened the proceedings, and then long trains of deputations waited on the Professor in the name of the various bodies he has been or is still connected with. Among these we observe the names of Graefe, Langenbeck, and Dubois-Reymond. The Minister of Public Instruction and Medical Affairs (which are considered of sufficient importance in Germany to occupy the attention of the highest functionaries) brought him from the King an additional decoration; and then followed the delegates from the most famous German Universities and Medical Faculties, including Vienna. The numerous assistants of the Professor, some of them now become men of note themselves, brought him a beautiful porcelain vase for which they had subscribed. In the evening a grand banquet was given, and altogether such a celebration, so enthusiastic and so universal, has hardly ever been seen, even in Germany itself. We may remark that it was to Romberg the popularising Charles Bell's discoveries in Germany was due, and that he has ever entertained an enlightened appreciation of the writings of English scientific authors.

PARLIAMENTARY.—THE CASE OF CARL ANDERSON—THE VACCINATION BILL—THE CATTLE PLAGUE—THE GUILDFORD GUARDIANS AND THEIR MEDICAL OFFICER—THE CONTAGIOUS DISEASES (ANIMALS) BILL—LUNACY EXPENDITURE—THE BROWN BEQUEST—QUARANTINE.

On Thursday, May 16, in the House of Commons,

Mr. Blake asked the right hon. gentleman the member for Cambridge University whether it was true that the sentence passed on the Swedish seaman, Carl Anderson, had been commuted to penal servitude for life.

Mr. Walpole said it was true the sentence had been commuted, but not on the ground that Anderson was insane. There was this peculiarity in the case—that the man was influenced throughout by a delusion. The Judge put this circumstance to the jury, fully explained the nature of the law, and told them to find a verdict of acquittal on the ground of insanity if they thought the prisoner acted under such a delusion. The jury deliberated for an hour, and found him guilty of murder, and, therefore, held him responsible for the act which he had committed. After that he himself referred the case to the Judge for his opinion, and the Judge thought that the sentence was not altogether satisfactory, and recommended that the sentence of death should not be carried into execution. Under these circumstances the commutation had taken place. Without any expression of opinion to that effect by the jury, or without a Medical certificate, it was absolutely impossible to treat the man as if he was insane. But after the opinion which had been expressed by the Judge it would be hardly proper for the extreme penalty of the law to have been carried into effect.

On the order of the day for the second reading of the Vaccination Bill,

Mr. Barrow moved the adjournment of the debate.

Lord R. Montagu trusted the hon. gentleman would not persevere with his amendment, but would allow the Bill to be read a second time, as Bills of a like nature had been passed a few years ago for Scotland and Ireland.

Mr. T. Chambers supported the motion for adjournment.

Mr. Bruce urged the House to give a second reading to the Bill.

The House divided, when there appeared—

For the adjournment	7
Against it	98
Majority	—91

The Bill was read a second time.

The Labouring Classes' Dwellings Acts (1866) Amendment Bill was read a third time and passed.

On Friday, in answer to Mr. Mitford,

Lord R. Montagu said: "I am sorry to report that the cattle plague is on the increase. There are now eight infected places, and we received intelligence last night that, out of seventy-three cows in one place in Stoke Newington, twenty-five were attacked up to yesterday evening. We have also received intelligence that the cattle plague is rife in many parts of Germany. Perhaps I may mention that an Order in Council has just been passed in reference to the matter."

On Monday, May 20,

Colonel Barttelot asked the Vice-President of the Committee of Council on Education whether he would lay upon the table of the House the memorandum addressed in 1867 by the

Registrar-General of England and Wales to the Lords of the Privy Council, on the registration of successful cases of vaccination.

Lord R. Montagu should be very happy to show the memorandum to the hon. member at the office at any time which he might appoint. But it was not customary to print the remarks of one department of the Government on the measures of another department. Many inconveniences would arise if such a practice were to become common. One of them would be that any person who desired to print a pamphlet at the public expense would only have to send it in the form of a memorandum to the head department, and then get some member to move for it in Parliament.

Mr. Dent asked the Vice-President of the Privy Council whether a fresh outbreak of the cattle-plague had occurred to-day, and whether the Privy Council had resolved on taking any steps with reference to the importation of cattle for the London market.

Lord R. Montagu was sorry to say it was true that a fresh outbreak of the cattle plague had occurred in a dairy of Messrs. Thirtle and Harvey, in Duncan-street, Islington. There were ninety-five cows in the shed, and twelve were slaughtered that morning in cattle plague. The question of the supply of meat to the metropolis was a very large one. If any restrictions were put on the trade, the price of meat would be raised and the supply diminished. The question was, however, under the consideration of the Privy Council, although he was not in a position to state what steps were likely to be taken.

On Tuesday, May 21, in the House of Lords,

The Earl of Carnarvon presented a petition from the Board of Guardians of the Guildford Union, stating that their Medical officer had been guilty of gross neglect of duty, that they suspended him in consequence, and that the Poor-law Board, after inquiring into the circumstances of the case, had censured his conduct severely, and then reinstated him in his office. The petitioners complained that, in such cases, it was the practice of the Poor-law Board to send as inspectors gentlemen who, from their absence of legal training and experience, were not fully qualified to sift the evidence and determine its real value. This, he thought, was a point that deserved consideration, and he could say, from his own experience as a member of a Board of Guardians, that there had been a great want of legal knowledge exhibited by some of the inspectors holding office under the Poor-law Board. The petitioners moreover complained that facts furnished to the Poor-law Board affecting the previous character of this officer, and bearing materially on the question they had to decide, had been suppressed. It was said that the Poor-law Board denied the receipt of those facts, but he believed that there must have been some error in reference to this part of the complaint. The petitioners desired that larger powers, and especially that of dismissal, should be conferred upon them. It was true that they were already empowered to suspend any of their officers, but if they suspended any officer for neglect of duty and the Poor-law Board reinstated him, the suspension was rather an advantage than a punishment, because the officer did no duty, but obtained nevertheless the whole of his salary in arrear. He merely laid the petition on the table, and expressed a hope that the noble lord the President of the Poor-law Board would cause inquiry to be made into the allegations which it contained.

The Earl of Devon had made it his business to inquire into the circumstances to which the petition referred. He believed that the experience of all their lordships who were members of boards of guardians would satisfy them that on the whole the working of the Poor-law system would not be advantaged by lodging the power of dismissal in any other hands than those of the Poor-law Board. The facts were correctly stated in the petition. The Poor-law Board carefully considered the whole of the evidence laid before their inspector, and came to the conclusion that though the misconduct alleged against the Medical officer deserved censure, it was not grave enough to necessitate his dismissal. It was true that the inspector in this case was not a lawyer. He was a Medical man, but his noble friend would recollect that the whole of the evidence laid before him was submitted to the President of the Poor-law Board, and the other gentlemen, legal and otherwise, connected with the department, who would not have taken into consideration any evidence which ought not legally to have been admitted. He should feel it his duty to again look carefully over the documents, but his impression, at all events, was that the decision of the Poor-law Board fully met the justice of the case.

The Duke of Marlborough, in moving the second reading of the Contagious Diseases (Animals) Bill, after giving an elaborate history of the recent and former outbreaks, stated that the legislation of last session, enabling the Privy Council to issue orders to meet special cases, had been productive of great advantage. The Bill now proposed would continue existing powers, and in some respects would extend them as experience had shown to be necessary.

After a brief discussion, in the course of which a general assent was given, upon an understanding that it would be referred to a select committee, the bill was read a second time.

In Committee of Supply, on the vote of £10,144 to complete the charges in connexion with the Lunacy Commissions for the three kingdoms,

Mr. Childers expressed an opinion that the amount of business done did not warrant the figures on the votes. There were three systems in use, and that in Ireland was the most economical, while it worked in a thoroughly satisfactory manner. He suggested, therefore, that an attempt might be made to assimilate the three systems, a course which would probably be attended by advantage and economy.

The vote was then agreed to.

On the vote of £13,115 to complete the grant to the Charity Commission,

Mr. Childers suggested an inquiry as to whether the expenses of the Commission might not be recouped.

Mr. Goldney, after referring to the original purpose for which the Commission was appointed, to inquire and report into a certain class of cases, mentioned the recent bequest of Dr. Brown, of Dublin, for the foundation of a Hospital for sick cats, dogs, and birds, and questioned the propriety of the State bearing the expense of seeing that such eccentric ideas were carried out.

Lord R. Montagu said the Commission had two distinct functions—to make inquiries and report to Parliament or the Attorney-General, and, under the Act of 1861, to discharge the duties of a subordinate branch of the Court of Chancery. He would not discuss the will of Dr. Brown, as there was a Bill relating to the matter before the House.

The vote was agreed to.

On the vote of £444 to complete the sum required to meet the charge for quarantine expenses,

Mr. Bentinck called attention to the disproportion between the expenses for southern and those for northern ports.

Mr. Cave wished to give some explanation upon this subject. The tendency of legislation in this country for some time past had been to diminish quarantine establishments. The Mediterranean countries would put us into quarantine at once if we did not keep up a quarantine ourselves. The southern ports of this country where quarantine was kept up were those with which the Mediterranean ports traded. In 1825 Mr. Huskisson took upon himself to issue free traffic to ships in Portsmouth, Southampton, and London, and the result was that the whole of the United Kingdom was put into quarantine by the Mediterranean ports, and the country was thereby put to the greatest inconvenience. That was the real explanation of this vote, and not because there was any danger from yellow fever being imported into the country.

Mr. Alderman Lusk did not regard the explanations which had been given of this vote as being satisfactory, and therefore moved that it be reduced by the sum of £700, but after some discussion the motion was withdrawn, and the vote agreed to.

COMPARATIVE PATHOLOGY AND ANATOMY.

(*From a Correspondent.*)

It seems likely that the intention of the Charity Commissioners for England and Wales of applying Mr. Thomas Brown's legacy to the purpose of promoting veterinary science cannot be carried out, in consequence of the determined opposition of the Dublin University, which has a reversionary interest in the fund, and that the bill now before Parliament will be either withdrawn, or thrown out on the second reading. In this case, the legacy will lapse in 1871 to the Dublin University, for it is hardly possible that a body like the Senate of the London University will "hire a stable and groom, and maintain a few sick goats and dogs" with the money. The

following arguments are urged against the Charity Commissioners' Bill :—

"*The 'Brown Charity.'*

"The Bill now before the House of Commons, promoted by the Charity Commissioners for England and Wales, is inexpedient, for the following reasons :—

"1. Because legislation on the subject is unnecessary, as the appropriation of the funds of the 'Brown Charity' has been already ordered by the Court of Chancery in conformity with the terms of Mr. Brown's will.

"2. Because it is contrary to well-established principles of equity to apply Mr. Brown's money merely to promote veterinary science, when he left it expressly to found an hospital for the maintenance, kind treatment, and cure of quadrupeds and birds useful to man.

"3. Because it is an injustice to Ireland to deprive the University of Dublin of the reversion of Mr. Brown's money, expressly specified by himself.

"4. Because the University of Dublin has expressed, by petition to the House of Commons, their readiness to carry out literally Mr. Brown's will, by founding Professorships in the Celtic and Oriental languages.

"5. Because the opening of the writerships in the Civil Service of India to public competition has rendered the alternative provided in Mr. Brown's will of greater national importance than his primary object, which cannot now be carried out for want of funds."

THE EPIDEMIC OF CEREBRO-SPINAL TYPHUS IN IRELAND.

(*From a Correspondent.*)

Although we have suggested the above title for this disease, it must be admitted that in many respects it differs from typhus in the ordinary form—in none more so than in the extremely rapid development of the eruption, which has been noticed as appearing within a few hours of the first accession of the nervous prostration which ushers in the disease; and in some cases of recovery, or in those in which life has been sufficiently prolonged for the maturation of the morbific action, or rather for nature to exhibit the process by which she struggles to eliminate the zymotic poison from the system, the livid ecchymosed spots take on a gangrenous action, thereby producing a degree of constitutional irritation under which many of the cases succumb. The absence of any affection of the lymphatic glandular system would go far to prove that the title of "pestis" is misapplied. Besides, we have not heard of any cases in which epistaxis, mentioned by Sir Samuel Baker as one of the most important initiatory symptoms of the true Egyptian disease, and as generally betokening a fatal result, has appeared. The term "purpura maligna" we also consider to be incorrect, as, according to the system of nosological nomenclature now prevailing (which, notwithstanding its many defects, is the officially recognised guide in these matters), the disease is thereby removed from the order "miasmatic," to which we consider it to belong, to the order "dietetic," thus indicating, as it were, that its etiology is to be found in some error in diet—a theory for which we need hardly say there appears to be no shadow of foundation.

Another remarkable peculiarity is the extreme rapidity with which in some instances pus, or, at any rate, degenerating lymph, can be deposited on the membranes of the brain and upper part of the spinal cord. In one of Dr. Gordon's cases, which terminated fatally in five hours, and which he considers to be the most rapidly fatal case of the disease on record, this deposit, and the generally inflamed state of the brain membranes, were very marked.

On the other hand, in one case at least of which we have heard, in which death occurred in sixteen hours, there was only observed a somewhat increased vascularity of the brain membranes, with slight increase of the quantity of subthecal fluid. As in all other cases of blood poisoning followed by rapid death, the blood in the heart and pulmonary vessels is found dark and fluid.

On the question of the contagious nature or otherwise of the disease, we must wait for further grounds on which to form a decided opinion. In a notice of a French epidemic it is stated that no grounds existed for supposing that the disease was contagious; but we have been informed of some instances of the disease as at present in Ireland in which its communicability through fomites appears indicated. Suffice it to say, for the present, that it is an adynamic fever of the typhus order, and that as such, until the fact be established to be otherwise, all usual precautions should be enforced to prevent its spread by contagion.

On the subject of treatment we can of course have but little to say. In the French epidemic, large bleedings in the early stage of the disease were the only means of treatment attended with success; and after the stage of excitement had passed, blisters to the head were found to be attended with benefit. Emetics, purgatives, calomel and opium, mercurial frictions, quinine, *et hoc genus omne*, were freely employed. Dr. Gordon, in the treatment of his cases, appears to put most confidence in the exhibition of nervine stimulants, with prompt and powerful counter-irritation of the scalp in the early stages, followed by general support of the system and the cautious use of stimulants; he also appears to think that benefit has followed the use of quinine, with small doses of the extract of belladonna.

*** We have received from Ireland an account of the case of a man who died during the past week of the disease our correspondent has been describing. His illness commenced with shivering, pain in the head, and pyrexia. About the middle of the day livid spots began to appear on the integument, and continued to increase in number until his death, which took place at midnight of the same day. Death was preceded by symptoms of coma. At the post-mortem examination the brain substance was discovered to be much congested; a layer of lymph was found upon its surface, and the ventricles contained about a drachm of fluid; the thoracic organs are merely stated to have been much congested.

REVIEWS.

Club-Foot, its Causes, Pathology, and Treatment. By William Adams, F.R.C.S., Surgeon to the Royal Orthopædic Hospital, etc. London: John Churchill and Sons. 1866. Pp. 422.

Mr. William Adams, by reproducing as a volume the essay to which the Jacksonian prize was awarded in 1865, has contributed largely to our present, it must be confessed, somewhat limited knowledge of the pathology and practice of Orthopædic Surgery, and more particularly to that special branch of it which consists in the division of tendons. So little attention has been paid to this subject hitherto, and the pathology of club-foot and reparative process in tendons after their division so little studied, that such a complete work as the present must be welcomed by all practical Surgeons. There are, in this branch of Surgical treatment, persons who, however, hold very different opinions to those which Mr. Adams so skilfully upholds and practises—as, for instance, the advocates of the treatment of these deformities without cutting tendons, who attempt the cure by ingenious, it must be allowed, but questionably advantageous mechanical appliances. Both parties bring forward apparently undeniable arguments in favour of their method, but actual results in favour of the tenotomists must, we think, in time outweigh the prejudices of the latter class. We may say then at once, that the cases to which the extending method only, such as the use of india-rubber bands, etc., has been applied, and satisfactory results alleged, have been almost exclusively non-congenital distortions associated with paralysis, as those arising from debility, ligamentous relaxation, etc., and we must candidly say that, from careful attention to congenital cases where this method has been applied, the results have not come up to our idea of what restoration, or even partial restoration, of the deformity should be. It must not, however, be supposed that the fact of merely cutting tendons, or cutting them indiscriminately, is all that has to be done with the view of ultimately curing these cases, but that physiological means, operative and mechanical combined, are necessary; and we may add that either alone will be complete. To Delpech and Stromeyer undoubtedly belongs the credit of the discovery of cutaneous tenotomy, and to the latter more particularly the merit of bringing it to its present state of perfection; gradual advances and improvements having been made since that time.

After a careful and interesting review of the history and progress of Orthopædic Surgery, Mr. Adams discusses the question of the reunion of tendons after the operation of

tenotomy—a question which has long been a matter of speculation and uncertainty, and one on which many eminent authorities still differ. The conclusions he himself makes are as follows:—"That tendon is one of the few structures of the body capable of reproduction or regeneration, and that the newly formed tissue acquires within a few months of its formation the structural characters of the old tendon so perfectly that under the microscope it is with difficulty distinguishable from it, but it does not acquire throughout its substance the uniformly opaque, pearly lustre of old tendon. . . . . That the process by which new tendon is formed is essentially similar in animals and man. That the perfection of the reparative process is in direct proportion to the absence of extravasated blood and inflammatory exudation; and that the sheath of the tendons, when consisting of loose areolar tissue, as in the tendo Achillis and other tendons surrounded by soft tissues, is of importance—

"1st. In preserving a connexion between the divided extremities of the tendon.

"2nd. In furnishing the matrix in which the nucleated blastematous or proper reparative material is effused; and

"3rd. In giving definition and form to the newly developed tendinous tissue.

"That the new tendon always remains as a permanent tissue, and as an integral part of the tendon the divided extremities of which it has been formed to reunite."

The author is of opinion that these adduced facts are sufficient to disprove the *linear cicatrix theory* advocated by Mr. Tamplin and others.

The cases in which Mr. Adams considers tenotomy unnecessary are those where children are born with inversion, the deformity here being usually cured by "working the feet." In the more severe cases of this class he applies an ordinary boot with a small steel spring attached to its outer side and passing up the calf, where it is connected with a narrow semicircular steel band, which by the aid of a strap encircles the leg, and a free joint is placed in the steel opposite the ankle joint.

There are, moreover, "cases in which some doubt may reasonably exist as to the necessity for operative treatment," and there are those of a more severe form than the ones just described, in which the foot can be nearly but not quite restored by manipulation, but where the heel remains somewhat elevated, so as to limit or prevent flexion at the ankle joint.

These are the cases where the greatest difference of opinion exists as to tenotomy.

Mr. Adams says, "The opponents of tenotomy, and those who believe that this operation interferes with the full development and ultimate power of the muscles operated on, oppose tenotomy in all but the most severe forms of varus, whilst some over-zealous advocates advise the operation in all but the slightest forms of varus previously described."

He considers that these cases are curable both with and without operation. But where tenotomy is performed, and the more quickly all the muscles of the limb are brought into action, the greater will be the muscular development, "and this is a strong argument in favour of tenotomy as early as the first or second month after birth," the muscles of the calf being thus brought into play at an early period, and hence later on in life the length of the limb and the circumference of the calf will be normal.

Speaking of the difficulty of deciding for or against operation in this class of cases, he says:—"The rule upon which I rely has reference to the elevation of the os calcis. This is the test of the extent of structural shortening of the gastrocnemius and soleus. If the elevation of the os calcis exists in any marked degree, I advise the operation, because the uncertain result of mechanical treatment in such cases justifies tenotomy, which may be also recommended on the ground of its diminishing the treatment from months, or perhaps years, to weeks, and thus materially expediting the cure." With respect to cases in which the operation is absolutely necessary, they are those which range from the last described series to the most rigid and severe forms ever met with, and the following indications are pointed out by the author as determining the necessity of operating:—

"1st. When the foot cannot be fully everted or brought to a straight line with the leg by manipulation, and when, in the attempt to accomplish this, the inner malleolus does not become prominent. 2nd. When the os calcis either cannot be depressed at all, or only in a slight degree, so that after the partial eversion of the foot little or no flexion at the ankle-joint can be obtained."

It does not seem probable, and we have no evidence to show, that such cases were ever cured by mechanical means without tenotomy.

Mr. Adams next gives two very interesting and well worked-out chapters on non-congenital, spasmodic, and paralytic talipes, and the deformities with rigid muscles, with their pathology and treatment.

In the chapter on the pathology of talipes equinus he considers that it is very rarely a congenital affection; with regard to its treatment, he calls particular attention to the manner of using the tenotomy-knife, so as to render it really a subcutaneous operation—namely, that the knife, the cutting edge of which should be considerably longer than the breadth of the tendo Achillis, should be introduced "with its flat edge parallel to the tendon, close to its inner or outer edge, as most convenient, when the tendon is prominent; but if it be deep it is best to enter it on the fibular side. The knife should be passed *obliquely downwards*, keeping the point close to the tendon, beneath which it may then be carried to the opposite side. The cutting edge being now turned towards the tendon, it is to be divided transversely from its internal to its external surface."

Mr. Adams prefers making division of the tendo Achillis and plantar fascia separate stages if the talipes be severe, and that the latter should be completed before division of the former.

With regard to the mechanical extending force, Mr. Adams proposes "to apply it to the anterior part of the sole, and in so doing to make use of the contracted state of the tendo Achillis as a means of fixing the posterior extremity of the arch of the foot. The fulcrum must be placed exactly over the anterior surface of the ankle-joint, by means of the oblique heel-strap of the Scarpa's shoe."

The after-treatment of talipes equinus must be most carefully regulated by mechanical means, and in this particular the author considers the principles taught by Professor Syme to be extremely reprehensible—viz., allowing the exercise of the joint to be resumed on the second or third day after the operation, "as this procedure will be inevitably followed by non-union, or a very weak and elongated condition of the tendon, rendering the foot much less useful to the patient and hopelessly incurable."

Mr. Adams differs from many Surgeons in the treatment of talipes equinus with existing paralysis. They advise that an operation should not be performed during the paralysis, but that we should wait until the return of power; whereas, by allowing the deformity to continue, atrophy is induced or increased in the comparatively healthy muscles on the anterior part of the calf, in consequence of the motion at the ankle-joint being either limited or entirely prevented by the contraction, and the persistence of the deformity interferes with the natural process of recovery in the paralysed muscles, and prevents whatever free play exists. Again, structural changes will take place, and several more severe complications. In several dissections of cases of congenital talipes varus, the author has met with instances of structural changes of importance in the muscles; future dissections must, however, prove their frequency; other authors do not appear to have noticed them. These changes, however, appear to have been noticed in infants. The operation should, he thinks, be performed at about the second month, as delay beyond this time acts prejudicially upon the results of the case. In all severe cases the operation is divided into two stages—the great practical point to be overcome being the inversion of the anterior part of the foot, and thus converting the varus into equinus, before dividing the tendo Achillis; and in cases where it is necessary to divide the plantar fascia, Mr. Adams proposes that this step be intermediate to the two mentioned above, thus making use of the contracted condition of the tendo Achillis in fixing the os calcis during the process of *unfolding the longitudinal arch* of the foot, by application of pressure to the anterior part of the foot in an uplifting direction. The mechanical treatment he also divides into two stages. This, however, was the method adopted by Scarpa. He objects to the use of Scarpa's shoe, and gives the following reasons for so doing:—

1. Its construction is not in accordance with the mechanical conditions of the deformity it is employed to remedy.
2. That it is very apt to cause sloughs from undue pressure.
3. That it exerts no influence over the anterior portion of the foot.

Woodcuts of some interesting and ingenious varus splints, contrived by the author, are introduced into the text, which appear to serve every purpose. For the accurate description of these we must refer the reader to Mr. Adams's work.

The success of the treatment of talipes evidently depends upon an intimate acquaintance with the anatomy and pathology of the affection, and *close personal* after-treatment—a remark, indeed, applicable to every branch of Operative Surgery.

Some interesting and valuable suggestions on the pathology and treatment of valgus and its complications terminate the treatise, to which, however, is appended a series of cases.

We cannot too highly compliment Mr. W. Adams on this valuable addition to modern Surgery. Not only does it epitomise everything that has been done in this department, but it contains, moreover, a vast amount of thoroughly original research, to which is united a most minute observation of the pathology and progress in the treatment of club-foot. It cannot fail, we consider, now to be the standard work on the subject, and we approve of the good taste exhibited by the College of Surgeons in their award.

The volume is nicely got up, and the plates, both diagrammatical and microscopical, excellently drawn and engraved by Mr. Lens Aldous, a well-known and clever draughtsman.

We can only regret that our space will hardly allow us to enter more minutely into detail with regard to some of the ingenious and novel appliances treated of in the volume.

FOREIGN CORRESPONDENCE.

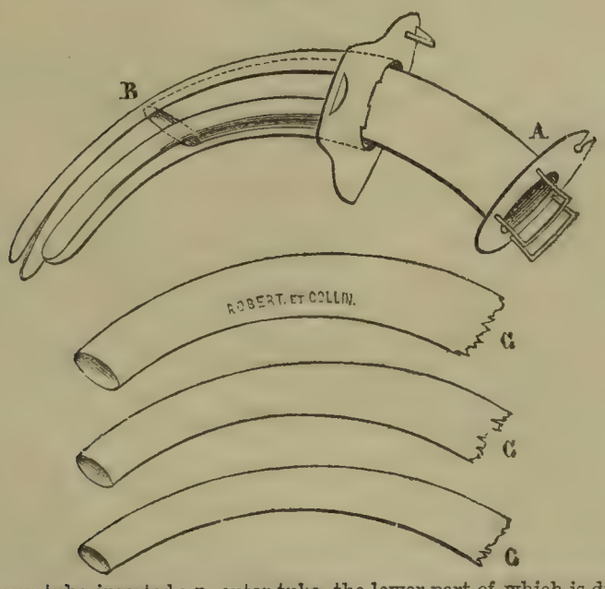
FRANCE.

THE PARIS EXHIBITION.

SURGICAL INSTRUMENTS—(*Continued*).

AFTER examining a great variety of tracheotomy tubes, my attention was attracted by an instrument of this kind which serves the purpose of dilating the windpipe in syphilitic or other strictures of the air-passages. The inventor of this instrument is M. Demarquay. It consists of a double tube; the outer one, in its lower part, is divided into three branches, which tend to converge towards each other, but are parted by the insertion of a second tube, through which the patient breathes. The size of this second tube is gradually increased as the stricture gives way.

FIG. 1.

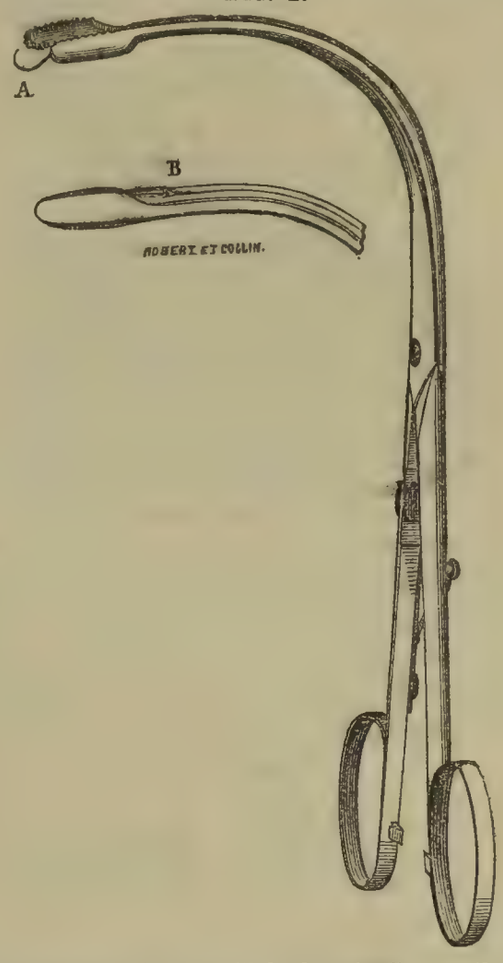


A, inner tube inserted; B, outer tube, the lower part of which is divided into three branches; C, C, C, tubes of various dimensions, to be used successively in dilating the trachea.

Among the numerous contrivances employed for the removal of laryngeal tumours, I particularly noticed the forceps invented by Dr. E. Fournié. Its lower extremity is armed with a hook, which emerges from its hiding-place like the claws of a cat when the instrument is opened; the tumour being thus secured, the forceps is closed, and the morbid growth is wrenched away. (See Fig. 2.)

All these laryngeal operations are of course performed with the assistance of the laryngoscope, and a host of these instruments, framed according to various models, are here exhibited. Most of these are too complicated to interest the general reader; two of them, however, I particularly noticed. One is the auto-laryngoscope of Dr. Krishaber, which allows the patient, as well as the operator, to behold his own larynx—though it seems difficult to conceive what pleasure it can afford a poor fellow to see a polypus torn away from his own vocal cords. As well might we place a looking-glass before the wretch who ascends the guillotine, in order to let him see his own head cut off. However, the well-known interest which people feel in the most minute particulars of their own case is no doubt a sufficient reason for allowing them to behold their own *rima glottidis* and the granulations which adorn it.

FIG. 2.



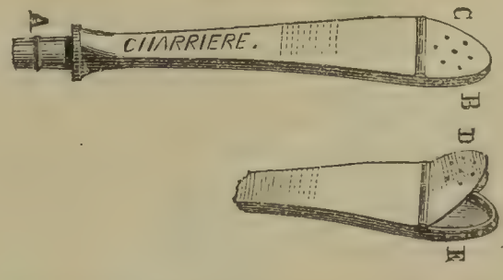
A shows the instrument open, with hook protruding; B, the instrument when closed.

The other instrument which struck me is a clever little pocket laryngoscope, by Dr. Labordette, of Lisieux, which allows a mere tyro in the art of laryngoscopy to behold all the mysteries of the throat. In my next letter I will give you a figure of this convenient little instrument.

Many ingenious contrivances have been adapted to the injection of medicated spray into the fauces, or to its inhalation by the patient.

A very convenient apparatus, invented by Dr. Guersant, who has devoted his attention for many years to the diseases of children, allows the operator to press down the tongue and inject the liquid at once—an important result as regards those very impatient little *patients*, who would seldom submit to a double operation. The instrument is screwed on to an ordinary *irrigateur*, or self-acting enema; it presses down the tongue, and then opens to let the liquid pass. In the subjoined figure B shows the instrument when open.

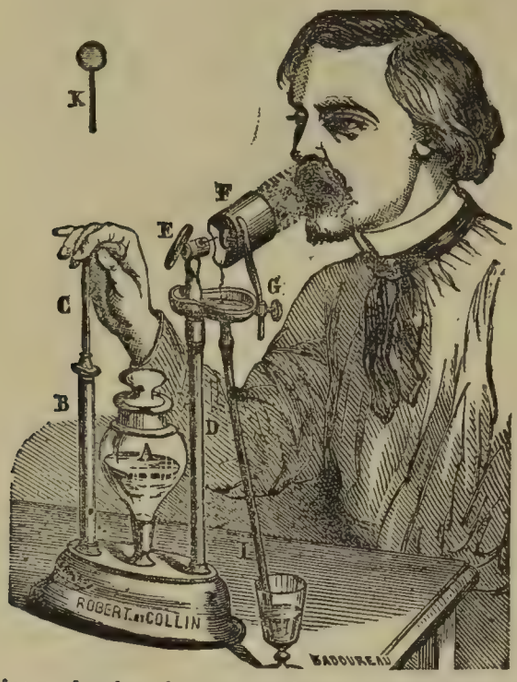
FIG. 3.



The various systems adopted for *pulverisation* of liquids may be reduced to two principal methods. In the primitive system, the idea of which belongs to Dr. Sales-Girons, the division of

the liquid into minute particles is produced by directing the jet against a metallic lens and making it pass through a small grate, which reduces it into spray. The latest model of the instrument is represented in the subjoined figure.

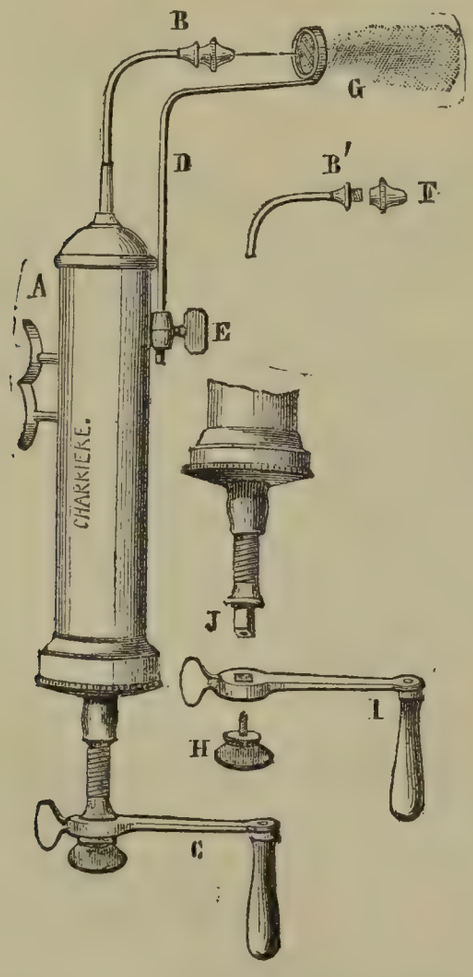
Fig. 4.



A, reservoir; B, chamber of pump; C, piston; D, tube through which the liquid is propelled; E, cock; F, barrel containing the lens, and closed by a metallic grate; G, support of F; I, tube which collects the liquid falling back from F; K, metallic grate, which may be substituted for F when the patient wishes to act upon the pharynx.

On the same principle, Dr. Meyer has constructed an apparatus for eye-douches, which can also be used in diseases of the throat. The subjoined figure gives a tolerably good idea of the instrument.

Fig. 5.

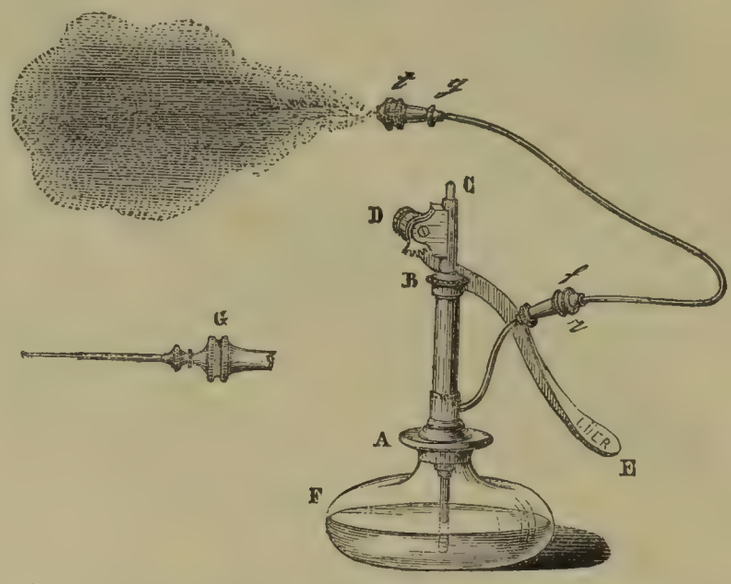


A, chamber of pump; B, B', curved extremity on which F is screwed when the pump has been filled; C, handle of pump when fixed; D, support of G, fixed by a screw E; H, screw which fixes I, the handle, to J, the lower extremity of piston.

The instrument is worked from right to left when full; it is filled by turning the handle from left to right, its extremity, B, being plunged into the medicated liquid.

The second method, the invention of which belongs to M. Lüer, consists in making the liquid pass with force through a narrow aperture. In this system no lens is employed; the resistance of the air is sufficient to reduce the water into spray.

Fig. 6.



In my next letter I will continue this subject by exhibiting some of the most important applications of the pulverisation system.

GENERAL CORRESPONDENCE.

THE MEDICAL COUNCIL.—MEDICAL EDUCATION.

To the Editor of the Medical Times and Gazette.]

Sir,—Last year the Medical Council of Great Britain—a body from whose deliberations and actions much has been expected, and whose members, most of them men of deserved celebrity, are annually brought together from the different quarters of the empire, at a heavy expense to the Profession—sat and considered much, and spoke much, on matters of deep interest to the public, even more than to us, and, after a laborious session of about ten days, returned to their respective homes, intending to hold a similar convocation in twelve months again.

They separated thus at the end of the eighth year of their corporate existence, and what has been accomplished up to this time? An imperfect system of registration, which gives no real protection to the Profession; an imperfect Pharmacopœia; a proposal for an amended Act, with a few trifling modifications as to legislation; and in the infinitely more momentous matter of education, practically nothing. We may add to this a notification that even if the Council were prepared with a solid measure, the Government under whose auspices they acted would give them no help towards carrying it through Parliament.

Considering all the circumstances, perhaps it could hardly be otherwise. Much could not be expected from a body of men, however wise and experienced, whose portfolios are scarcely opened till their session is over, and who have other and full occupation for the rest of the year; many of these representing powerful outside interests, and others feeling that even if they had the moral courage to propose they had not the power to carry out what was necessary for the public weal.

But my object at present is not to consider whether such an administration would not be more efficiently worked by a permanent board of independent and capable men, whose entire time should be devoted to these very important duties, and whose power of benefiting the public and the Profession would not be shackled, as is necessarily the case now, from the present constitution of the Medical Council. I only desire here respectfully to suggest the question whether much valuable time would not be saved, and much good done, by the Committee on Education continuing their labours during the interval between the meeting of one Council and another.

wind which was the important point; it was the force; and in autumn, when cholera chiefly prevailed, easterly winds had little force. The amount of disease was lessened when the winds were high.

Dr. ANSTIE said that, instead of discussing the whole paper, he would limit his observations to the rainfall as affecting one particular disease—typhoid fever. Generally speaking, a fall of rain in towns had a beneficial effect on typhoid fever and diseases propagated in its fashion, but in the country, where the drainage was not so good, this was by no means the case. When a well was situated near a sewer, in dry weather the tendency of the water was to pass from the well to the sewer; in wet, the reverse was the case. He had known of such an instance in the case of certain militia barracks, where the water was not impure for many years until there came a great downfall of rain, after which there was much typhoid, all who drank being affected, those who did not drink of the water from this particular well remaining healthy.

PROSECUTION UNDER THE MEDICAL ACT.

ROBERT JORDAN, of George-street, Hanover-square, was summoned before Mr. Mansfield, at the Marlborough-street Police-court, for unlawfully pretending to be, and taking and using the name, title, and description implying that he was recognised as, a Surgeon.

The Hon. A. Thesiger was for the prosecution; and Mr. Keane, Q.C., and Mr. M. Williams, instructed by Mr. E. Lewis, were for the defence.

There was a second summons, taken out by the Royal College of Physicians, Edinburgh, for a similar offence.

Mr. Thesiger said he had the honour to appear for the Royal College of Surgeons, to support an information laid by the secretary, under the 29th Geo. III., for an offence committed against the provisions of the Medical Act, the defendant "unlawfully pretending to be, and taking and using the name and title and description implying that he was recognised as, a Surgeon." He might state that, although he had taken the words of the information as used in the 40th section of the Medical Act, yet they utterly failed to express the real nature and character of the offence of which the defendant had been guilty. The Royal College of Surgeons had the will to punish that offence as it deserved, but as the law was constituted they were without the power. This was not the case of a man who had merely infringed the statute by holding himself out to the public as possessing the proper qualifications, but it was the case of a man who had been a member of two honourable societies—that of the Royal College of Surgeons in England, and the Royal College of Physicians in Edinburgh—who had possessed the means of earning a name and a competency, and who had sacrificed his name, had been ignominiously expelled by the College of Surgeons, and moreover, who, after being expelled, had openly braved the Society, had carried on a trade which outraged decency in every possible way, by publications and by keeping open a museum the description of which must shock every mind possessing a particle of feeling or propriety.

Mr. Keane: If the defendant is to be tried for these alleged crimes, let him be charged at once with them.

Mr. Thesiger: The magistrate had a discretionary power as to the penalty, and therefore if he proved the facts he should lay before the Court, he trusted the highest penalty would be inflicted. He contended that by the language he now used he was not exceeding his duty as counsel. For years the defendant had been using the name of "Surgeon," and professing to be a member of the Societies of London and Edinburgh, displaying the diploma, for the purpose of disseminating books teeming with disgusting statements, in order to prey on the follies and fears of the young and ignorant. On proof of these acts, he trusted the Court would inflict on the defendant the highest penalty the law permitted. The learned counsel here went into the details to show the establishment by Act of Parliament of the Royal College of Surgeons, and the powers conferred by the Act. From this statement, it appeared that the College of Surgeons had power to admit members and to grant diplomas to them, and in case of unprofessional or indecent publications to expunge the name of an offending member from the register, and to demand the restoration of the diploma. When members were admitted they subscribed to a certain declaration and signed the by-laws. In 1857 the defendant was admitted a member of the Royal College of Surgeons of England, and also of the Royal College of Physicians, Edinburgh. The defendant signed the declaration that he would demean himself honourably in the practice of his profession, and maintain the dignity and power of the Society. The defendant also signed the by-laws. In 1863, in consequence of complaints made to the Council of the Royal College of Surgeons, to the effect that the defendant Jordan was carrying on a museum and publishing indecent books, a letter was written to him by the Secretary of the Council. The letter was to the effect that he (the Secretary) had been directed by the Council to state that their attention had been called to the defendant's conduct in the opening a museum, and in publishing a work entitled a "Guide to Masculine Vigour," which was presented to the visitors to the museum, and handed to ladies and gentlemen passing through George-street; as likewise another work entitled "Vita Vitalis." That the Council would meet in a few days to see whether it would not be their duty to remove him in consequence of the misconduct he had been guilty of, and that before doing this they would be ready to receive his explanation. In one of the sections of the laws of the College it was provided that no Fellow of the College should advertise a secret cure relating to his practice as a Surgeon, or put forward anything indecent in that character. If this were done, the member rendered himself liable to be removed from the register, and to cease to be a member of the College of Surgeons of England. A correspondence passed between the Secretary and the defendant, and on April 10 the defendant, by resolution of the Council, was formally expelled, and at a subsequent meeting of the Council that expulsion was confirmed. In the section which gave power of expulsion it was further provided that every member removed from the register should forfeit all rights as a member, that his diploma should be void, become the property of the College, and be delivered up to the College on demand. In accordance with the Act of Parliament notice was given to the General Council, and the defendant's name was erased from the register of the College of Surgeons, and also from the College of Physicians, Edinburgh. A letter was written by the Secretary, and delivered by Mr. Stone to the defendant, demanding the diploma. The defendant refused to give it up. The Council, thinking they had done enough, took no further steps, and the defendant continued to show about the diploma as if nothing had occurred. The Council. afterwards hearing that the defendant was publishing books of an indecent character, took other steps, which resulted in the present summons, the only regret of the Council being that they were obliged to limit themselves to this proceeding, and could not strike at the root of a practice which was a disgrace to the metropolis. The Council employed a detective officer of the name of Russell. The officer visited the defendant's museum; he was taken upstairs, and a book, to which he should presently refer, was given to him. While at the museum the officer saw the diploma hanging up. On April 5 Russell went a second time to the defendant's house, and on seeing the defendant told him that he called on behalf of a friend, and after some conversation the defendant presented him with two books, which would constitute a portion of the offence with which the defendant was charged. The Medical Act of 1858, in the 49th section, stated that any person pretending to be a member of the College of Surgeons, or using any name or title by which it should be implied that he was on the register as a Medical man recognised by law, should on conviction pay a penalty of £20. The wording of the section was not so clear as it might be, but he apprehended that it meant that any person not registered who pretended to be qualified to act as Surgeon or Physician was liable to the penalty named. He should prove that the defendant had brought himself within the provisions of the 40th section by showing about and setting forth his diploma after it had been called in by the College of Surgeons, and by other acts holding himself out to patients as a qualified Practitioner. If he made out his case, then he hoped the magistrate would put on the highest amount of the paltry penalty; and he must again express his regret that the Council could do no more to put a stop to such gross offences.

Mr. Trimmer, Secretary to the Royal College of Surgeons of England, produced the Charters of the College, the by-laws, and also the declaration signed by the defendant on being admitted a member of the College.

Mr. Stone, Assistant-Secretary of the College, proved the handwriting of the declaration to be that of the defendant.

The Hon. Arthur Dillon, a clerk in the Home-office, iden-

tified the signature to the by-laws as that of Mr. Walpole, Secretary of State in 1862.

Mr. Trimmer produced a copy of the "Medical Register" of 1862, made in accordance with the Medical Act, and printed, published, and sold under direction of the Medical Council.

Mr. Keane objected that the copy of the "Medical Register" must, before being received in evidence, be proved to be a copy.

Mr. Mansfield said he would admit the copy, but take a note and reserve the point if necessary.

Mr. Charles Fritcher, managing clerk to Messrs. Wilde and Co., produced a copy of a notice he served on the defendant on March 2, 1863, to produce three letters written by Mr. Balfour, the late Secretary to the College, and also a certain diploma.

Mr. Stone proved handing the defendant a letter written in March, 1863, by Mr. Balfour.

Mr. Trimmer produced the Minutes of the Council of the College, and said he was present at a meeting of the Council on April 18, 1863. A resolution was passed at the meeting.

Mr. Keane objected that any conversation or act done by the Council in the absence of the defendant without his having due notice to attend the meeting, could not be received as evidence.

Mr. Mansfield would receive the evidence, but take a note and reserve the point.

Mr. Trimmer then said that at the meeting of the Council a resolution was come to expelling the defendant as a member of the College.

Mr. Stone proved delivering to the defendant a letter written by Mr. Balfour, dated April 27, 1863, to the effect that by direction of the President he had been removed from the list of members, and asking him to deliver to him (Mr. Stone) his diploma. He (Mr. Stone) removed the defendant's name from the list of members immediately after the meeting of the Council. He produced the Medical Register for different years, and the name of the defendant appeared in it, but the defendant's name did not appear in that for 1867. He ordered the defendant to give up his diploma when he delivered the letter, and, thinking he might like before doing so to consult his friends, told him he would call again, and did so, but the defendant refused to deliver up his diploma, and had never done so.

Mr. Thesiger read a letter from the Council, which had induced the Court to pass a resolution, to the effect that in consequence of defendant distributing indecent books, and advertising in the papers an advertisement bearing the title of *Vita Vitalis*, he was to be expelled.

George Russell, a detective sergeant of the City Police, said that in consequence of instructions he received from Messrs. Wilde and Co., on April 3 he went to the defendant's house, and saw on the door "Dr. R. J. Jordan." He rang the bell, and the door was opened by a porter. He asked the porter whether there was a museum, and he said there was. He asked what was the admission, and the porter said "One shilling," and gave him a catalogue, and said the museum was on the first and second floors; and he went up. He saw a document, which he believed to be a diploma. It was dated "Feb. 4, 1859," and signed with the names of "Green," "Arnott," and "South," the names all apparently in different handwritings. As he was coming down from the museum he saw a gentleman, he believed the defendant, but he was differently dressed. He went again on April 5, and saw the defendant. He asked if he had a work on debility, and he said he had, and that it was a shilling; and he purchased it. The defendant said if he would wait a short time he would give him a book of extracts from his larger work, and after a minute's waiting he fetched the book produced, but he did not charge witness for it.

In answer to Mr. Keane, the witness said he did not go to the defendant owing to nervous debility, although the defendant might have thought he did. He went by direction of the solicitors. All he said to the porter was, "Is there a museum?" The defendant said nothing to him about the diploma at any time. He did not affect to consult the defendant. He told him he thought he had a friend who suffered from debility. He asked the defendant the best time to see him, and his charge, and he said in the middle of the day, and his charge was £1. The "friend" was merely an invention—a little diplomacy. The defendant did not draw his attention to any part of the books. He did not ask the defendant if he was a legally qualified Practitioner, neither did he say he was. The books had not been in witness's possession ever since. He signed them before giving them to the solicitors.

Mr. Thesiger said that was the case for the prosecution.

After some discussion between the learned gentlemen engaged in the case, the further hearing was adjourned till Thursday.

The case was resumed on Thursday, some further evidence being brought forward for the prosecution, after which Mr. Keane addressed the bench in behalf of the defendant. Mr. Thesiger made some observations as to the law of the case, when, after a very few words, Mr. Mansfield found for the plaintiffs, and fined Jordan the full sum of £20. Notice of appeal was given.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary Examinations for the Diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 21st inst.:—

Thomas Benjamin Briscoe, Calcutta; Henry Murray Steele, Harrington-street; Charles Augustus Robinson, Kingston, Jamaica; William Leonard, Sheffield; and William Jones Williams, M.D. Edin. and L.R.C.P. Lond., Port Madoc, students of University College. Edward Scudamore Angove, Camborne, Cornwall; Frederick Henry Waylen, Haverstock-hill; William Edwin Williams, L.S.A., Llanhilleth, Newport; and Frederick Charles Shaw, Hampstead, of St. Bartholomew's Hospital. Thomas Edward Webb, Aylesford, Kent, and Henry Goldsworthy Shorter, Hastings, of Guy's Hospital. John Campbell White, Princes-street, Westminster, of the Westminster Hospital. Henry Estcourt, Manchester, of the Charing-cross Hospital. Frederic Anthony Helsdon, North Walsham, of the Middlesex Hospital. George Purdey Field, Sussex-gardens, of St. Mary's Hospital. Henry Schofield Baldwin, M.D. Queen's University, Ireland, Burnley, Lancashire, of the Dublin and Belfast Schools; and Christopher Haynes Jenner Hogg, Birmingham, of the Birmingham School.

The following gentlemen were admitted members on the 22nd inst.:—

Edwd. Hepburne Seccombe, Clapham, and Edwd. Moore Little, Melksham, Wiltshire, students of King's College; Charles Turner Haddelsey, Caistor, and John McKenzie, Inverness, of the London Hospital; Frederick Edwin Vernède, Blomfield-street, Bayswater, of University College; Richd. Minors, Sudbury, Derbyshire, of St. Mary's Hospital; William Bartlett Dalby, M.B. Cantab., Ashby-de-la-Zouch, of St. George's Hospital; Charles Goate Gurdon, L.S.A., Boxford, Suffolk, of Guy's Hospital; and John Henry Hunter, Youghal, of the Cork School.

It is stated that out of the thirty-four candidates who presented themselves for examination, eight failed to satisfy the Court as to their proficiency, and were consequently referred to their Hospital studies for the period of six months. The next examination for membership will not take place until the middle of July, and during the interval Professor Hancock will deliver his annual course of six lectures on the Anatomy and Surgery of the Foot, in continuation of his course of last year.

APOTHECARIES' HALL.—Name of gentleman who passed his Examination in the Science and Practice of Medicine, and received certificate to practise, on Thursday, May 16, 1867:—

James Joseph Rablah, Scarborough.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.—The following are the names of candidates who passed the major examination as Pharmaceutical Chemists, on May 22:—

Edmund Hewson Armitage, Louth; Charles Curé, Mauritius; George Thomas Naldrett, Brighton; Edward Owen, Montgomery; Lewis Buttle Ross, Driffield; James Williams, Mildenhall.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

ADAIR, J. J., M.D., M.R.C.S.E, has been appointed Honorary Surgeon to the Isle of Man General Hospital.

BRACEY, C. J., M.B., has been elected Honorary Surgeon to the Birmingham and Midland Free Hospital for Sick Children.

DENNE, H., L.R.C.P.L., has been appointed House-Surgeon to the Birmingham and Midland Eye Hospital.

HARDIE, JAMES, M.D., L.R.C.S., has been appointed Honorary Surgeon to the Clinical Hospital, Manchester.

OAKLEY, C., L.R.C.P. Edin., has been appointed Physician to the Salop Infirmary, Shrewsbury.

WITHERS, W. O., M.R.C.S.E., has been appointed House-Surgeon to the Salop Infirmary, Shrewsbury.

BIRTHS.

HISLOP.—On May 15, at Queen's-park-terrace, Glasgow, the wife of J. B. Hislop, F.R.C.S.E., of a son.

LONGTON.—On May 18, at The Priory, Southport, the wife of E. J. Longton, M.D. Edin., of a son.

THEOBALD.—On May 17, the wife of R. M. Theobald, M.A., M.R.C.S.E., of Lee-terrace, Blackheath, of a son.

TOMKINS.—On May 17, at Beddington, Surrey, the wife of C. P. Tomkins, L.K.Q.C.P.I., of a son.

MARRIAGES.

HOOPER—DYER.—On May 14, at All Saints, Upper Norwood, J. H. Hooper, M.R.C.S.E., of Tenby, to Anne, eldest daughter of the late S. Dyer, Esq., of Cromhall, Gloucestershire. No cards.

KEELE—LEE.—On May 14, at Trinity Church, Regent's-park, C. F. Keele, M.R.C.S.E., King-street, Covent-garden, to Emma, eldest daughter of the late W. Lee, Esq., of Plymouth.

SHORLAND—BLUETT.—On May 16, at Applepen, Devon, E. Shorland, M.R.C.S., of Melksham, Wilts, to Caroline, third daughter of P. F. Bluett, Esq., of South Wembury Manor, late of Holcombe Court, Devon. No cards.

DEATHS.

COWIE, G., M.D., at Groveside-cottage, Airdrie, N.B., on May 15, aged 27.

DIX, JOHN, Surgeon, at Smallburgh, Norfolk (where he had been in practice for upwards of fifty years), on May 10, aged 75.

HANDS, F., L.S.A., of Berkeley, Gloucestershire, on May 28, aged 70.

HUMPAGE, J., M.R.C.S.E., of Clifton, at Malvern, on May 16, aged 51.

LLEWELYN, J. H., Surgeon 8th Hussars, at Tunbridge Wells, on May 15, aged 44.

PHILLIPS, H. C., M.D., L.R.C.P., etc., of 14, Colville-square, W., at the house of his brother-in-law, the Rev. W. J. Rundell, 227, New Kent-road, on May 15.

POWELL, H., M.D. Oxon., at Brighton, on May 18, aged 58.

WESTCOTE, T. P., L.S.A., of Martock, Somerset, on May 1, aged 69.

VACANCIES.

BIRMINGHAM LYING-IN HOSPITAL.—Resident Surgeon.

CLINICAL HOSPITAL AND DISPENSARY FOR CHILDREN, MANCHESTER.—House-Surgeon.

HEREFORD GENERAL INFIRMARY.—Dispenser.

HOSPITAL FOR DISEASES OF THE CHEST, VICTORIA-PARK.—Junior Assistant-Physician.

JAMAICA LUNATIC ASYLUM.—Assistant Medical Officer.

NOTTINGHAM COUNTY LUNATIC ASYLUM.—Assistant Medical Officer.

PARISH OF PADDINGTON.—Medical Officer of Health.

ST. GEORGE'S AND ST. JAMES'S DISPENSARY.—Accoucheur.

ST. MARYLEBONE GENERAL DISPENSARY.—Physician.

MIDDLESEX HOSPITAL.—Resident Physician's Assistant.

WEST HERTS INFIRMARY.—Two Honorary Surgeons.

YORK DISPENSARY.—Resident Medical Officer.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATION.

Settle Union.—Mr. Robert Simpson has resigned the Settle District; area, 18,496; population, 3187. Also the Workhouse; salary, £18 per annum.

APPOINTMENTS.

Ashby-de-la Zouch Union.—Edward Bousfield, L.R.C.P. Edin., M.R.C.S.E., to the Fifth District.

Axbridge Union.—Joseph Ford, M.R.C.S.E., L.S.A., to the Mark District.

Dudley Union.—Edward Malins, M.B. Edin., M.C. Edin., M.R.C.S.E., to the Second Rowley Regis District.

Nantwich Union.—Seymour H. Munro, M.D. Edin., M.R.C.S. Edin., to the Nantwich District and the Workhouse.

Pwllheli Union.—John Evans Hughes, M.R.C.S.E., L.S.A., to the Nevin District; John Roberts, M.D. St. And., M.R.C.S.E., L.S.A., to the Criccieth District.

FELLOWSHIP EXAMINATIONS.—We hear that an effort is being made by the College of Surgeons to improve the examinations for its Fellowship, by the addition of a clinical test. The College has applied to the committees of the different metropolitan Hospitals for permission to examine in their Surgical wards, and in several instances the application has been favourably received.

THE CASE OF JORDAN.—The Royal College of Physicians of Edinburgh *v.* Jordan is fixed to come on on Tuesday week, at the Marlborough-street Police-court.

COOLIE EMIGRATION.—The Calcutta emigrant ship *Hornet* lately arrived in Trinidad, West Indies, with 432 coolies. One death from disease happened on the voyage. Dr. Pearse, who was in charge, attributes the remarkably small mortality to his having adopted the protective and supporting treatment he has recommended in his work on the subject of emigration.

THE Society of Arts gave a brilliant *conversazione* on Thursday, May 23, at the South Kensington Museum.

THE International Ophthalmological Congress, which was to have taken place in Vienna in August, 1866, and was postponed on account of political events, will be held this year in Paris on August 12, 13, and 14. A preparatory meeting will be held at the house of the President, M. Sichel, 50, Rue de la Chaussée d'Antin, at 8 o'clock, on August 11.

TWO cases of wilful poisoning by arsenic are reported from Derbyshire. The accused person is a young woman named Elizabeth Wheeldon, and the victims were two children named Tomlinson.

METROPOLITAN POOR-LAW MEDICAL OFFICERS' ASSOCIATION.—The quarterly meeting of this Association will be held at the Ship Hotel, Charing-cross, on Saturday, May 25, at half-past seven precisely. As the question of uniformity of dietaries in the metropolitan workhouses, together with a dietary table prepared by the Council, will be submitted to the meeting, it is earnestly hoped that all London Union Surgeons, whether members of the Association or not, will attend. It is also proposed to discuss the provisions of the Vaccination Bill now before Parliament, and other matters interesting to London Union and District Medical Officers.

DR. LIVINGSTONE.—Sir R. Murchison has written to the *Times* to warn the public against receiving a repetition of the report of the Johanna men, which has reached this country in a letter from the Consul at Johanna. He writes:—"This letter simply proves that the Johanna men told the same story when they got home which they did at Zanzibar. I have had this information for some days in my possession, as transmitted to me by the Secretary for Foreign Affairs, and coming from the Consul at Johanna; but it has not in the least degree removed my scepticism, nor made me waver in the conclusion that the Johanna men are mendacious, and not in any way to be relied upon, seeing that Moossa, their head man, has given a version of the catastrophe to one of the Sepoys entirely at variance with this old Zanzibar story."

PROSECUTION UNDER THE VACCINATION ACT.—At the Greenwich Police-court, on Thursday week, Mr. Maude, the sitting magistrate, imposed a fine with costs on George Allen, of Blackhorse-fields, and John Ody, of 3, Somerset-place, for neglecting to have their infants vaccinated, in accordance with the Act 16 and 17 Vict., c. 100, August 20, 1853, which makes vaccination compulsory before the child reaches its fourth month. Dr. Henderson, the public vaccinator, stated in Court that within a hundred yards of the residence of Allen there were seven bad cases of small-pox; and yet the parents, although warned of the danger, refused the protective influence of vaccination.—*Borough of Greenwich Standard.*

EDINBURGH HYGIENE.—We extract the following from the *Edinburgh Courant*:—"A singular accident occurred about 9 o'clock on Wednesday night in a house at Killiebrae, in the West-port, Edinburgh, situated nearly at the back of Crombie's-land. The house was occupied by a man named R——, his wife, and a little girl. The man had come in from his work, and was sitting by the fireside reading a paper, when, on a sudden, the hearthstone, which was broken in two, gave way, and he was precipitated into a hole twelve feet deep, at the bottom of which there was about six feet of filth and water, with which he was completely covered. He got hold of a part of the wall, and his wife knelt down and gave him her hand, by which means he contrived to scramble out. The little girl had also been sitting on the hearthstone, but just before the accident occurred she was sent out on an errand, and by that means escaped, but the stool which she had been occupying fell in. The chair upon which the man was sitting also fell into the hole, and his cap was lost in the filth. The opening is supposed to be part of several cellars which were originally underneath the land, but how the water happens to be there has not yet been ascertained. The occupants of the other houses in the passage say that there are similar openings underneath their floors of a greater depth than 12 feet, and, as the flooring over them is loose, they are in the habit of throwing all their ashes and rubbish down. During the late visitation of the cholera this was one of the first lands in which the disease broke out. The occupants of the house have in the meantime got accommodation from one of their neighbours, and their house has been shut up by the authorities until the cause of the nuisance has been ascertained, and it has been put into a habitable condition." The locality where this occurred is thus described in the

Scotsman of May 6:—"Passing by these hovels in the meantime, however, we go along the West-port a short distance to Crombie's-land. In a visit by night darkness serves to conceal many external horrors, but the debauchery and misery of the inhabitants are at all times glaringly exhibited. The land, which forms a small square, stands back from the street, and can only be reached by a dirty narrow passage, the flocculent abominations of which supply a nauseating foretaste of the evils within. The square or yard is so intersected with scale stairs and galleries as to form a maze, which the dancing light from the policeman's lamp can only by very small degrees reveal. This outwork has a hideous appearance at night. There is no plan in it, and no end to its mysteries. But the way of ascent is easily discovered at the end of the passage, and the galleries afford access to the houses. Menacing creaks accompany the thud of each footstep on the rotten stairs; and the gaping galleries, with their mud droppings, are very insecure to the stranger."

THE ENDOSCOPE.—Professor Andrews, of Chicago, has employed the magnesium light with great advantage in the use of the endoscope for examining the urethra.—*Boston Journal*, April 11.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

A Fellow.—If your address is known at the College, you will receive due notice of the day of election. Write to Mr. Hulme, the honorary secretary, Gower-street. A Provincial Fellow will preside.

Dr. Reynard.—The Lock Hospital was founded by Bromfield in 1745. In the Court of the Kings of Wales the Physician or Surgeon was the twelfth person in rank.

H. L. and H. F. S.—The celebrated Dr. Radcliffe frequently favoured the Mitre Tavern, Fleet-street, and the Bull, Clare-market, with his presence. It was at the latter he was sacrificing to Bacchus when a messenger arrived telling him he had lost £5000 in the South Sea scheme, whereupon the Doctor replied he had only as many stairs to go up to make himself all right.

THE MEDICAL PROVIDENT SOCIETY.

The Treasurer of the Medical Benevolent Fund begs to acknowledge the following additional sums returned to the donors from the Medical Provident Society:—Stephen S. Alford, Esq. (a moiety), £1 7s.; H. Veasey, Esq., £6 16s. 6d. W. H. BROADBENT, Hon. Sec.
May 21.

COMMUNICATIONS have been received from—

Dr. GERVIS; Mr. SALT; Dr. GAIRDNER; Dr. ROGERS; Dr. CHARLES KIDD; Dr. BROADBENT; Mr. BREMRIDGE; Dr. HARDIE; Mr. GELL; Mr. DRAPER; Dr. HARVEY; Mr. SAMUEL SOLLY; Dr. B. BALL; Mr. E. BELLAMY; Dr. HUGHLINGS JACKSON; Dr. DAY; Dr. LEARED; Mr. J. CHATTO.

BOOKS RECEIVED—

Marcet's New Process of Preparing Meat—Macgillivray on Hydatid Disease—Report of the Devon Lunatic Asylum—The Glasgow Medical Journal, May—Report of the Sanitary Visitation Movement in Glasgow—Wilson on Diseases of the Eye—The Medical Press and Circular.

NEWSPAPERS RECEIVED—

Laboratory—Gazette Hebdomadaire—Greenwich Standard—Irish Times—Calcutta Englishman.

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 18, 1867.

BIRTHS.

Births of Boys, 1165; Girls, 1098; Total, 2263.
Average of 10 corresponding weeks, 1857-66, 1823·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	595	524	1119
Average of the ten years 1857-66	627·1	565·6	1192·7
Average corrected to increased population..	..	..	1312
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,388	4	2	..	..	6	3	1	..
North ..	618,210	7	..	4	3	17	13	5	..
Central	378,058	4	5	1	..	3	5	2	..
East ..	571,158	11	3	3	..	8	6	3	..
South ..	773,175	12	5	4	2	4	7	6	..
Total ..	2,803,989	38	15	12	5	38	37	17	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	9·697 in.
Mean temperature	46·8
Highest point of thermometer	63·0
Lowest point of thermometer	34·9
Mean dew-point temperature	39·3
General direction of wind	N.E.
Whole amount of rain in the week	0·12

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, May 18, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending May 18.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending May 18.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	2263	1421	1119	63·0	34·9	46·8	0·12	12
Bristol (City) . .	165572	35·3	91	74	‡55	64·1	37·0	47·5	0·50	51
Birmingham (Boro')	343948	43·9	246	167	140	..	..	..	..	..
Liverpool (Borough)	492439	96·4	410	285	233	63·0	36·3	47·4	0·20	20
Manchester (City) .	362823	80·9	251	205	‡204	70·0	36·0	46·6	0·17	17
Salford (Borough) .	115013	22·2	89	58	56	66·0	34·9	45·6	0·23	23
Sheffield (Borough).	225199	9·9	200	119	79	65·7	31·9	43·2	0·49	49
Leeds (Borough) .	232428	10·8	232	118	109	66·0	29·8	45·6	0·42	42
Hull (Borough) .	106740	30·0	78	49	46	..	..	..	..	..
Newcstl-on-Tyne, do.	124960	23·4	106	66	73	54·0	37·0	43·4	0·12	12
Edinburgh (City) .	176081	39·8	134	85	111	52·7	32·0	42·9	0·40	40
Glasgow (City) .	440979	87·1	358	257	209	..	..	..	..	..
Dublin (City and some suburbs) .	319210	32·8	206	†157	189	61·9	30·8	46·9	0·38	38
Total of 13 large Towns . . .	6187764	34·8	4664	3061	2623	70·0	29·8	45·6	0·30	30
					Week ending May 11.	Week ending May 11.				
Vienna (City) . .	(1863) 560000	..	..	..	397	..	..	§59·7	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·697 in. The barometrical reading increased from 29·22 in. on Sunday, May 12, to 29·98 in. on Friday, May 17.
The general direction of the wind was N.E.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.
† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.
‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.
§ The mean temperature at Greenwich during the same week was 63·4°.

APPOINTMENTS FOR THE WEEK.

May 25. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.
ROYAL INSTITUTION, 3 p.m. Prof. Huxley, "On Ethnology."

27. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

28. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Mr. C. H. Moore, "On the Influence of Inadequate Operations on the Theory of Cancer." Dr. Ryan, "On Atelectasis Pulmonum."
ROYAL INSTITUTION, 3 p.m. Prof. Miller, "On Spectrum Analysis."

29. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 2 p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.

30. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.
ROYAL INSTITUTION, 3 p.m. Prof. Huxley, "On Ethnology."

31. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.
ROYAL INSTITUTION, 8 p.m. T. Sterry Hunt, Esq., "On the Chemistry of the Primæval World."

GENERAL MEDICAL COUNCIL.

The Roll having been called, the minutes of the general meeting of Tuesday, May 29, 1866, were read and confirmed.

Dr. Risdon Bennett, the new member of the Council, was then formally introduced by Dr. Paget, and received by the President into the Council.

The President then delivered the annual address:—Gentlemen,—Before we resume our accustomed labours at this council-table—labours which have been so often devoted to the improvement of the social and scientific position of the great commonwealth of the Medical Profession throughout the British Empire—I would crave permission to offer a few introductory remarks. Your deliberations upon several subjects—and important subjects—which have anxiously and largely occupied your attention in former years, were terminated with regard to several matters on the last occasion, and your conclusions were embodied in certain reports and recommendations which were printed and circulated throughout the country. To my mind one of the most important topics which engaged your attention last year was the report of your committee upon general education—that is to say, the report upon the subjects which were to constitute the preliminary examination of students upon general education. Of all the labours which have been bestowed by this Council on various subjects, I know of none more likely to be productive of great benefits, present and prospective, to the whole of the Profession individually and collectively, than the establishment of a compulsory examination on subjects of general education of all persons before they are permitted to enter the Medical Profession. Gentlemen, if the Medical Practitioner is still to maintain his proper position and influence amongst the educated classes of society—if our Profession, as a whole, is still to bear the name of, and be regarded as, one of the learned professions, then, undoubtedly, those who enter upon it ought to have received that amount of mental culture, and ought to be capable of passing a preliminary examination on subjects of general education, which shall at any rate be equivalent to the examinations which are passed by those who are entering upon the clerical profession, by those who are entering upon the legal profession, the army and civil service of the country. Unfortunately, the Medical Act under which we are assembled here, and by the provisions of which we are regulated, did not give us, as a Council, any power to encourage or to distinguish individuals of high literary attainments or of great Professional knowledge, but that Act of Parliament has given us a power to establish a standard of education, below which we can say that no man is fitted to enter into our Profession; and I do trust, therefore, that the Council will agree with me, and will agree among themselves, to keep up that standard of general education to as high a point as the circumstances of the case will permit. It is true, indeed, that this Council cannot take to itself the credit of having initiated these examinations in general education of students about to enter the Medical Profession, because of course the great Universities of the land, and many other corporate bodies—qualifying bodies, I mean—had instituted examinations upon this point prior to the formation of this Council. But then these examinations upon general education were not preliminary examinations. They were by no means uniform; they were passed at irregular times; and while the student was, or was supposed to have been—or, at any rate, ought to have been—actually engaged in Professional studies, he was permitted, at those irregular times, to pass those examinations, and even sometimes those examinations were passed just prior to the final qualifying examination of the individual. Now it must be obvious to all that examinations on general education, so irregular and at such unsuitable times, could not attain the object which the Council had in view, and could afford us no kind of security that the students' minds were sufficiently instructed on subjects of general knowledge before they were permitted to enter upon the curriculum of Professional study. During the last session we arranged and settled in a convenient form our code of recommendations and regulations, as far as they had been completed and perfected upon several points. The first, upon which I have been enlarging, was upon the subject of preliminary examinations of students in general education; secondly, upon the important subject of the mode of registration of Medical students; thirdly, upon the curriculum of Professional education; fourthly, upon the successive Professional examinations; fifthly, upon the supervision of all the examinations held by the qualifying bodies. I say we circulated those recommendations and regulations in a convenient form as far as they are at present perfected. No doubt some of them admit of very great improvements. With respect to the last mentioned of those regulations—namely, the supervision of examinations—you have suggested in your former resolution that the supervision of the examinations should be continued as before; but also, in your last session, you went further, and passed an important resolution, the words of which I have jotted down:—"Resolved,—That the visitation of the examinations shall be continued as before." You further determined that the reports of the visitors should apply to every part of those examinations, and should include a statement of the facts observed and the opinions of the visitors as to the efficiency of the examinations, as also remarks and observations with regard to any defects present in them. Now, I heartily believe, gentlemen, that if any impartial person would take the trouble of perusing those reports of the visitors for the last two years (I wish I could say of all the reports, for, unhappily, there are one or two sad and painful exceptions)—I say, if any one would take the trouble of perusing the reports of the visitors, taken as a body, I am sure they would find there are not only proofs of the necessity which existed for the supervision of these examinations, but they will also afford unequivocal evidence of the benefits already obtained by the plan which has been hitherto pursued. (Hear, hear, and applause.) I would not wish either you or the public out of doors who may become acquainted with what I am now stating to suppose that I am so far an optimist with regard to what has been done by this Council as to assert either that the supervision of examinations has been conducted upon the best system or by the persons whom theoretically I could conceive best adapted for the purpose. But supervision of examinations carried on by Universities and Colleges of great antiquity and repute could not be conducted without its being necessarily to a certain extent an invidious task. The duty is required in the first instance to be performed with great tact, prudence, and forbearance. A more rigid, uniform, and systematic form of carrying on those visitations in the first instance might, I fear, be met with more opposition, might have given rise to heartburnings, and afforded far less satisfactory results than those which have been attained by the cautious, tentative, but more imperfect system which we have adopted. In the first series of reports of the visitors we find various remarks and suggestions, which have not only been taken in good part by the qualifying bodies—and those bodies of the highest standing and character—but they have been acted upon by several examining bodies without delay. And you will find in the reports of the visitors of the examinations for this present year the fruits of suggestions made in the reports of the preceding year. Gentlemen, I think there is great cause for congratulation that you should have commenced and carried on this system of supervision of examinations without more seriously hurting the susceptibilities of the honourable and distinguished men who are engaged in conducting these examinations, and the results already obtained give us an earnest of great improvement in the future as to insuring the fitness of candidates to enter upon the various duties of their Profession. Let me here pause one moment, and just take a brief review of what this Council is doing, and has so far effected, throughout the empire, or at any rate in the United Kingdom, to secure that the Medical Practitioner shall be better fitted for his social station, and also more equal to the emergencies of his responsible calling. If this Council persists in enforcing a good preliminary examination in subjects of general education upon all persons who are about to enter the Medical Profession, and before they are allowed to register themselves as Medical students, if the curriculum of Medical study be established and be sufficiently long to enable persons of ordinary ability to acquire a sound knowledge of the various branches of Medical and Surgical science, and if the Professional examinations are conducted at proper stages and intervals during the curriculum, and if the Council can be assured by their visitors that those examinations are really efficiently and properly conducted, then, I say, this Medical Council would have done their duty, in this matter of education, towards the Profession and towards the public. Then, I say, they may bid defiance to their detractors out of doors (and, I am sorry to say, we have those who detract from our credit), and to those who carp at, and who are jealous of, the

authority of this central controlling body, and who are therefore desirous to injure the *prestige* and independence of the General Medical Council. Gentlemen, among the arduous duties assigned by the Legislature to this Council, as representing the interests and wants of the whole Medical Profession of the United Kingdom, none was beset with more inevitable difficulties than the preparation of the Pharmacopœia which should supersede the three Pharmacopœias of the Colleges of Physicians of London, of Edinburgh, and of Dublin. To consolidate the Pharmacopœias into one work for general use throughout the United Kingdom—this had become a great want, a positive necessity; and although this has been attempted more than once the previous attempts have failed. The British Pharmacopœia of 1864—a work of great labour and merit—did, indeed, accomplish this object, and was a manifest proof that this Council had the will and ability to cope with, and to overcome, difficulties which had previously been deemed insuperable; and, although the British Pharmacopœia of 1864 was not so favourably received as we could have desired, still, considering that on its first appearance the book was, to a certain extent, an intruder every way, perhaps a *parvenu*, superseding the old-established Pharmacopœias of the several editions in the United Kingdom, we ought not to be surprised that it met with rather a cold reception. Gentlemen, the Committee entrusted by this Council with the preparation of a new edition of the British Pharmacopœia have completed the duties assigned to them. It is impossible to allude to this subject without mentioning how deeply the Pharmacopœia Committee were indebted to the indefatigable labours of their excellent Honorary Secretary. I firmly believe myself, if it had not been for his energy, and tact, and experience, the labours of that Committee would hardly yet have been concluded; but concluded happily they have been, and the Executive Committee have published, as you know, a work in accordance with the resolution of this Council. I can hardly suppose that any work of a similar kind ever had more patient labour bestowed upon its preparation than this Pharmacopœia. And here I must mention and advert to the labours of Professor Redwood, and how ready he was on all occasions, as far as his own judgment would permit, to accede to the wishes expressed by members of this Council. Neither can I suppose any work ever received a more patient or searching revision, as well by the scientific members of this Council as by other skilful pharmaceutists who are not members of this Council. As far as a notion can be formed from the remarks and criticisms of public journalists, we may anticipate a most favourable reception to this new edition of the Pharmacopœia, and that it will prove the most useful and standard work ever published for general use throughout the country. (Hear, hear.) Gentlemen, it was only yesterday that your Executive Committee determined that the official announcement of the Pharmacopœia should be made in the London, Dublin, and Edinburgh *Gazettes;* and after a certain day this new edition of the Pharmacopœia will be openly recognised as the national Pharmacopœia. And it is very much to be hoped that after that period all loyal men, whether Physicians or Surgeons, will employ it to the exclusion of all the former Pharmacopœiæ, because, unless it is so adopted, we cannot expect it to accomplish the great end which we believe it is capable of effecting. The last topic to which I will allude is the negotiation of the Executive Committee, and, I may say, also of your President, with the Government upon the Medical Acts Amendment Bill. It will be in your recollection that towards the close of our session last year you came to the conclusion that a letter should be written to the then Home Secretary, Sir G. Grey, and that that letter should be accompanied by the Draft Medical Act Amendment Bill as approved by this Council, accompanied also by a statement of the reasons why this Council had thought it right to deviate in certain particulars from the Draft Bill as we have received it from the Home Office. In the concluding paragraph of the letter it is stated, "I have to ask that you will at your earliest convenience receive the deputation of our Council to consider the amendments in question." Now, you are aware that shortly after this period the late Government resigned, and Sir G. Grey went out of office. Therefore the Executive Committee had no opportunity of having that interview with Sir G. Grey. However, you will recollect that at a subsequent meeting of the Medical Council, May 29, 1866, it passed a resolution in the following words:—"That it be delegated to the Executive Committee to confer with the Government regarding the proposed Bill for the amendment of the Medical Acts, to press on the Government the expediency of its being adopted as a Government measure, and at the same time to state that the Medical Council are of opinion that unless the Bill be introduced by the Government, it would be unadvisable to proceed with it." In accordance, then, with that resolution, at the first meeting of the Executive Committee following upon your session last year—that is, on July 17—the Executive Committee determined that a deputation should wait upon the new Secretary of State, Mr. Walpole; and your President, accompanied by Dr. Andrew Wood and Dr. Aquilla Smith and the Registrar, waited upon the Secretary of State, who received us kindly and courteously, and listened to all we had to say. We endeavoured to put before him the feelings and wishes of this Council, and the absolute necessity that there was for an amendment of the original Act of 1858. Now, Mr. Walpole himself seemed to be conscious of the defects of that Act, and he led us at that time to hope (without any definite promise, however) that he would take up the subject at another period. He also intimated that he would be happy in the ensuing autumn to see your President on the subject, and to go into the matter with him. Therefore, when the autumn of 1866 had arrived, in the month of November, in accordance with the wishes expressed by him, I put myself in communication with him, both by letter and also by personal conference; and I endeavoured to reiterate, by statement and argument, all that had been said by the deputation in July, 1866. In consequence of some delay in getting any reply to these negotiations with Mr. Walpole, I had occasion to write to that gentleman more than once; but on February 2 of this year Mr. Walpole wrote a letter, the particulars of which are mentioned in the Minutes of the Executive Committee, and you will, therefore, be aware of what was said—namely, that Mr. Walpole, although aware of the necessity of the amendment proposed, felt himself so burdened with the various work which the Government had on hand that he could not promise to undertake it; and he suggested that we should endeavour to obtain the assistance of some private member of the House of Commons or Lords to take up the Bill. But that was not in accordance with the expressed wishes of the Council, and could not be acted upon, and I intimated to Mr. Walpole that such was your determination last year. The thing then remained to a certain extent in abeyance, and I thought it right to press for another interview, which was granted to me on March 11. I then explained to him the whole subject, and on that occasion I met the legal adviser of the Home Office, and went through the subject with him—endeavouring to explain to him what the Profession and this Council expected from him, more particularly as he had been the individual who introduced and carried through Parliament the original Bill. Mr. Walpole promised I should have an answer from him shortly. However, that answer was so long delayed that it was absolutely necessary again to remind him of the necessity, before this Council met, of learning his final decision; and it was only last week, since you received your summons to attend at this Board, and since the programme of the Council was issued, that I received from him a most important communication by letter. That letter suggested modifications of one of the clauses of the Medical Acts Amendment Bill, which was before the Council last year; and that was a matter of so much importance that, in passing, I may be allowed to hope that, in accordance with the recommendation of the Committee yesterday, you will think it sufficiently urgent to be taken into consideration at an early hour in this day's proceedings. I will not detain you by alluding further to it. I will merely hand this communication to your registrar, who, when the hour comes, will read it to you. I have thus endeavoured to give you a sketch of the principal points which have occurred since we met last year. There still remain, however, of course, many questions of great interest to be settled and discussed at this meeting, although I believe some of the greatest difficulties which surrounded your onward progress have been surmounted. The Profession out of doors looks to you, as a body, to sustain its place in the social circle, and to obtain, if possible, from the Legislature better means of preventing the quack and the impostor from personating the regularly educated Practitioner. Gentlemen, I trust we shall enter on our discussion this session with all that calmness and dignity which befits our station and position. I trust that in our discussions we shall endeavour, as far as possible, to make our observations with that conciseness of diction and with that courtesy of manner which becomes us when addressing one another, when addressing our equals in intelligence and information, and that

we shall feel sure that the men who sit round this table are not likely to have their opinions swayed by the charms of rhetoric, and that their calm cool judgments are still less likely to be biassed by any violence of language. Gentlemen, I here conclude, and we will now proceed with the business of the day. (Applause.) I think it will conduce to the progress of our business if we proceed to appoint certain committees without which we cannot go on. The first committee to be appointed, and without which, of course, we could not progress at all, is a Business Committee. I do not know whether any gentlemen will offer to serve upon that committee. It is one, of course, which involves a good deal of personal inconvenience, and which requires a daily attendance. I do not know whether we may again venture to trespass upon the kindness and the zeal of our friend Dr. Andrew Wood. If he would allow his name still to be upon that committee, I believe it will conduce very much indeed to the progress of business.

Dr. Andrew Wood said that, if the Council wished it, he would be very pleased to comply.

The following gentlemen were then named as the Business Committee:—Dr. Andrew Wood, Dr. Embleton, Dr. Aquilla Smith, Mr. Cæsar Hawkins, and Mr. Rumsey.

The President: Then I think the next thing is to appoint the Finance Committee. Of course our two treasurers may take part in that—Dr. Sharpey and Dr. Quain. Dr. Aquilla Smith has always been good enough to give great attention to the affairs of the Finance Committee.

The following gentlemen were then appointed to the Finance Committee:—Dr. Aquilla Smith, Dr. Fleming, and Mr. Cooper.

The President: In accordance with the programme and the suggestion of the Executive Committee appointed, and also in accordance with my judgment, you will now be good enough to give your attention to the communication received on May 20 from Mr. Walpole relative to the amendment of the Medical Acts.

On the suggestion of several members of the Council, the President promised to give every publicity in his power to the annual address just delivered.

The Registrar then read Mr. Walpole's letter, as follows:—

"My dear Sir,—Immediately after your last interview with me on the proposed amendments to the Medical Act, I placed the papers in the hands of the Home Office counsel, with directions that he should, if possible, devise some mode of carrying into effect the objects which I understood the Medical Council had in view, without placing what might be deemed undue restrictions on eminent foreign Schools of Medicine.

"The pressure of business upon him was so great that he could not, without great inconvenience, attend to the subject then, and, I am sorry to say, it escaped my recollection that he had not sent me an answer.

"I must remind you that the difficulties which have arisen in respect of this Bill are in no degree chargeable to the Home Office, but they arise from the fact that the Medical Council had deviated from the form of Clause XI. as settled last year by that office.

"Should the Medical Council be willing to adopt in place of Clause XI. the amended clause that accompanies this letter, I do not think that the Government would offer any opposition to the Bill; but as the Bill is not a Government Bill, I must express my concurrence with the opinion expressed by Sir George Grey, contained in Mr. Murdoch's letter of the 11th of May, 1866, that it would be well for the Medical Council to entrust the Bill to some independent member.

"Believe me, my dear Sir,

"Yours very faithfully,

"S. H. Walpole."

The amended clause is as follows:—

"Every one who has resided in the United Kingdom for a period of not less than twelve months immediately previous to making his appplication, and who legally possesses a colonial or foreign degree, licence, or other diploma from a University, College, or other body which qualifies him to practise Medicine or Surgery in the colony or foreign country where such degree, licence, or other diploma was obtained, shall be entitled to be registered under the Medical Act 1858, provided such degree, licence, or other diploma shall have been granted by a University, College, or other body which, in the opinion of the Medical Council or of one of her Majesty's principal Secretaries of State, grants degrees, licences, or diplomas after such course of study and examination as guarantees the possession by the holder of sufficient knowledge and skill for the efficient practice of Medicine and Surgery."

Sir D. J. Corrigan suggested that the original clause should be read, in contrast with the clause proposed by Mr. Walpole.

The Registrar then read the original clause proposed by the Home Office:—"Every person shall be entitled to be registered under the Medical Act of 1858 who is qualified as follows; That he is, at the time at which he applies to be so registered, legally possessed either of one of the qualifications described in Schedule B of this Act (including the diplomas of certain foreign and colonial schools of Medicine), or of some other foreign and colonial diploma obtained, in the opinion of the General Council, after such course of study and such examination as guarantee to their satisfaction the possession by the applicant of sufficient knowledge and skill for the efficient practice of Medicine and Surgery. Secondly, that he has resided in the United Kingdom for a period not less than twelve months immediately previous to making his application. Thirdly, that he has not been guilty of any offence which, according to the law of the country to which he belongs, would disentitle him to practise Medicine and Surgery, or which would enable the General Council under the Act to strike his name off the Register." Then the clause, as settled in the last session, is, at page 129 of the minutes—"Every person who has resided in the United Kingdom for a period of not less than twelve months immediately previous to making his application, and who legally possesses a colonial or foreign diploma from a university, college, or any other body, qualifying him to practise Medicine or Surgery in the colony or foreign country where such diploma was obtained, shall be entitled to be registered under the Medical Act (1858), provided such diploma shall have been granted by a university, college, or other body recognised in a list to be annually prepared by the General Medical Council, which list shall be submitted to her Majesty in council for approval, and shall thereupon be published in the *London Gazette*.

Dr. Alexander Wood now requested the Registrar to read the passages from the report of the Committee at page 124, which was accordingly done.

The President: Now, gentlemen, you have before you the negotiation with Mr. Walpole, and you have an opportunity to contrast his proposition with the original proposition coming from the Home Office, and also with that which you decided upon last year. The question then comes—What do you propose shall be done with this communication of Mr. Walpole?

Dr. Paget: I beg leave to propose to appoint a Committee to consider it. (Hear, hear.) Mr. Walpole's communication must be met at once, though I fear it has put an end to the small power we had, or still have, of carrying through the Medical Acts Amendment Bill in the present session. Consider how the House of Commons is engaged at the present time with the English Reform Bill. Consider how it will be occupied for the remainder of the session with the Reform Bills for Scotland and Ireland. It seems to me to be utterly impossible that a measure introduced by any private member could possibly pass in the present session, even under the favourable circumstances of its receiving the active support of the Government. But if I understood Mr. Walpole's communication, it amounted to this—that he only promises, speaking in the name of the Government, that they will abstain from active opposition to the measure. I think, under these circumstances, it is scarcely possible that any measure introduced by a private member could be passed during the present session. Therefore, the best plan will be to refer the whole matter to a Committee, with a request that that Committee should consider what is best to be done, and report to the Council as speedily as possible. This is the more advisable, because, speaking for myself, I think there are serious objections to the condition that Mr. Walpole or the Government has annexed to their consent not to offer opposition. The condition is the admission of those clauses with reference to the registration of persons with foreign or colonial diplomas. Now, I am well aware that the Council, individually and collectively, have the best possible goodwill towards gentlemen who come to England, either Englishmen or foreigners, with foreign or colonial diplomas, and no doubt there are many instances of persons well known in science. I need only refer, for instance, to Dr. Sieveking, Dr. Farre, and others that might be named, to show that it would be quite proper and necessary to put such men on the Register without requiring them to obtain a licence or

diploma from any English qualifying bodies; but Mr. Walpole's proposal is this. It tallies with the previous proposal of Sir George Grey, that not individual cases, but that Universities and Colleges should be, so to speak, recognised, and that any person coming with diplomas from one of those Universities should be entitled to be registered. It does no doubt propose that the Council should have the power of naming what Universities should be able to give such a privilege to the possessor of their degrees and diplomas; but it also gives the same power, if I understand it, to any one of the Secretaries of State. ("Hear, hear," and a laugh.) So that it might actually happen to be the case of a University or College (and there are many such in some parts of the world), say a Homœopathic College, the degrees of which might not be quite satisfactory to the Medical Council, and yet the holders of those diplomas might appeal to the Secretary of State, and the Secretary of State might have some crotchet upon the subject, and might say it was satisfactory to him, though not to the Medical Council, and thus the Council would be compelled to put the holders of those degrees on the Register, although they knew them to be unfit to practise as British Practitioners. ("Hear, hear," and applause.) I think that is exceedingly objectionable: it is as bad as the mediæval absurdity of the Archbishop of Canterbury's degrees; for a Secretary of State would be very likely no better judge of the qualifications of a Practitioner in Medicine than the Archbishop of Canterbury himself. (Laughter.) Besides these objections, there are others very serious, which are sufficient reasons that this matter should be referred to a Committee to report upon it. Recollect, this is not a question of the mere admission of individuals holding foreign and colonial diplomas. If it were, it need not detain us a moment: I am sure the Council would not allow that to weigh at all against what seems reasonable and fair. But it is much more than that. If it were possible to put foreign and colonial Universities of repute exactly on an equality with the British Universities and Colleges, I feel quite sure the Council would do it. But that is not possible—at least, I do not see how it can be done. And the reason is this, that the Council is vested with a certain authority in regard to these British diplomatising bodies, which it could not have with regard to colonial and foreign Colleges—namely, the right of visiting and reporting upon the course of instructions, and the right, if those reports are not attended to, of suspending and depriving the College for a time of the power of granting any diplomas at all. That is a power which could not possibly be exercised with regard to foreign and colonial Universities; and it is one of the utmost importance with reference to the power of this Council. It is the power by which the Council is actually at the present time, by the visitation of examinations, doing a great deal of good, and gradually effecting a very great change in the standard of minimum qualifications of Practitioners in this country—minimum qualifications, I mean, as regards general and Professional knowledge—so that really by this power the Council hopes to elevate the social status of the Profession and to improve the qualifications of the students in those Colleges.

A Member of the Council called the attention of Dr. Paget to the fact that the clause permitted any one of Her Majesty's principal Secretaries of State—not the Home Secretary only—to exercise this power.

Dr. Paget: That is what I say—so that it may be a Foreign Secretary, who, feeling an interest in some foreign college, or perhaps with some diplomatic view, or to please some of our colonies who feel disposed to quarrel with us, may grant such a concession. In fact, the thing is quite inadmissible. The general principle of it is one which altogether requires the serious attention of this Council; and I therefore propose, as the only step which it seems to me at this moment possible to take, that we appoint a committee to consider Mr. Walpole's communication and the several notices of motion relating to the Medical Acts Amendment Bill, and to report to the Council as speedily as may be what course they think would be advisable under the circumstances.

Mr. Rumsey: Although nominated by the Crown to the seat I have the honour to hold in this Council, I cannot avoid on the present occasion expressing my deep surprise and regret at the manner in which the Government of this country has received the communication made to them from you, sir, after our last session. I wish not to say more than is absolutely necessary; but I do conceive that a Council which has been called into being by the Legislature of the country, and placed in relation with one of the highest departments of the State—the Privy Council—had at least some claim on the Government to be regarded as an authority in the matter of a Medical Acts Amendment Bill. Government should certainly, if they did not approve of all the provisions of the Bill, or of any one of them, have given the reasons of that disapproval. But as far as I understand the communication made to us to-day, the Government have not condescended to give the slightest reason for their setting aside the clause which we proposed to substitute for theirs; nor any reason for the alteration they made upon their proposal of last year. The report of the Committee on the draft bill of last year gave good ample and satisfactory reasons for the change we proposed to make. To say the least, it would have been courteous in the Government to have answered that report; but not a word of the kind have we received. Nor do I think the plea of public business during the present session is at all a valid one. They had this measure before them very soon after our last session—long before there were any of those exciting questions which have turned up at a later period, and at a time when they had leisure to deliberate and to say whether or no they would accept your Bill. But they paid no attention at all until it was too late. Other measures have been brought forward—a Vaccination Bill of a very indifferent character has been proposed by the Privy Council, and has been pushed up with great activity; and yet the Amendment of the Medical Acts Bill has been not only set aside, but it is proposed that a private member shall bring it in instead of the Government. Sir, I do say that such a proposition is most disrespectful to this Society.

Mr. Syme (who was quite inaudible at the reporters' table) was understood to say that on former occasions the Council thought they had reason to complain of the indifference and apathy of the Government with regard to this question; but it seemed to him that now they had gone beyond apathy and indifference, and had treated them in a manner which amounted to an insult to their body. ("Hear hear," and applause.) The proposal of the Government was one which, if carried out, would lead to the most disastrous results. No one could doubt, from what we know of the sentiments and opinions of some members of her Majesty's Government, that there would be at least one individual member of that body who would be disposed, through private friendship or the representations of interested parties, to nominate as a registered Practitioner some person who might be disgraceful to the whole body of the Medical Profession. Nobody can doubt it. Fortunately they had got rid of Mr. Walpole, as far as his official capacity went; but he considered it was the first duty of the Council to reply to his letter, and then communicate with his successor. He would move that the Council be requested to communicate to Mr. Walpole the result of their determination with regard to the clause, and also to intimate to him that his proposal that the Bill should be entrusted to a private member was quite inadmissible. He felt so strongly the objectionable nature of this proposition that he would rather confine it to that point, in order to show what the opinion of the Council was upon the subject. He believed it would have the effect of putting an end to this frivolous and insulting proposition from the Government.

Dr. Andrew Wood seconded the motion. I understand Professor Syme to say that it will never do for the Council to take anything but an independent and strong course in this matter. I think we have great reason to complain of the way in which we have been treated, and I have no hesitation in saying that the Home Office, whether under the previous Government or under the present Government, have not paid that attention to this Council which, from its position, it deserves at their hands. ("Hear, hear," and applause.) Nay, more; if I understand Mr. Walpole's communication, it is this—he endeavours to throw upon the Council the blame of the delay that has taken place in bringing in that Medical Amendment Bill, for he tells us that it is in consequence of our not adopting the clause sent us by Sir George Grey that the delay has taken place. Now, I will put the question—did Mr. Walpole ever give us the least idea of that some months ago, when we waited upon him? Did he ever give us to understand—"The reason why I did not take up your Bill, or why I did not give you the communications you ask" (which he did not give for months), "is because your clause is not satisfactory"? If he had told us that, we should have known exactly what to do, for we were put off from day to day without any reason being given, and now the cat jumps out of the bag, and we are called upon to adopt a clause in a new Bill which I have no hesitation in saying effectually goes to unseat the Medical Council from the power of regulating

the registration of the Profession, and to make it co-ordinate, if not subordinate, to the Secretary of the Foreign, Home, and other Departments. Now, I say, rather have no Bill at all than that. I would throw the Bill over the table and cast upon the Government the blame of allowing a state of matters to continue which is not a hardship to the Medical Profession chiefly, but which is far more a great hardship to the public, who, if the Government will not take up this Bill, will see a continuation of men practising under titles implying that they are Physicians or Surgeons, and committing very serious injuries upon her Majesty's lieges. I say, if the Government make up their mind to that, upon them be thrown the odium, not upon this Council. (Hear, hear.) I can only say that you yourselves have been most constant, in season and out of season, in besieging the doors of the Home Office, and I have no doubt, perhaps, Mr. Walpole is tired of seeing your faces there so often. I am sure you will give credit to the Executive Committee also, that they have aided you to the best of their power to make the Government take up the Bill, which seems to me to be properly a Government matter. But Government have not done it, and they do not say they will do it yet. They come and dictate this clause in a Bill, and at the same time tell us, "We will not bring it in as a Goverment measure; you must get some private member to bring it in yourselves." I say that is unreasonable; I say that it is not treatment we ought to put up with or receive from the Government of this country. But how does the matter stand now, I would ask? Are we still to go on in communication with Mr. Walpole, or are we to go to the Home Office, or are we to go—and perhaps that would be the best thing after all—to Lord Derby himself? At the present moment, here we are meeting to consider this Bill, and Mr. Walpole is with the Queen at Balmoral. We have no means of personal communication with him, we have no means of knowing whether he is to take charge of this matter in future. I think, therefore, the proposal of Professor Syme is a good one, that we should at once go to the Home Office or to Lord Derby, and I believe that would be better, and state exactly what has happened with regard to this matter, and at the same time state that this Council cannot accept the proposal made, and cannot undertake the duty which has been endeavoured to be committed to them by two Governments, of finding a private member to bring in what is a public Bill. I therefore feel great pleasure in seconding what Professor Syme has said, and I do trust we shall take our stand in this way, and then, at all events, whatever happens, we shall stand well with the Profession and the public for having done our duty, and let the Government excuse themselves as best they can.

Professor Syme: I have drawn up a resolution in which I have endeavoured to explain my meaning:—"That the President be requested to intimate that the Medical Council cannot entertain the proposal of the last communication from Mr. Walpole, to the effect that one of Her Majesty's Secretaries of State should insert the names of foreign and colonial Practitioners in the Medical registers."

Dr. Wood: I should go further than that. Professor Syme thought that if more than that were inserted it would weaken the expression of the opinion of the Council upon that point. Dr. Wood proposed to state the objection of the Council with regard to the Bill being entrusted to a private member.

Professor Syme: I intended to have moved a separate motion with regard to that, and if the President will allow me I will do so.

Mr. Cæsar Hawkins rose and said: The motion of Professor Syme, and the manner in which it has been received by the Council, and the question which is left open as to whether we are to go to this person or to that person, all tend to show me the utmost necessity of adopting the proposal to refer the matter to a committee. It is quite clear if we go on to-day with this matter, nothing satisfactory will be done, and it is better, I am quite sure, for the committee to consider each of the items of this matter in a clear and proper way. Suppose you send this to Mr. Walpole, and to Mr. Walpole you would have to send it, I suppose, because the Government has had nothing to do with it. Sir George Grey individually, and Mr. Walpole individually, are the only persons who have had anything to do with this matter. Suppose, then, you send it to Mr. Walpole. The first question would be—to whom are you to go next? And suppose you went to Mr. Gathorne Hardy, his question would be, "Well, what do you propose instead of this?" Place it clearly before Mr. Gathorne Hardy or Lord Derby, or whoever else you are determined to go to, before you adopt a motion of this kind simply rejecting what the Government has proposed. I think the better way would be to have a committee appointed to consider the proposal of Mr. Walpole, in conjunction with that of Sir George Grey, and to bring the whole subject clearly before us, and then let us determine not only what we shall do with this letter, but further what we shall do with the Government with regard to the Bill.

The President: This motion is proposed by Dr. Paget and seconded by Mr. Hawkins.

Dr. Sharpey: I think, with Mr. Hawkins, that we should not send a mere communication to the effect that we do not accept the proposal of the Government. I quite feel, with the rest of the Council, that this is a very humiliating message to receive from the Government. At the same time, I do not think it will be a useful or practical course to go to Lord Derby, or to anybody else, and simply say, "We refuse to adopt this." That is not a proceeding likely to lead to any issue. I quite agree with Dr. Paget and Mr. Hawkins that it would be much better to send the whole question to a committee to report upon it, to make their proposal, and to assign reasons for any proposal that they may make; and therefore I shall vote for the original motion.

Dr. Alexander Wood: As I understand the position of things now, we have a motion before us for the appointment of a committee to consider fully this subject, and to report to the Council. Another proposal before us is that of immediately stopping all further negotiations with Mr. Walpole with regard to this Bill. Now, I strongly support the former of those propositions, and for this reason—I do not yield to Professor Syme, or to Dr. Andrew Wood, or to any gentleman round this table, in feelings of indignation at the communication which has been made to us, or in feeling that this Council, called into existence by Act of Parliament, ought to be a body with whom the Government should consult in all those matters. I feel that we have been insulted by such a communication as that which has just been read, but I think our reply to that communication will have much greater effect if it is calmly, coolly, and deliberately considered and prepared by a committee, than if it bears, even though it may not be truly so, upon it the impress of having been delivered in a fit of irritation and indignation, however just, at the treatment we have received. I would recall the attention of this Council for a single moment to what seems to have escaped the attention of some of the former speakers—at least it has not been alluded to by them—namely, that throughout the entire of the correspondence which has been carried on between the Home Office and yourself, sir, there have been certain individual cases referred to as cases of hardship; that the contention of the Home Office has been to get certain individuals recognised as fit to be put upon the Registry, whom I believe not a single person at all round this table, or a single respectable member of the Profession in Great Britain, would wish to see upon the Medical Register. And I also further would remind the Council that when there was a strong desire upon the part of the Committee to draw up a schedule such as that suggested by the Home Office, if foreign and colonial Universities and bodies think fit to give a licence which should admit the holders upon our Registry, the difficulties of framing this were found to be insuperable. In the first place it was difficult to get accurate information with regard to these bodies, and in the second place the information that was got with regard to many of them—and I speak with some right to speak upon the subject, from having been for some years your Chairman, with regard to the claims of foreign graduates—proved that in certain countries the whole arrangements of the Universities were very different from those of this country, that though they were called by the same name they mean very different things. I may refer to America for example. In America a University is not at all the same sort of thing as it is here. Any two or three individuals, clubbing together for the purpose of forming a school, are entitled by the laws of the United States to receive the *imprimatur* of the Government, and to be constituted a Government University, and then, of course, they had the name and authority of what is called a school. They often labour under the worst of all diseases—impecuniosity—and are fain to relieve that impecuniosity by the granting of degrees in a manner that is not at all reputable or safe for us to recognise. Now, looking at all these things, looking at the great care required on the part of Medical men accustomed to look into these matters and to sift the evidence of these qualifications; looking at the impossibility which we expe-

rience, with all the desire on the part of the American Consul to give us the information we require, with respect to the American Universities—there were many the names of which he had never heard of before; looking at the proclivities of Secretaries of State in favour of all sorts of heresies in Medicine, I say we should incur the greatest possible danger, and we should be very foolish to expose ourselves to it, if we go on with this Bill in the face of the warning, if I may so call it, which we have received. We are asked to alter this Bill to suit Mr. Walpole. The Government has altered it, and the Government does not appear to say whether they will assist in bringing it in, but simply that they will not oppose it if we entrusted it to a private member; so that we, the Medical Council, constituted under the Act of Parliament, acting, in the best of our belief, in the interests of our Profession, may be opposed by the Government in what we consider the best Bill that can be introduced on the subject unless we can alter it to suit the requirements of the Secretary of State. Now, what is the remedy for all this? Those of us who were engaged in the labours which resulted in that very ill-shaped and misbegotten Bill, which we have sat here for ten years to try to administer, know very well that even that wretched Bill, miserable in the extreme as it is, would not have been obtained unless, year after year, the various bodies represented at this table and the Profession generally had besieged the doors of the House of Commons, until at last, in self-defence, and to get rid of our importunity, they were forced to pass the measure. Now, I say the remedy is to resort to the same process again. Laborious as it may be, difficult as it may be, disagreeable as it may be, that is the remedy for the present evil. We are delegates from the different bodies we represent, sitting round this table, we are representatives of those bodies; but I do think we have perhaps erred a little in not taking the several bodies we represent sufficiently along with us in our struggles for Medical Reform. You cannnot take up a single number of the Medical journals which refer to the proceedings of the Medical Council without seeing us taunted with not having done things which the present Medical Act renders it impossible for us to do. You will find the utmost ignorance prevails amongst Medical Practitioners throughout the country with regard to the powers of the Council under the Medical Act, and we are continually charged with not exercising powers which the law has not given us. Now, let us throw ourselves back on the several bodies we represent, and the Medical Profession generally, and then they will feel the necessity of the reform which we are now contending for. I believe if we now close our communication with Government, as I have no doubt the Committee will advise us to do, and during the recess between this and the next meeting of the Council stir up the various bodies and the Profession generally to beseech Government and the Houses of Parliament to give us a proper Medical Act, we shall receive a better proposition than that which was the minimum Bill—the least reform which we could do with; and those among us who are spared to come up to the next Council would have a very different measure to deal with from that which we are now considering. But I think all this should be done calmly and deliberately, and not in the hasty manner which Professor Syme proposes, although I admit his is only the expression of a very natural feeling, but I think to appoint a Committee calmly considering the question will be the safest course to adopt, and, perhaps, the most effective with the Government. With these remarks, I beg to support Dr. Paget's motion.

Dr. Christison: I think there are very few of us who, upon hearing that clause read by the Secretary, must not have felt very great surprise, to use no stronger expression, at the propositions therein contained. At the same time, I think our expressions of feeling have been effectually brought forward, and it now becomes a serious question whether we are to close at once our communication either with Mr. Walpole or the Government, and upon maturer reflection I am disposed to depart from my original intention, to go at once with the vote of Professor Syme, and to recommend that we should refer it to a Committee for full consideration. To that Committee I would also beg to refer the motion which was made, and alluded to by every speaker on this matter—namely, with regard to the more general question, whether we should ever assent to a Bill being brought into Parliament for amending the Medical Act, except by Government. For my part I feel there is one sufficient reason for not doing so, and that is, that we have not a chance of carrying such a Bill. Under present circumstances such a thing is utterly hopeless, because how does the matter stand? It is right the Government should know this, and it is plain they do not; otherwise such a proposition as Mr. Walpole's would not have been made to this body. It is now twenty-seven years since the Medical Reform Act, as it was then called, was accepted by Sir James Graham; it was repeated in 1845, and on every occasion when an attempt has been made to bring in a Bill for reforming the condition of the Medical Profession, it has been found that, however private members might move in the matter, they were always obliged in the end to give way, and allow it to be brought out as a Government measure. Not only was this Bill carried by the Government, but perhaps we have lost sight of the equally grave fact, that there have been four amendments carried through Parliament in reference to this matter, and every one of them has been brought in by Government. Now, what is to be concluded by the public at large, or by our legislators, if they find that now, when we are asking for a far more important amendment than has ever been proposed, the Government desert us, and grow lukewarm in the matter, saying, we do not object to your getting the Bill, if you can do so, by a private member of the House of Commons? As if this was not a public Bill, and a measure of very great importance! Therefore, I ask, how is it to be supposed that we can ever carry a Bill under such circumstances? (Cheers.) I will not detain the Council with any further observations, but simply ask that the Committee should be requested to consider this question among others, and I will put it in this shape—"That the Medical Act of 1848 was introduced into the House of Commons by the Government of the day, that the four amended Acts since carried, were introduced by Her Majesty's Government for the time being, and that this Council sees great objections to carrying through any important amendment otherwise than by a Government Bill."

Dr. Embleton: I beg to second that proposal.

Mr. Hargrave said that last year Sir G. Grey gave little assistance to the Council; but Mr. Walpole had completely snubbed them, for that was the only term he could apply to his letter. He had listened with great pleasure to what Dr. Christison had said with regard to so important a measure not being brought in by a private member; but he would now ask a question of Dr. Christison—If the Government went on shilly-shallying year after year, doing nothing, what course would it become the duty of the Council to take? Would they not at last be driven to call on private members to press the matter before the House? It was in his recollection that there was a private member when the present Act was being formed who gave great assistance in carrying out the views of the Profession; and he thought that if the Government did not take up the matter, it would be much better for the Council to throw their pride overboard, and to apply to some hon. member of the House of Commons to give his assistance in the matter. He thought it was standing altogether too much on their dignity to refuse the assistance of a private member under such circumstances.

Sir D. J. Corrigan, Bart.: There is one pleasing feature in the whole of this discussion—namely, that we are all, I think, unanimously of opinion that the course which the Government has pursued towards us is one which they ought not to have followed. Upon that there is but one opinion—with, perhaps, the exception of Mr. Hargrave, who says that we should throw our pride overboard, and apply to some private member of the House of Commons to help us. I must say I dissent altother from Mr. Hargrave's proposal, and I think it would not be consistent either with our dignity, with what we have said in our previous resolutions, or with the great interests involved in this question, for us to go forward, as I said before, hat in hand, to solicit votes in the lobby of the House of Commons. (Loud applause.) I quite agree with Dr. Christison that whatever amended Bill is to be brought in must be brought in by the Government; that if the Government do not choose to bring in a Bill, then, as Dr. And. Wood has emphatically observed, let the evils that arise out of imperfect legislation lie at the door of the Ministry, and not with us. (Loud applause.) We passed a resolution last year, to which I will beg to draw your attention. It was a resolution from which there was not a dissentient voice, and I would ask your attention to it at p. 303 of vol. iv. of our Minutes:—"Moved by Dr. And. Wood, seconded by Dr. Alex. Wood, and agreed to (and I know I myself heartily gave it my support):—'That it be delegated to the Executive Committee to confer with the Government regarding the proposed Bill for the Amendment of the Medical Acts; to press on the Government the expedi-

ency of its being adopted as a Government measure; and at the same time to state that the Medical Council are of opinion that, unless the Bill be introduced by the Government, it would be unadvisable to proceed with it.'" To that resolution I would myself strongly adhere. With regard to Mr. Syme's amendment, I would respectfully ask him, on consideration, to withdraw it. With regard to the course which it will become the duty of the Council to pursue, I entirely concur with what Dr. Christison has said, that we should take care that in the feeling we have at the present moment at the manner in which the Government has acted towards us we should not do anything in a hurry; that we should not arrive at a scheme, or any imitation, or any Bill inconsistent with the constitution of a body like this, and, therefore, we should not come to any resolution to-day to express our feelings at once to the Government; but that we should, in accordance with Dr. Paget's proposal, have a committee to consider what is the answer that ought to be sent back. It appears to me the question is a very narrow one—that is, as compared with the Bill. It relates to a single clause. From that clause, as proposed by Mr. Walpole, I myself, and nearly all the members of this Council, dissent. We object altogether to the idea that authority should be given to a Secretary of State to determine as to a man's knowledge of Midwifery—(laughter)—Surgery, or Medicine, and that, in fact, we should be nothing but the mere registrars of the will and pleasure of the Secretary of State, who might send down any day a declaration that his nurse-tender or some old lady relative—(a laugh)—had informed him that Dr. Mary Walker was an extremely intelligent Practitioner, and forthwith we should be desired to put her name on the Register. To a measure conferring such ridiculous powers we never can consent, nor will there be, I think, one assenting voice at this table. I do not go into the merits of the question, but, with regard to the proposal of the Committee, I shall give it my full support on one condition, and that is, that we shall do what we did before when a very important question was before us—viz., that the Committee shall consist of the whole General Council; in fact, that we resolve ourselves into a Committee to consider Mr. Walpole's proposal with regard to Clause 11. We did that on two or three former occasions, and the reason I suggest it at present is that there will be a great variety of opinions—first, as to the way in which it ought to be met, and next as to the substitution of some recommendation from ourselves; and I would rather that the Committee should consist of the whole Council, than that we should present what may be an unseemly appearance—viz., that of a report being brought up from four or five persons, which would be cut perhaps into pieces when it came before the General Council. When considering the question of education during the first year of our formation, it was proposed that a committee should be appointed to report upon it; but on consideration of the great interests involved, and many views that would be taken as to the course to be pursued, it was determined that that Committee should consist of the whole General Council formed in this way—viz., that the General Council should resolve itself into a committee to consider the question. If that will meet Dr. Paget's views, I shall most heartily support him. If we are determined, on the other hand, that an answer should be sent at once with regard to that particular point, I would then merely mention as a suggestion for the Committee, in like manner as Dr. Christison has mentioned his suggestion, "that on the consideration of the interests involved in the question of Medical reform, both to the public and the Profession, the General Medical Council must adhere to their resolution of May 29, 1866—viz., that the Medical Council are of opinion that unless the Bill be introduced by Government it will be unadvisable to proceed with it; and that the General Medical Council must therefore decline to accede to the Right Hon. S. H. Walpole's suggestion that the introduction of the Amended Medical Bill should be given to some independent member of the House of Commons." That is, omitting altogether any reference to that very objectionable clause, and merely basing our answer on the resolution of last year, that we would not undertake the responsibility of bringing a Bill before the House of Commons unless introduced by the Government. However, I would rather waive the discussion of that if Dr. Paget will adopt my suggestion that the Committee should consist of the General Council, and that the business should be taken first to-morrow morning.

Dr. Andrew Wood: I think you will see at once the objection to appointing such a Committee to meet at an early hour. If you have no objection to the Committee meeting at 12 or 1 o'clock—

Sir D. J. Corrigan: I have no objection. What I object to is that such an important question as this should be entrusted to a small committee. If the Council are willing to meet early, I am ready to attend at any hour. But the point I wish to put to you is, that on an important question like this the Council ought to resolve itself into a committee to consider it.

A Member of the Council: I think Sir Dominic forgets that in those cases when we resolved ourselves into a committee of the whole Council on Medical education, it was after a small committee had considered the various suggestions, and amalgamated them into a report; and I think in the present instance it would be better to follow the same plan. I quite agree with him that the subject must be taken up by a committee of the General Council.

Mr. Syme: As this is an occasion on which it is very desirable we should, if possible, be unanimous after the expression of the opinion of the Committee, I beg to withdraw the amendment I made, and to ask that it should go with the other suggestions to the Committee of the whole Council, who will have to consider the matter. I must say I quite agree with what Sir Dominic Corrigan has said, that it would be better to have it discussed in that way.

Dr. Andrew Wood: Let it be an open committee.

The President: The words of Dr. Paget's motion are not restricted to a large committee or a small committee; therefore it will be entirely open to the Council if they like to attend it. The motion we have before us is proposed by Dr. Paget, and seconded by Mr. Cæsar Hawkins.

Dr. Acland: I would ask permission to say a few words on this matter, which concerns us all so much, and chiefly to express my dissent from Mr. Hargrave. I quite agree with Sir Dominic Corrigan and others who have said that for us to bring in any amendment Bill after so many years of our existence otherwise than through the Government would be practically to alter the position of the Council altogether, and, in my judgment, would be taking a course which would be quite suicidal. I would rather remain for any reasonable time, year after year, until we had by our own power and weight in the country obtained a proper Bill. (Hear.) Now I look last year no direct part in the preparation of the Bill which is now before us, and for this reason, that I felt strongly there were many matters in the minds of members of the Council of very great consequence to the public, and to the Profession—educational and other matters—which ought to be incorporated in any Bill which an important body like this Council should bring forward; and I did not think that we could with much chance of success in any way compel or even request the Government of the country to take up any measure excepting what may be called a Government Bill. But as I understand Dr. Paget's motion will refer all matters which should be incorporated in a Medical Bill to a Committee, and as I believe in that manner the members of the Council will have, *de novo*, an opportunity of suggesting, with reference to any Bill, whatever upon their mature judgment they think will be required, for that reason I heartily support it. I hope the Committee will not be a very large one, because I believe the time of the Council will be greatly saved in that way if a committee such as Dr. Paget suggests be appointed to bring forward some definite scheme before the Council, and no doubt in a day or two that might be done.

Dr. Quain: I wish to say a word or two upon this, because the view I take of the present proceedings has not been mentioned exactly by any member of the Council. We have received a communication from Mr. Walpole, and it seems to me our simple duty is (and the sooner we perform it the better) to send him an answer. I think that is our first duty. What that answer should be, there cannot be the slightest difference of opinion with regard to the clause itself. We are unanimous that it is impossible to agree to it. We might even refer Mr. Walpole to the following clause in his own Bill, which requires any College in this country which wants its qualifications recognised to apply to the Privy Council; so that, in fact, a foreign college would get its qualification recognised by a simple application to a Secretary of State, whereas a University in this country must by that Bill apply to the Privy Council for that purpose.

The President: That clause was made by the Home Office, when Sir George Grey was there. Mr. Walpole had nothing to do with it.

Dr. Quain: Still it is in the Bill. You will find it in the

fourth volume of your Minutes, page 123. There is no doubt that that was the means by which any English University was obliged to get a new licence; so that literally an English University is put in a thousand times worse position than a foreign one by this proposed clause. I think that clause is a complete answer to that letter. Sir, I cannot help feeling that when I was appointed to this Council I was appointed to a public body which stood between the public and the corporations. I did not belong, I supposed, to a new corporation that was to seek its own interests and to further itself by going to Parliament and getting what it wanted there. I thought we were a Government body, and that it was in the interest of the Government that we should be a public and an independent body, and I still think that it is for their interest that we should be maintained as such. I believe, if a reply is sent to Mr. Walpole stating why we should maintain our character as a public body, it would be a simple and first duty to perform, and therefore I think in the second place that there should be another Committee to indicate what course we should take afterwards. I think the two questions are separate and distinct, and should be considered entirely apart. In the first place an immediate answer to Mr. Walpole's letter should be drafted; and in the second place there might be a second Committee to consider what our course might be. Having appointed a small Committee first to draft a suitable reply, I think we should then appoint a large Committee for the purpose of a deputation to Lord Derby, to recommend any course they think fit. I therefore propose that a Committee be appointed to prepare a draft reply to the letter which has been addressed to us by Mr. Walpole, and that that Committee be requested to report to the Council to-morrow.

Mr. Syme: I beg to second the resolution. It was in deference to the expressed wish of the Council that I withdrew my motion.

Sir D. J. Corrigan: I think Dr. Paget's resolution and Dr. Quain's are the same.

Dr. Quain: Oh! no, they are not.

The President then read the amendment of Dr. Quain and the original motion of Dr. Paget.

Dr. Risdon Bennett: I am sorry to prolong this discussion, and especially to take up the attention of the Council in any way unnecessarily on this its first day of meeting, but it does appear to me that there is an important reason for adopting the line of procedure suggested by Dr. Quain, which has not hitherto been alluded to. In the first case, *primâ facie*, it is desirable that we should give as courteous an answer as possible and as speedily as possible to Mr. Walpole's letter. Then when we have done that, it seems to be the general opinion of the Council that we should close our negotiations with Mr. Walpole, and I think it is clearly very desirable that we should do so, inasmuch as he is no longer a member of the Government.

Several Members: He is in the Government, but not in the Ministry.

Dr. Risdon Bennett: If I understand the position of Mr. Walpole, he is no longer taking charge of this matter on the part of the Government, but merely as an individual member who has had it in hand hitherto, and who is willing to carry it on.

The President: No, Mr. Walpole is not at all willing to carry it on. He intimates that if the Medical Council adopt a suggestion made by him, the Government will not offer any opposition to any Bill which we may bring in. He writes to me as a member of the Government, and pledges the Government to that extent.

Dr. Risdon Bennett: Then in that case my remarks will not apply. But it seems to me we have now arrived at a point at which it becomes us to understand, once for all, what is our position with reference to the Government. The authority by which we sit here is, I apprehend, that of the Medical Act of 1858, and the preamble of that Act states the object for which we are appointed. Now, if we show the Government that it is impossible to carry out the general purposes of the Act, going on as we have hitherto done, proposing a Bill for the Government to accept, then alterations from them, and so on, and also telling the Government this, "We are a public body, appointed by you for specific purposes; having purposes we cannot fulfil unless a supplemental Act is passed, and unless supplemental powers are given to us beyond those contained in the Act of 1858. We are willing, and choose to point out to you wherever that Act is insufficient, and what further powers we want to be possessed of, and we will do our best to submit to you a Bill which will enable us to carry out the purposes for which we are constituted." We consider it to be the duty of the Government to carry into effect any such proposed Bill; and, unless they understand very distinctly and clearly what is our opinion and position, it is impossible for us to attempt anything. We must point out what are the deficiencies, and then leave the onus upon the Government of carrying out a proper scheme to supply those deficiencies. I certainly should be anxious that our communications with Mr. Walpole should close as soon as might be, and then that we should apply to the Government, that we should state our whole position truly and frankly to them, and let them perceive what our wishes are, giving them thoroughly to understand that, unless they are prepared to carry them out, we cannot, as a body, do anything in the matter.

Mr. Rumsey: I wish to explain, in a few words, my reason for supporting Dr. Quain's amendment, and those which prevented my supporting the original motion. They both appear to have the same object—viz., the appointment of a Committee; but their objects are really very different. Dr. Quain would confine the action of that Committee to the immediate duty which belongs to this Council—viz., that of replying to Mr. Walpole's communication. It does not enter upon the much greater question which would be included in the consideration of the amendment which may be introduced into a Bill for the amendment of the Medical Act of 1858. There are many very great and important questions, as Dr. Acland has suggested that he would like to see introduced many that I should like to see. If we are to enter upon all this, the answer to Mr. Walpole's communication might be delayed far beyond the end of this session, and therefore I think it would be better to treat the two matters separately, by adopting Dr. Quain's suggestion, and referring the answer immediately to a small Committee, and then after that appointing a Committee to consider what other matters are desirable to be inserted, either in this or in any larger or more important Medical Acts Amendment Bill.

Dr. Alexander Wood: I am prepared to support both propositions, that a direct communication should be made as proposed by Dr. Quain, and also I am prepared to support an amendment for a Committee, as proposed by Dr. Paget. That Committee would consider what course should be pursued with regard to the Medical Acts Amendment Bill. I think it would be a great misfortune if we had two Committees for considering the same thing. I agree with Dr. Paget.

Dr. Paget: That is exactly what I was proposing—to add the words "that the same Committee should report to-morrow what answer should be given to Mr. Walpole's letter."

Dr. Quain: I have no objection to that. I should have proposed a small Committee of two or three to draft an answer. I mean, I think it will be a waste of power for the whole Committee to consider that subject.

Dr. Paget: That would be easily amended by the Committee appointing a sub-committee for that purpose.

Dr. Quain: I have not the least objection to that.

Dr. Paget: With regard to the remarks of Sir Dominic Corrigan about the Committee of the whole Council, I agree with him; but I think that we should have before us a more definite statement, such as would be drawn up by a smaller Committee, in order to make our discussions more to the point. From Dr. Christison's suggestion, I think he will have no objection himself to be on the Committee. He would naturally and very properly bring those suggestions before the Committee, and in that way they would be sure to be discussed; and so with regard to the views in relation to the amendment of the Medical Acts entertained by other members of the Council. During the discussion there has been by one or two members of the Council perhaps a little injustice done to Mr. Walpole's communication.

Sir D. J. Corrigan: I do not know whether Dr. Paget is replying or not, but I shall support Dr. Quain's amendment for this reason, that it deals with the only question, and the most important, before us—viz., the answer to Mr. Walpole's letter to us. If we mix up the subjects together, which have no necessary connexion, and refer those to a committee, I am afraid our labours will be greatly increased both in committee and in the after discussion. My objection to voting for Dr. Paget's resolution in the present form is this, that it mixes up, if I understand it rightly, the consideration of all Medical Acts, the consideration of all the notices of motion and of the amended Medical Acts; and my opinion is this, that if we mix them up with the simple question before us—viz., the

reply to Mr. Walpole's letter—we shall have a very confused state of things, and a very tedious labour to go through. I therefore support Dr. Quain's amendment, and take exactly Dr. Andrew Wood's view—viz., that I shall distinctly support Dr. Paget's resolution if he brings it forward as a substantive motion. Let us hear the two. Let us first give an answer to Mr. Walpole's letter, and then let Dr. Paget bring forward his motion, as a substantive resolution, that a committee shall be appointed to consider the whole of the Medical Acts, and I will support that with pleasure. But I will suggest to the Council that it will be much better policy on the present discussion to limit the work of the committees solely and completely to answering that very short letter from Mr. Walpole on two points—1st, with regard to his suggestion to us that we should introduce a Bill through an independent member; and, 2ndly, with regard to the clause which he proposes. Both proposals will be met by our negative; and our answer will be strictly confined to the fact that we must adhere to our former resolution. We must simply say, "We have passed the resolution that we would not place ourselves in the position of engaging the agency of a private member of Parliament, and we must decline to accede to his suggestion." The answer is a very short and simple one; and if we adopt Dr. Quain's amendment we shall get the ground quite clear before us, and can afterwards take up the other part of the question.

Dr. Parkes: Allow me to ask the Council whether we might not arrange the matter in this way: the Medical Bill has been so thoroughly discussed in this Council that it fills one with horror to think of another discussion upon it. Every clause has been adopted, and at the end of every clause we have had to go over the whole thing again in consequence of the statements made by certain members of the Council. I confess I should view with very great dislike any new discussion on the Medical Acts, and, therefore, I propose this as an amendment on Dr. Paget's motion—viz., "That a committee be appointed to prepare a draft answer to Mr. Walpole's letter, and submit the draft of that answer to-morrow, and that the Deputation Committee be requested to seek an interview with the Premier for the purpose of considering the Bill already carefully prepared by the Medical Council." (Applause.) That will bring the matter to an issue, and will not burden the great question which I am afraid must occupy the whole of our time unless we carefully avoid it.

Dr. Paget: Will you allow me to say that Dr. Quain has put his amendment in such a form as to be quite acceptable to Mr. Hawkins and myself? I will, with your permission, read it, and, if it is generally acceptable, it may shorten the discussion. "That a Committee be appointed to consider Mr. Walpole's letter and to prepare a draft reply to be submitted to the Council to-morrow; and that the same Committee be requested to report to the Council on the steps to be taken hereafter with reference to the amendment of the Medical Act."

Dr. Acland: Having heard that, I will venture to say a word with regard to Dr. Quain's amendment. It is simply this—We seem to be approaching a clear understanding which it is best not to disturb. There is, 1st, the answer to Mr. Walpole. I believe it is the opinion of every member of the Council, as far as I can judge, that that should be sent as speedily as possible. Then, 2ndly, there is the amended Bill as it now stands, and we are assuming what I hold to be by no means clear, that if there were a fresh attempt made, the Government would not take up this matter. Now, I do not at all know, I do not feel the slightest conviction in my own mind, that if the matter were put as it now stands, and the present Home Secretary, Mr. Gathorne Hardy, who is an active energetic man, as we all saw in his conduct in the matter of the Poor-law Bill—I do not feel at all certain that this short Bill could not pass, or that he could not be persuaded to take it in hand. But neither of these points has anything to do with the third question—namely, the reconstruction of all the other amendments, and, under the existing circumstances, I think it would be quite clear that the wish of the Council is best carried out by having these three points kept quite distinct. The answer to Mr. Walpole is clear enough, and can be arranged before we leave to-night. Then, secondly, an address to Lord Derby to carry this Bill as it is; and then, thirdly, we may spend as much time as we like in the consideration of the other resolutions. Now, under existing circumstances, I have no objection to agree to a report, which I did not last session, to present the existing Bill as it is, but I understand that by taking this course under existing circumstances we are not to depart from a plan of taking all sorts of means for pressing the present Government upon the subject. I think if Dr. Paget could in any way keep those three points quite distinct, we ought to agree to his motion, but I do not want the second and third of these objects to be either overstepped in the form of an amendment. They are quite distinct.

The President: Dr. Paget, will you be kind enough to state how far you wish the Council to deal with your motion?

Dr. Paget: I will refer to that amendment which has been given by Dr. Quain, and which I just read to the Council. I am not prepared to do more than that, because it seems to me no answer could be returned to Mr. Walpole without some consideration what you would do. We are not going into a discussion of all the details of how it should be mentioned, but you must form some notion of what your next step will be before you can return an answer to Mr. Walpole, unless it be some very curt unceremonious reply that you propose to make. I think if the Committee be bound to produce to the Council to-morrow a letter in answer to Mr. Walpole's communication, then, if they find it necessary to take more time for the consideration of other matters, they can do so, but I think they should also be prepared to point out to the Council what immediate course should be pursued with reference to going to Lord Derby or Mr. Gathorne Hardy, or what not. I think the letter can hardly be written without consideration of what steps are to be taken. Allow me to say, although I object to Mr. Walpole's clause, it has been a little misunderstood. It is not proposed to grant to the Secretary of State the power to say that this man or that shall be entered on the Registry, but what it proposes to do is to give to the Secretary of State the power of saying that this or that University shall have its degrees recognised.

Sir D. Corrigan: That is worse.

Dr. Paget: It may be worse, but it is, at all events, the same thing. I ask leave to submit that a committee be appointed to consider Mr. Walpole's letter, and that a draft reply be submitted to the Council to-morrow, and the same committee be requested to report to the Council on the steps to be taken hereafter with reference to the amendment of the Medical Act.

The President: It is only competent to Dr. Paget to submit this with the consent of the Council. Do I understand that Dr. Quain withdraws his amendment?

Dr. Paget: This is Dr. Quain's own writing.

Dr. Quain: The better way will be to withdraw the resolution and the amendment, and then to substitute this motion for them, and I will now second it.

The President: That is what I think. Do the Council agree or not to that course of proceeding—do they consent that the original motion and amendment be withdrawn, and this motion be put?

The Council having expressed their assent, the President put the amendment to the meeting.

Mr. Rumsey: I propose an amendment—namely, that all the words of the resolution following the word "to-morrow" be omitted.

Sir D. J. Corrigan: I beg to second that.

Mr. Rumsey: In the event of its being carried, I am desirous to know, will it preclude the possibility of our dealing with this great question? I am afraid, if you reject that part of Dr. Paget's motion in favour of the amendment, you have settled the question, and you cannot take up what we have to-day referred to. I merely ask the question.

Dr. Paget: I agree that it will preclude the Council from waiting upon Lord Derby or taking any other steps. It would occasion unnecessary delay.

Sir D. J. Corrigan: With regard to that observation of Dr. Paget's, that it would preclude the Committee from suggesting that a deputation should wait upon Lord Derby with regard to various matters connected with the legislation, I think, on consideration, Dr. Paget will see that that will contradict the reply to Mr. Walpole, and would add very much to the labours of the Committee. If the two subjects be mixed up together, I think it is perfectly evident that we cannot deal with the reply of Mr. Walpole without taking up the other. It is a very complicated and difficult question. With regard to waiting upon Lord Derby at such a critical period as the present, I am sure his only desire would be to bow us out of the room as quickly as possible. It is impossible to do any such thing this session as to carry this Bill. If I thought this would have the effect of preventing us from taking up the question of Medical reform afterwards in a lengthened way, I should not support it. I have simply proposed that those words should be omitted in order that we

should confine ourselves to the simple question of replying to Mr. Walpole's written communication, and I am sure I should have great pleasure, if Dr. Wood will move it to-morrow or the day after, in seconding this resolution—"That a Committee be appointed on the subject of Medical reform"—so far am I from wishing to stop such a thing.

Dr. Andrew Wood: We are getting into a fix, in this way—that last year we devoted ourselves day after day to maturing what this Council considered a proper Medical Amendment Act. We prepared that Bill with the greatest care. There were many divisions upon it, but the mind of the Council was fully made up upon this—that it was a good Bill—and I believe the criticisms of the Medical press have given their *imprimatur* to that Bill. Now, that we must answer Mr. Walpole is quite clear, and I trust then we shall have done with Mr. Walpole. But are we going to drop our Medical Amendments Act because Mr. Walpole has suggested a course that we cannot agree to? I do not see why we are, and I should be extremely sorry to think that you were going to send the Medical Amendments Act back to a committee in order that they may bring up a number of suggestions such as we had last year, and begin a fresh agitation for a new Amendment Act Bill. Surely the Council do not want that? I say if you adopt Dr. Paget's motion the Committee will have to go into it. The straightforward course is that suggested by Dr. Parkes, and I hope the Council will throw out Dr. Paget's motion and adopt the motion of Dr. Parkes, because that will put us in this position—we shall, in the first place, answer Mr. Walpole as he deserves to be answered, and we shall then have done with him, and we shall then go to Lord Derby or to Mr. Gathorne Hardy with our Bill in our hand, and say that we hold it is entirely essential that the Bill be brought in by the Government, and that if the Government take it up and suggest any alteration which they think ought to be made we are quite ready to consider it—that our anxiety is that the Government should take up the Bill in some shape or other and carry it through, that we may be no longer going on as we have been. But as to taking up the time of the Council for another session in reopening the whole of this question, and going on day after day in discussing it, I say the Medical Council will stultify themselves if they permit such a thing. I therefore humbly trust that Dr. Paget's motion will be thrown out, and after that that Dr. Parkes's amendment will be accepted, which I will now read.

The President: You must postpone that.

Dr. Andrew Wood: I am reading it as part of my speech, showing exactly what I wish the Council to do—"That a committee be appointed to prepare a draft answer to the Council to-morrow, and that the President of the Executive Committee be requested to settle an immediate interview with the Premier for the purpose of urging upon him the necessity of introducing as a Government measure the Bill already carefully prepared by the Medical Council." I think that is the proper course to take, and that it will expedite the matter. We shall know in the course of the present session whether the Government will stand by the Medical Council, or whether they will at once say "Gentlemen, we shall have nothing more to do with your Bill." Then we may consider what we shall do. We may say *liberavi animam meam*—we have done our duty. I think, therefore, we should take the straightforward course and show the Government that we have not brought before them an ill-considered Bill, but a Bill considered for several years. I therefore hope the Council will adopt Dr. Parkes's resolution, and be straightforward both in the matter of the reply to Mr. Walpole and the deputation to Lord Derby.

Dr. Alexander Wood: I think Mr. Walpole's communication to us consists of two parts. There is first the declaration on his part that the Government will not bring in a Bill; that must be answered by us in the emphatic way in which we answered a similar communication last session. Then, in the second place, there is the complaint against us that we took upon ourselves to alter the Bill after it had been revised by the Government solicitor; that is the second thing to be answered. Then, in the third place, there is now proposed a clause perfectly different from any clause that we have had under our consideration before, and I presume this Council is not going to expose itself to the charge of rashness, and, without having a committee to consider the report upon that clause, to reply upon it. This, I understand, is all that is proposed by the motion before you—merely to consider these new suggestions made by Mr. Walpole. There is nothing in the motion that would warrant the Committee in opening up all the questions. Lastly, there is the motion which I have had for some time upon your paper, referring to the subsequent Bill—the Bill which it was proposed to send to the same Committee to deal with. But I suppose Dr. Paget would be as adverse as my friend, Dr. Andrew Wood, to reopening the whole discussion. However, I think if you throw out Dr. Paget's motion you will land yourselves in a very great difficulty, and the proof of that is, that Dr. Andrew Wood could not conclude his speech without dragging in, with a very side wind, a motion which is not in existence yet—he must drag in what is in the future before he concluded his scheme of action. Now, I say we have simply to deal with what is before us. We have Dr. Paget's motion; let us deal with that in a sensible and straightforward manner.

Dr. Paget: I have nothing more to say than this, that if Dr. Parkes's motion were before the Council I have still objections to urge against it.

The President: The motion before the Council is this:—Proposed by Dr. Paget and seconded by Dr. Quain: "That a committee be appointed to consider Mr. Walpole's letter, and to draft a reply to be submitted to the Council to-morrow, and that the same committee be requested to report to the Council to-morrow on the steps to be taken hereafter with reference to the amendment of the Medical Acts Bill." To that an amendment is moved by Mr. Rumsey, and seconded by Sir D. J. Corrigan, and which I now put to the Council.

The amendment was lost by a minority of six to thirteen.

Dr. Parkes: Do we distinctly understand that the question of the Medical Bill is not to be reopened? because my vote entirely depends upon that. If we are merely to discuss this particular matter I do not care, but otherwise our time will be taken up by a discussion which has already taken place.

Dr. Paget: It will certainly not open the general question of the Medical Bill, but it will be absolutely necessary to take into consideration that clause to which Mr. Walpole's proposal is an amendment.

Dr. Parkes: You will take that into consideration in your answer.

Dr. Paget: I object to its being so exactly limited, and for this reason—you would be precluded from considering the form of the clause to which Mr. Walpole's proposal is an amendment. You must consider that.

Dr. Parkes: If you specify the 11th Clause, I am satisfied.

Dr. Paget: If that is the understanding, I think we shall agree upon it.

Dr. Acland: I should like to ask this question. I see there is a notice of motion by Dr. Leet.

Dr. Quain: That has nothing to do with this subject.

Dr. Acland: Is it to be part of this resolution to suggest anything with regard to the Medical Act?

The President: No.

Dr. Acland: We must be sure of that, because many of us have motions which we wish to make; and it must be understood that we are not to be prevented from doing so at the proper time. (Applause.)

The President: I now put the motion to the meeting.

It was carried *nem. con.*

The President: Gentlemen, you must give me your help in the nomination of this Committee. I think, looking at the discussion that has taken place, the gentlemen who seem most interested in the question are Dr. Paget, Professor Syme, Mr. Cæsar Hawkins, Dr. Andrew Wood, Mr. Rumsey, Sir D. J. Corrigan, Professor Christison, Dr. Acland, and Dr. Quain. If there is any other gentleman who would like to serve upon the Committee, we shall be very happy to have his assistance. I hope those gentlemen I have named will be willing to serve. Dr. Paget will be Chairman, and the Committee will meet at 11 o'clock to-morrow.

The motion for the appointment of these gentlemen to the Committee was put to the Counsel and carried unanimously.

Dr. Andrew Wood moved that the Report from the Executive Committee on the resolutions proposed last session by himself be taken into consideration.

The President: This was "delegated to the Executive Committee by the General Council, May 29, 1866." The Executive Committee made a report which our Registrar will read.

Dr. Andrew Wood: My motion is that the Report of the Executive Committee be now considered.

The motion, having been seconded, was carried unanimously.

The Registrar then read the Report from the printed programme of business.

Dr. Alexander Wood: I now rise to move that this Report of the Executive Committee be not approved of, and I do so upon this ground. The Executive Committee have given a deliverance upon those resolutions which I proposed last session, and which were sent to them for their consideration. The deliverance is contained in four lines. If the first two lines had stood alone—"The Committee, after full consideration of the subject, are of opinion that the adoption of this recommendation is unnecessary"—I do not think I should have disputed it, but unfortunately they have committed a blunder which a certain judge who was sent to the colonies was wont not to commit. They have pronounced their sentence, and they have been foolish enough to give a reason for it. It is for that—only that—reason I have to quarrel with it. Their reason is as follows: They do not think the adoption of this recommendation necessary, because "they give to members of the Council no powers which they do not at present possess and exercise." Now these standing orders, which were suggested by me, were not intended to give to the Council any new powers, and I wonder any body like the Executive Committee should suppose that any of the standing orders could give the Council any power at all. The Council derives its powers from the Act of Parliament, and no standing orders can increase those powers one jot or one tittle, and no man who ever proposed standing orders could propose them with a view of increasing its power. Therefore, I say that the Committee have given this as their sole and only reason: their legs are knocked from under them, and their objection is invalid. Now, having told you for what purpose I do not propose these resolutions, I beg to tell you in a few words for what purpose I did propose them; for any one who was not familiar with our regulations would suppose that this was a most foolish and useless resolution; but if you will look back upon our proceedings, I think you will not agree with that view. What are the facts of the case? When a report is brought out before this body, it is read generally clause by clause, and immediately every man among us who thinks he is acquainted with English grammar begins to criticise this and that expression—a proceeding which occupies generally an hour or two of our time. Then, having discharged that very important duty, the next proceeding is to discuss the order of the sentences, and to criticise the report in a logical point of view. That takes us another hour. Then we come next to discuss the substance of the report, which, I need not say, also occupies a very considerable amount of time. The report is then printed on our minutes, and we have the pleasure of looking at it at our breakfast-tables next morning. When we see the thing in print, we see a number of things which we had not discovered in our former discussions. Then, when the matter comes before the Council again, the same process has to be gone through; first the grammatical criticism, then the logical criticism, and then the criticism on the substance of the report. Now, with the laudable view of shortening the business of this Council, I propose to define—to bring out and to state clearly—what are the duties of the Council in regard to reports; and having got this statement in the standing orders of the Council, I was in great hopes that gentlemen who have a strong grammatical sense or a strong logical sense would consider they were no longer responsible for the grammar or the logic of their Committees, and would no longer think it necessary for this Council to go into those minute details which are the great cause of the consumption of our time. I may ask you to look at this, and take it as a whole with this explanation. That it is not intended to expand the powers of the Council; secondly, that it is not intended to limit the powers of the Council; and, thirdly, that it is not intended to confine the powers of the Council. The first is—"That it shall be competent to any member of the Council to move, 'That a report be or be not received, and be or be not entered on the Minutes.'" Now, I think that is a most important regulation. It is the foundation of all legislation in regard to reports, that when a report comes up I may, *ab initio*, stifle that report. It will be quite competent to prevent it appearing on the Minutes at all; whereas hitherto the report has gone necessarily as Minutes if it has been once laid on the table. Now, there is no public body which does not exercise that privilege of refusing to receive a report if it should consider it necessary so to do. I think that is the first thing in which we should define our powers. Then—"In the event of its appearing to any member of Council that a report is defective or redundant, it shall be competent for him to move that the report be recommitted to be amended by the Committee by whom it was prepared." I may take that along with the next resolution—"That in the event of a motion for recommitment being carried, the names of the mover and seconder of such motion shall be added to the Committee, if they are not already members." This would prevent the whole of the criticism of this table, to which I have alluded, with regard to leaving out certain passages of the report. It would send them back again to the Committee, and it will have the effect of adding to that Committee those gentlemen who show their willingness to criticise the matter at this table, so that, instead of being here until six o'clock, the whole thing will be done in Committee. I think every member of the Council will agree that this will effect a great saving of time. Then—"It shall be competent for any member to move that a report be approved of, either in whole or in part." That is a necessary motion. It is only to keep up the connexion of the several stages in order to deal with the report. The next is—"That if a motion approving of the whole report be carried, the report shall come to be considered the report of the Council." That is the common and usual course of business, but I introduce it from having seen that certain members of the Council had great doubt about it; and thought that if any part of the report was approved of, then the Council became responsible for the whole. The 6th is, "That where a report contains more than one recommendation, each recommendation shall be separately numbered; and it shall be competent for any member of the Council to move that these recommendations be considered seriatim." That is a check upon adopting a wholesale—a large body of recommendations. 7th, "That a motion for the approval of each recommendation shall be made and seconded, and without such motion being carried, no recommendation shall be held to be adopted by the Council." That is to prevent the Council being surprised into adopting a recommendation which they have not fully considered, unless the motion for the approval of the whole report has been adopted. The next is, "That in the case of only a part of a report, or one or more recommendations contained in a report, being adopted, the Council shall in no case be considered as responsible for the remainder of the report." That is to limit the responsibility of the Council. Then the 9th exempts the Daily Business Committee from these regulations; and, for obvious reasons, I will just in conclusion say that while you have dealt with such legislation in your standing orders with regard to other things, you have done nothing with regard to the manner of dealing with reports. I say, if you do not adopt such a proposal as this, it will become you to appoint a committee to consider what you will do in the matter; for it is quite clear to those who have attended this Council day by day that your dealings with reports are of the vaguest and loosest description possible. I will just say in conclusion that by far the most important part of the business that comes before this Council occurs in the shape of reports of committees, and that, therefore, you must lay down certain standing orders for dealing with these reports. Now, in discussing this matter, do not let gentlemen get up and say, "A great many of these things are what common sense would have dictated." No doubt they are. Certainly there is nothing very striking in them; but they will, if they are adopted and become law, enable you, sir, in that chair, to limit the discussion of reports in the most simple and effectual way, and to bring that part of our business into the same order into which you have brought other portions, for the regulation of which I am sure you deserve our best thanks. However, the majority of the Council agree with the Executive. However, if the majority of the Council think it is advisable, I have no objection whatever, if the amendment be moved that it should be sent down to a committee to consider it; but it is clear that we must have in our standing orders some legislation with regard to dealing with our reports; and with these remarks I beg to move that the report of the Executive be not adopted.

Sir D. J. Corrigan: This is irregular. The invariable practice when a report is brought up is to move "that this report be received." Then it is open to propose an amendment, or to make a negative. But the course now proposed is, to say the least, extraordinary.

The President: You are quite right. I was going to say the same thing. When a report is read somebody ought to move that the report be received, and then Dr. Alexander Wood's amendment may come.

Sir D. J. Corrigan: Then I beg to move that after some

discussion upon this point of practice the Chairman put the motion "That the report from the Executive Committee be received and adopted."

Dr. Alexander Wood: Then I move as an amendment that it be not adopted, and that the resolutions be added to the standing orders.

Dr. Aquilla Smith: I wish to say a few words in reply to Dr. Wood. He says the Committee have acted very foolishly in asking reasons and in introducing those words into the report with the recommendations, "Give no powers to the members of the Council which they do not at present possess and exercise." Now, it appears to me that the Committee have expressed themselves incorrectly. They have acted wisely, for the first resolution was intended to imply that there was a new power to be given to the members of this body. The words are:—"It shall be competent to any member of Council to move that a report be or be not received, and be or be not entered on the Minutes." That was intended to give them a power which was supposed not to be in existence. The Executive Committee thought the power did exist, and Dr. Wood, it seems, thought so too, because the very first step he takes upon standing up is to move "That the report be not received"—(laughter)—proving that the Committee were right in assuming that any member could at any time object to the reception of the report. I feel, therefore, that the members of the Committee give him their best thanks for proving in that way that they have expressed themselves correctly. I understood, however, Sir Dominic Corrigan, who seems to take upon himself the position of the chair so far as saying whether things are regular or irregular is concerned, to say that there was an irregularity in the way which Dr. Wood dealt with the matter. I apprehend, if you propose that these regulations be part of the standing orders, it is a very fit and proper amendment.

Dr. Alexander Wood: That was my amendment.

Dr. Embleton: I beg to second it. I think the loose state of our standing orders very much requires some amendment, and if any one thing could show more clearly than another the necessity of amending such a state of standing orders as this, it is the blundering method in which the business appears to be carried on here.

Dr. Fleming: I want to know whether it is possible to shorten the session of our proceedings. It appears to me that these resolutions were proposed with that view—that we should have a more concise method of dealing with reports, from which a great deal of time has hitherto been lost. Dr. Wood will remember the first proposal was that no report of any committee should appear on the Minutes, and that was unanimously adopted.

Dr. Paget: I think the suggestions of Dr. Wood will be exceedingly valuable as guides to our proceedings; but if we make them into standing orders they will be rather a burden upon us, because we could not deviate from them without the sanction of the Council.

Sir D. J. Corrigan: I cannot help remarking on the kindness and good nature of one of the speakers, who said that a considerable portion of the time of the Council had been taken up in blundering. Whatever blundering there has been, of course the Chairman must be responsible for; and therefore that gentleman must feel much obliged for the compliment which has been paid him. With regard to the resolutions, I think Nos. 1, 2, and 3 are unnecessary. The third is particularly objectionable—"That, in the event of a motion for recommitment being carried, the names of the mover and seconder of such motion shall be added to the Committee, if they are not already members." Now, by that you absolutely bind the Council to put them on the Committee. You have no choice in the matter; your hands are tied. I do not think it is possible to entertain such a thing for a moment. To the fourth I have no objection. With regard to the fifth, nobody ever doubted it. With regard to the sixth, we have always when a report has come up had it read paragraph by paragraph. With regard to No. 7, we must confess that what Dr. Wood has said about disputes as to grammar and logic seems to be particularly applicable. Take the first portion—"That a motion for the approval of each recommendation shall be made and seconded." I believe it was always understood that there cannot be a motion unless it is moved and seconded. Then—"Without such motion being carried, no recommendation shall be held to be adopted by the Council, unless in cases where a motion for the approval of the whole report has been carried," so that, according to this extraordinary method, assuming a recommendation is objected to, unless you move to obtain the approval of the whole of the Council for the whole of the report in favour of any recommendation, it cannot be adopted. With regard to Clause 8, I will ask the Council, can we really put our hands to such nonsense as to say that it is necessary for us to state that we are not responsible for what we do not adopt? (Laughter.) I do not think it necessary to say any more upon such a subject.

Dr. Stokes: I have never heard such a charge against the Council as I heard from Dr. Alexander Wood—namely, that in the transaction of important matters of business a large portion of our time is occupied by disquisitions on grammar and logic. Now I, as a member of the Council, entirely repudiate that statement. I do not think we have lost any time in such matters. (Ironical cheers.) At all events, I, for one, emphatically deny it, and I rise for the honour of the Council to set them right with the public in that respect.

The President: The motion is, that the report be received and adopted. The amendment is, that it be not adopted, and that the resolutions be added to the standing orders. That has been moved by Dr. Alexander Wood and seconded by Dr. Embleton.

The amendment, having been put to the Council, was lost by a minority of three to fourteen, and the motion was then put and carried.

The Registrar: There is another report from the Executive Committee upon a resolution moved by Dr. Fleming and seconded by Dr. Alexander Wood—"That it be remitted to the Executive Committee to consider the whole form of procedure which has hitherto been followed in conducting the business of the Council, and to report on the first day of next session any alterations which in their opinion would tend to expedite the transaction of business." The report of the Committee was then read, and, after a few words in explanation from Dr. Fleming, which unfortunately did not reach the reporters' table,

Dr. Alexander Wood said: I oppose this resolution *in toto*. I believe it would have the effect of constituting the Executive Committee an *imperium in imperio*. I think that a result to be exceedingly deplored, and one which would be most unfair to the various bodies who have representatives at this table, who are not included in that Executive Committee. This proposal is with a view of shortening the business of the Council, and no doubt all of us would wish to see any reasonable proposition for such a purpose carried. With that view I seconded Dr. Fleming's motion last year, but I did not expect the proposal would be of the nature which is now brought forward—namely, that it should be delegated to the Executive Committee, to act as a Business Committee during the recess. I have been a member of this Council from its formation, and I remember quite well one of its most active and energetic members being on the Executive Committee during the first year of its existence; and that gentleman, in his zeal for the conduct of the business of the Council, ventured to do the very thing which this now proposes to legalise; and no one was more strong in his censures upon the conduct of that member of the Council and the Executive than my friend upon my right, who denounced it in his loudest tones and most eloquent phraseology as an invasion of the rights of this Council which must be put down firmly and at once. But now the Executive Committee come forward with a proposal to legalise that invasion of our rights, and of course things assume a new aspect; and we are asked to legislate for doing the very thing that a few years ago we were called upon so emphatically to condemn. The first point is, that the Executive Committee shall be delegated to act as a Business Committee during the recess; that is to say, they are to conduct the business of this Council. If there is one thing which the Council has been jealous of, it is of allowing the Executive Committee to get one iota beyond certain regulations by which they were constituted. And if you will look back to the Minutes of this Council, you will find what care we took that they might not by possibility outstep those bounds. Indeed, it was my friend on my right who was generally most active in framing those restrictions. The second resolution proposed is, "That the Committee, in that capacity, should consider and prepare reports upon any subjects that may suggest themselves to the Committee, or may be suggested to them by the Branch Councils, as requiring the attention of the General Council." Now, that I think the most dangerous of the whole series, and for this reason. As you are all aware, or, at least, those of you who have sat for any time in this Council, the chief business is managed by Committees. It is they who adjust

and prepare for us almost every subject that comes before us for discussion at this Board. The usual course of proceeding is this—that if any gentleman has a particular interest on a subject, or is particularly familiar with it, or feels that a subject is particularly pressing itself upon the notice of the Council, he brings it forward, and a Committee is appointed, of which Committee he is generally—I may say universally—made chairman; and the consequence is, that you secure a chairman who has some interest in the subject, and has thoroughly mastered its details. That it is, I think, which has given the great efficiency to our reports. But now the Executive Committee, on its own suggestion, are to take up the duty of preparing those reports; and members will gradually lose their interest when they find they are losing their time year after year in discussing reports prepared for them, and so we shall lose the labours of some of our most valuable members; and you may not have in the Executive Committee the very men who could give you light on the subject, because their voice is almost certain to be drowned in this assembly, from the influence which the Executive Committee will bring to bear in support of a report which they have already framed. We know how difficult it is for a Committee, after they have once framed a report, to depart from that report, even with the strongest and best reasons for so doing. The next is, "That these reports should be inserted in a programe of business, to be circulated amongst the members of the General Council, at least one fortnight before its meeting." Of course, I do not object to that if they are to be prepared at all. Then the 4th is, "That it be recommended to members of the Council, desiring to bring propositions before the General Council, to submit the same in the first instance to a Branch Council, in order that the Executive Committee, if they see fit, or if it be suggested by the Branch Council, may report respecting them to the General Council." This seems to me to be another very complicated method of getting rid of the individual responsibility of members of this Council; and I, as representing an important body, will never willingly consent to anything which will take from those functions which I possess as a member of this Council, and hand them over to any Executive Committee, by having my hands tied by any such process of percolation as that suggested by the Executive Committee. Then, "That the Branch Councils be requested to transmit to the Executive Committee the reports of the visitation of examinations, about three weeks before the meeting of the General Council, in order that they may be printed and placed upon the programme of business to be prepared as already stated by the Executive Committee." Now we have heard a good deal lately about unnecessary legislation. We have not found there was any difficulty in printing reports of our examination visitations, and what good it would do to submit them to the Executive Committee previously, I am at a loss to conceive. Have you had any difficulty? Did you not get them soon enough, or complete enough? or what possible advantage will it be to put an additional impediment in the way of handing them over to the Executive Committee in the first instance? Then "That the Executive Committee meet the day before the annual meeting of the General Council, in order to prepare and arrange the business for the consideration of the Council." Now, I have no objection to that, because I think the Executive Committee an unnecessarily large body, and I think we might safely say that the Business Committee of last year might do this work, which they do throughout the entire of the session. I should have it done by the Business Committee, and not by the Executive Committee. In conclusion, let me say that these resolutions are framed by the gentlemen who are taking, or who wish to take, the plan into their own hands, in opposition to the wishes of a large body of the Council, out of whose hands the power will be taken. I may be told that this will not occur, because the Executive Committee can do nothing until the reports are submitted to the Council. But I do not think that is a sufficient answer. As I have said before, we all know how difficult it is to alter a report once arrived at, and unless the members of this Council are prepared to hand themselves over, bound neck and heels, into the hands of the Executive Committee, I advise them to consider well before they approve of these suggestions. I beg to move that this report be not approved of.

The PRESIDENT: This is not an amendment; it is a negative.

Dr. QUAIN: Some of these suggestions the Council might be very willing to adopt. Others they might object to. But it seems to me the best way would be to read each recommendation, and adopt or reject it on its own merits.

This proposal was seconded by Mr. COOPER and carried unanimously.

The REGISTRAR then read the first clause.

After some discussion,

Dr. ANDREW WOOD rose and said: I will defend this against the tirade of my friend Dr. Alexander Wood, who seems to represent that the Executive Committee are a grasping body, who want to monopolise the whole power of the Council, and that they are occupying themselves from one end of the year to the other in endeavouring to find out how they can heap upon their own shoulders all the responsibility and labours of the Council, to the exclusion of all those happy individuals who are to be relieved from those arduous duties. (Laughter.) Why, I will ask members to recollect what the Executive Committee is, and how it was appointed last year for the very purpose of getting rid of the objections against the Daily Executive Committee in former years. What did the Council resolve upon?—that there should be representatives from Scotland and Ireland. Because, if Dr. Alexander Wood will carry his mind back a few years, he will find that there was very considerable jealousy, both in Scotland and in Ireland, at some of the doings of the Executive Committee. (Hear, hear.) But at the last meeting of the Council it was resolved that there should, at all events, be made the experiment of reconstituting the Executive Committee on another basis; that it should comprehend not only members residing in London, regarding whom it was possible some jealousy might arise, but also members from other parts of the kingdom. Then with regard to what Professor Syme has said, he must recollect that there are certain duties delegated to the Executive Committee, in addition to what appear here. But those are all specially delegated by the Council, so that the Executive Committee have no power whatsoever to go beyond many of these functions or dealings, the powers which have been committed to them by the General Medical Council. And this is a very different thing indeed from what has been represented by my friend Dr. Wood. It is not transferring to them the power to do anything, but it is transmitting to the executive power the labour and the duty of preparing reports, with a view to save the time of the Council, and of expediting the business. Because look what often happens. Often reports of Committees are not ready for the deliberation of this Council, until far on in the session. And it has happened again and again, that most important business is either required to be put off for another year, or has been transacted in far too hurried a manner. Now it is in order to get rid of that, that the Executive Committee have brought forward these resolutions. It is an experiment, but I certainly do feel that if the Council commit this very simple power of preparing reports to the Committee, they may be quite satisfied that the Executive Committee are not so enamoured of power as to become the despots and the monopolisers which they have been represented to be. The duties of the Committee as a business Committee are defined by No. 2—"That the Committee in that capacity should consider and prepare reports upon any subjects that may suggest themselves to the Committee, or may be suggested to them by the Branch Councils as requiring the attention of the General Council." They were allowed to make an alteration suggested by Dr. Christison, and to call it "a Committee for preparing the business during the recess," instead of "Business Committee." It defines it better. I must say I do not comprehend, so far as I have ever seen anything of the Executive Committee, that they will be at all disposed to go beyond their commission, sometimes even, perhaps, not to go up to it, and I feel quite satisfied, having had a good deal to do in the preparation of the business of this Council, that it would be a very great matter if, during the recess, there should be a standing Committee, such as the Executive Committee, which, recollect, is a Committee elected by ballot in this Council. It is important to recollect that fact, so that if any individuals elected to it show ambitious projects, which shall tend to oppose the feelings of my friend Dr. Alexander Wood, the Council can easily dispose of them by the ballot-box. But I say it would be a very great convenience in many cases; for example, supposing we have a very important matter which crops up at the end of this session, such as cropped up in the hands of my friend, Dr. Acland, many years ago, I say it would have been a very great help to this Council if they could have said to themselves—"This is a very important matter; we have no time to take

it into consideration, let us send it to the Executive Committee to act as a committee through the recess, to read that very report on the first day of the sittings of the Council, and to have a programme circulated at least a fortnight before the meeting of the Council." Now, it is a complete mistake to suppose that because a report is prepared the Council are obliged to take that report in its entirety—or anything like it. The Council will exercise their own judgment on every such matter. The Council will take that report for exactly what it is worth, and they will adopt what parts they choose, and reject what parts they choose. I really do not say that the Council should be swayed by any fears of monopoly or ambition; and if we think that by appointing this Executive Committee in the capacity of preparing reports, it will tend to expedite business and shorten our session, I think we should take some step for the purpose of securing so desirable an end.

Dr. Storrar: Dr. Alexander Wood has referred to a gentleman without a name, who was considered to be the victim of a severe extravasation of work, who was on the Executive Committee, and who devoted himself so earnestly to carry out certain projects. (Laughter.) Now I was that unhappy man, and am very pleased to discover that Dr. Underwood has had opened up to him new lights upon this subject. I do not rise for the purpose of throwing obstacles in his way—far from it. I think there are some duties here which are proposed to be assigned to the Executive Committee, which may be fairly and properly assigned to it. I think it may be very good service to this Council, by taking up some of the business intimated in these six proposals. Some of them, I fear, may be going a little too far. They rather indicate that fervent zeal which is considered to be appropriate to recent and strong conversions. (Laughter.) I refer now particularly to No. 1. It is before us. I consider it to be a pure surplusage—"That it shall be delegated to the Executive Committee to act as a business Committee during the recess." What is the Executive Committee, if it is not to do business? We assume, as a matter of course, that if the Executive Committee meets to do something, what it means to do is to do business. (Laughter.) But now, says Dr. A. Wood, I find a defect in No. 2. Then I say shape No. 2 so as to let it be understood what the Executive Committee is to do, and drop No. 1 altogether; or let No. 2 read thus—"That the Executive Committee be prepared to report," and so on. As to No. 1, it appears to be a mere abuse of words; and, really, upon that subject I could not help thinking how pertinent some of Dr. Alexander Wood's remarks were. Here is an Executive Committee who have had a whole twelvemonth to prepare this, and yet they now come forward with their first resolution, which means nothing at all. I must vote against it.

Sir D. J. Corrigan: I shall vote against No. 1. I shall make no observation upon No. 2, except in so far as it is necessary to refer to it in order to explain No. 1. I object to No. 1 standing by itself, because there is no limit to the power of this body as a business committee. (Hear, hear.) I do not think it necessary to argue beyond that, and I adopt completely Dr. Storrar's view that it should be omitted altogether, and that the duty of the Committee should be considered under No. 2. Whether I should vote for No. 2 or not is another question; but as regards No. 1 I must vote against it.

Resolution No. 1 was then formally moved by Dr. A. Wood, seconded by Dr. Aquilla Smith, put to the meeting, and negatived by a large majority.

Dr. Parkes: I presume, No. 1 being lost, the whole will be lost. (Laughter.)

The President: Oh dear, no; that was not the understanding.

The Council then adjourned to the following day at 2 o'clock.

Second Day.—Thursday, May 30.

After some preliminary discussion as to the confirmation of the Minutes,

Dr. Alexander Wood proceeded to bring forward a motion for appointing a Committee to take up the whole subject of the preliminary education of Medical students.

Dr. Storrar would second it, provided it meant the reappointment of the old Committee; but, if anything more, he would like to know what could be done with the powers possessed by the Council.

Mr. Hargrave wanted to see the programme previously recommended in force.

Dr. Stokes thought that improvement was going on, and therefore that the Council should not interfere now.

Sir D. J. Corrigan maintained that everything had been done which could be, since there was no power to enforce any regulations.

Dr. Andrew Wood said that if all were of Dr. Dominic's opinion, the sooner the Council adjourned *sine die* the better.

Dr. Sharpey thought that the improvements already effected in this way by the Council were amongst their most important works.

A very sharp discussion ensued as to the regulations of the Scottish Universities and the Queen's University in Ireland.—Motion carried.

Mr. Forman's (of Felkicairns) name was ordered to be expunged from the Register, having been fraudulently entered.

Dr. Paget then read the draft of the proposed letter to the Government on the subject of the Medical Acts Amendment Bill. After some discussion as to the exact wording of the letter, it was agreed that it should be forwarded to Mr. Walpole the same evening.

Dr. Andrew Wood then brought forward a motion that a Committee be appointed to examine, and, as far as possible, regulate the course of Professional study and the mode of examinations.

Dr. Parkes shortly seconded the motion.

Dr. Storrar pointed out the immense diversity of opinion on these subjects, greatly doubted its desirability, thought that it was better that different bodies should preside over education in England, and therefore objected to laying down one uniform curriculum.

Sir Dominic Corrigan thought that examinations, not courses, were to be attended to.

Dr. Alexander Wood had his opinion confirmed by Sir Dominic Corrigan's speech, and would therefore vote with Dr. Andrew Wood.

Mr. Hargrave thought that the visitation of examinations had done great good.

Mr. Hawkins thought that the examinations, not the courses, should be left out of sight at this stage.

Dr. Andrew Wood agreed to the exclusion of examinations in the meantime.

Dr. Sharpey thought that Dr. Wood would do better to direct his energies to the question of the visitation of examinations, and leave the curricula to be settled by each licensing body.

Dr. Acland held that it would be best to attend chiefly to the examinations, but the Council would do well to advise men as to what would be the best course and what the minimum of study. Also, he believed that time should be taken about it.

Professor Syme objected to the prescription of courses.

Mr. Rumsey advised that a minimum of study should be prescribed, but many men would be inclined and would really devote longer time to this.

Dr. Risdon Bennett also thought that a minimum should be secured.

Sir Dominic Corrigan's amendment was carried over the original; but, on the motion of Dr. R. Bennett, further discussion was deferred.

A full report will be given next week.

Professor Hancock.—This gentleman will commence his second course of lectures in the Theatre of the College of Surgeons on Monday next, by delivering six lectures on the Anatomy and Surgery of the Foot.

Medical Charities.—It is with very great pleasure we record that during the past week information has been received that the sum of £13,750 has been bequeathed to various metropolitan and provincial Hospitals. Mr. W. J. Hall, the wealthy wharfinger, has bequeathed to the Seamen's Hospital ship *Dreadnought* £2000; the London Hospital, £2000; the Lock Hospital, £2000; the Hospital for Consumption and Diseases of the Chest, Victoria-park, £750; the Tower Hamlets Dispensary, £500; the Eastern Dispensary, Leman-street, Whitechapel, £500. Mrs. Mary Gregory has bequeathed £5000 to the Middlesex Hospital. Mr. Edmund Buckley, of Higher Ardwick, gives £500 to the Manchester Royal Infirmary; and Miss Charlotte Rane bequeaths £500 to the Windsor Royal Infirmary, of which institution she had been a supporter many years. All these bequests are to be paid free of legacy duty.

ORIGINAL COMMUNICATIONS.

CASE OF PUNCTURE OF THE MEDULLA OBLONGATA THROUGH THE BASILAR PROCESS.

By P. J. KENDRICK, Esq., M.R.C.S.

March 22, 1867.—Lizzie Maria R., aged 2 years and 3 months, was brought to me at 6.30 p.m., having just fallen down with a wooden crochet needle in her mouth, of which about a quarter of an inch was protruding between the incisor teeth, the opposite end being firmly fixed in bone, having first transfixed the uvula in transit. It was necessary to use very considerable force to extract it. No blood escaped, neither was there any tinge of blood upon the needle, the barb of which had broken off and remained behind. The child was scarcely conscious, uttered a low wail continuously, but offered no resistance; she was, indeed, paralysed in the extremities from the moment of her fall; face pale; pulse 80, and soft. To be kept in a dark room in the recumbent posture until reaction came on, when a warm bath and 4 grains of calomel were to be administered, and the head kept constantly wet with cold water. 9.30 p.m.: Lying quietly on mother's lap; head thrown back; surface warm and still pallid; pulse 80; vomited once, bowels acted once, urine passed once, and voluntarily.

23rd.—Slept well after warm bath, is quite conscious, objects to have her head raised, and seems in pain when its position is altered; face flushed; head and skin hot and dry; pulse 100; breathes well; bowels have acted twice; urine free; takes milk and arrowroot without difficulty; tongue rather dry, fauces slightly reddened; perforation in uvula distinctly visible. Linseed-meal and mustard poultices from nape of neck to lumbar region to be applied, warm bath repeated, and 2 grs. hydr. c. cretâ and 2½ grs. pot. nit. to be given every four hours; cold to head to be continued. 8.40 p.m.: pulse 120 and weak; skin moist, tongue dry, and slightly coated with white fur; bowels have acted twice; urine free; pupils act well.

24th.—7 a.m.: Said to have just been convulsed in the left arm and right leg, which ceased when a warm bath was used. Face pale; head hot; skin perspiring; pulse 140; pupils contracted; is conscious when roused; sometimes calls "mamma," and "dear mamma," and requests to be "moved from sofa to bed, etc., does not like to wet the bed." Bowels have acted once; urine free. Beef-tea and milk diet ordered, and the linseed meal and mustard poultices repeated. Medicine as before. 1 p.m.: Still conscious when roused. Pupils contracted; eyes and eyelids twitching convulsively, and eyes turned upwards occasionally for several seconds. Has passed urine and fæces involuntarily. Blisters to be applied behind the ears. 5 p.m.: Worse; more twitching of eyes and eyelids; roused with more difficulty; rolls the head from side to side; fæces pass involuntarily; head very hot; skin perspiring; tongue thickly coated; pulse 160. 9 p.m.: Much worse; convulsive movements of eyes, etc., incessant; can scarcely be roused for a moment; pupils sluggish; skin perspiring profusely; defecation and micturition involuntary. Coma came on rapidly, and death took place at 4 a.m., March 25, 1867.

28th.—Post-mortem made 78 hours after death. Rigor mortis present; body well developed and well nourished; purple discoloration in dependent parts; hands and feet slightly flexed; eyes half open; all the thoracic and abdominal contents quite healthy; right cavities of heart filled with dark coagula, and the left with fibrinous clots and casts extending into the aorta and pulmonary veins; bladder empty. On removing the calvarium found the dura mater very vascular, and on raising it the other membranes of brain appeared much congested, and the arachnoid somewhat opaque; the superior surface of both hemispheres undergoing decomposition, and of greenish colour in patches; brain structure healthy; ventricles contained about an ounce and a half of turbid serum, and the same fluid occupied the sub-arachnoidean spaces; all the vessels much engorged. On removing the brain, etc., there was found a punctured wound in the medulla oblongata in the median line, where the fibres of the corpora pyramidalia decussate, about $\frac{1}{10}$ inch in diameter, containing a clot of blood; the vessels in its neighbourhood very much congested. This led to careful examination of the basilar process, and a probe was passed through the left nostril into a ragged hole immediately in front of the foramen magnum in the median line, and, on dissecting the dura mater away around the probe, the missing barb of the crochet needle was found imbedded in recently effused lymph.

OPIUM IN THE TREATMENT OF ULCERATION.

By J. FAYRER, M.D., F.R.S.E.,
First Surgeon to, and Professor of Surgery at, the Medical College Hospital, Calcutta.

G. W. W., aged 28 years, an English engineer, was admitted into the Medical College Hospital on February 21, 1866, with a sloughing ulcer on the upper and internal surface of the left foot. It commenced as a small pustule, which excited much inflammation in the foot, seven months prior to his admission. It cicatrised over in the Moulmain Hospital, but broke out shortly afterwards on his voyage to Calcutta. The ulcer, on admission, was irregular in outline, and about two inches in length. It was very painful; the surface was of an ashy colour, and the margins were swollen and inflamed.

He had syphilis about a year and a half ago, but says he did not suffer from the constitutional disease. He had been in the occasional habit of opium-smoking seven or eight years ago, but had left it off completely since then.

Under the influence of potass. iodid., poultice, and rest on a splint, healthy granulations sprang up, and a portion of bone that was exposed became covered with granulations. The ulcer had contracted to the size of a shilling, when, on March 30, a tendency to spread was observed at its posterior margin.

The ulcer had an inflamed, irritable look, and continued to spread, when, on April 16, the following was ordered:—Opium, gr. j. every four hours; the leg to be suspended in a cradle, and dressed with toddy poultice.

21st.—No improvement. Increase the opium to gr. jss. every four hours. ℞ Acid. nitric. dil. ♏ x.; tinct. opii ♏ x.; aquæ ʒ j. Lotion for dressing, instead of the poultice.

30th.—Ulcer less painful, but still looking irritable. Opium, gr. ij. every four hours. Opium lotion, gr. v. to aquæ ʒ j. as a dressing. Arg. nitrat. lot. gr. x. to ʒ j. as an application.

May 1.—Does not feel sleepy; ulcer no better. Opium, gr. iij. every four hours. Continue dressing.

6th.—Healthy granulations beginning to make their appearance in different parts of the ulcer. Opium, gr. iv. every four hours. Continue dressing.

9th.—Ulcer covered with healthy granulations and cicatrising. Continue pill every three hours.

13th.—Pupils natural; feels sleepy occasionally during the day. Opium, gr. v. every three hours. Continue dressing.

26th.—Much itching of the body; feels sleepy; pupils natural; ulcer again looking unhealthy at the margin. Continue pill. Quinine m. gr. ij. every four hours.

June 2.—Ulceration extending. Continue pill. ℞ Ol. terebinth. ♏ xx.; spir. æther. nitric. ♏ xxv.; aq. camph. ʒ j. ter die. Omit quinine.

6th.—Ulcer no better. It is extending and deepening, and the cicatrix tissue giving way. Omit opium. Continue dressing.

7th.—Not so sleepy. Has no pain. Appetite bad. One opium pill, gr. v., at bedtime. Quinine gr. iij. ter die.

8th.—Slept badly. Complaining of much pain in the ulcer. Inclined to vomit. Feels very uneasy. Opium gr. ivss. every four hours. Opium poultice as a dressing.

11th.—Ulcer has an ashy appearance. Continue pill every three hours. Balsam of Peru for dressing.

16th.—Ulcer has spread over the whole external aspect of foot. Tendons sloughing. Is despondent. Wishes to have the foot amputated. Opium gr. v. every three hours. Opium lotion for dressing.

17th.—Ulcer looking worse. Opium gr. vj. every three hours.

19th.—Feels easier. Destructive process arrested. Sloughs separating. Opium gr. vjss. every three hours.

July 7th.—Ulcer contracting and much smaller. Healthy granulations rising all over it. Opium gr. vj. every three hours. Cod-liver oil ʒ ij. once.

August 19th.—The margins look suspicious. Opium gr. vij. every three hours.

**

29th.—No more ulceration of cicatrix. Bowels regular. Appetite good. Opium gr. vijss. every three hours.

September 4th.—The ulcer has nearly cicatrised.

6th.—Left the Hospital to go to sea.

The strength was supported throughout with nutritious diet, port wine, and beer, and bowels kept open when necessary with cathartic enemas.

Remarks.—This case is interesting from the extraordinary toleration of opium evinced by the patient. He was not addicted to excessive use of stimulants, and, though he confessed to having smoked opium for a short time some years previously, there is no reason to suppose it had become a habit, for he had entirely relinquished the use of it for several years. It is also a good example of the benefit of opium in the treatment of ulceration in an irritable constitution; and I have little doubt, from the progress of the case, that, had we not pushed the use of the remedy, the foot, if not life, would have been lost. He was of a peculiarly irritable constitution and fretful temper, much broken down by exposure and hardships, and, I fear, a debauched life. The ulcer was, I have no doubt, of a syphilitic nature, and probably his statement that he had no other previous indication of constitutional syphilis is to be accepted with hesitation. In my experience nothing is so effective in checking ulceration of a phagedænic character in constitutions of this nature as opium freely administered, and the amount to be given can only be deduced from the results of the first few doses. The lesson to be derived from this case appears to me to be the necessity of studying the effects of the drug on the patient, and not being influenced by the quantity alone. I generally commence with doses of a grain every second or third hour, and increase or diminish the quantity according to its action. Its effect is generally most satisfactory; the destructive process ceases, healthy granulations appear, and contraction and cicatrisation begin. The quantity may be somewhere between one grain and five or six grains. In no case would it be prudent to begin with more than two, though the case cited shows it may have to be increased to much more. 7½ grains were given, every three hours, with the best effect. The local applications are also of the greatest importance, especially in sloughing or phagedænic ulceration, and in my experience none is better, or indeed as good, as strong nitric acid. The dead tissue is immediately decomposed by its action, and the dead and decomposing animal matter, which is most injurious to the living tissues with which it is in contact, is thus removed. The action of the putrid dead tissue kept in contact with the living is most prejudicial, and hastens the death of the parts with which it is in contact. The application of nitric acid, though very painful for a time, is followed by healthy action in the part. The pain diminishes, and repair rapidly begins, and, under the influence of opium, progresses till cicatrisation is completed.

The notes of this case were kept by my House-Surgeon, Baboo Gopaul Chunder Roy, L.M.S.

University Intelligence.—In a Convocation held at Oxford on May 23 the following degree was conferred:—*Doctor in Medicine:* George Fielding Blandford, Wadham College. At a Congregation held at Cambridge, May 23, the following degree was conferred:—*M.D.:* O. Sturges, of Emmanuel College.

Royal College of Surgeons.—The election to the Chair in the Court of Examiners, made vacant by the resignation of Sir William Lawrence, Bart., was filled up at a special meeting of the Council, on Monday last, by the selection of Mr. Samuel Solly, F.R.S., the Surgeon to St. Thomas's Hospital. We stated last week our conviction that this gentleman would be elected, although *not* without opposition, and that Sir William Fergusson would instinctively shrink from taking precedence of his colleague. We have good authority for stating that Sir William gave all his powerful influence to secure the seat for his colleague, when the slightest expressed wish on his part would have obtained the chair for himself; so close, indeed, was the voting, that three balls would have placed Sir William in the post now worthily filled by his friend Mr. Solly. We believe there is some foundation for the report which has reached us that a member of the Court of Examiners, who has twice filled the President's chair, will shortly cause another vacancy in the Court by sending in a resignation, which he was recently deterred from doing by another colleague, from whom a similar proceeding was, and may still be, expected.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0

Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

Terms of Subscription for India, £1 15s. per annum.

The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.

Post-office Orders and Drafts on Army or Navy Agents, should be made payable to Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d. | A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d. | A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, JUNE 1, 1867.

REPORTS OF THE VISITATION OF EXAMINATIONS BY THE GENERAL MEDICAL COUNCIL.

The Reports of the Visitors of Examinations for the year 1866-7 are of very great interest and value. They show that nearly all the qualifying bodies—in England and Scotland, at least—have improved and extended their examinations, in some instances the improvements being very considerable and highly important. And these improvements are unquestionably due to the influence brought to bear on the qualifying bodies by the Medical Council through these visitations.

The visitors to the Royal College of Physicians of London—Dr. Storrar and Mr. Cæsar Hawkins—report only, as last year, on the examinations for the licence. They state that, at the Primary Professional Examination, "specimens, articles of Materia Medica, and chemical preparations were amply provided at two tables; but the examiners on anatomy and physiology had no means whatever of practical examination, except that on one table was a book of anatomical plates, on which some questions were sometimes put." They considered that "the questions to be answered in writing were, on the whole, fair and sufficient; those on anatomy and physiology not very searching or extensive." At the Pass Examination the candidates are taken to various Hospitals and subjected to clinical examinations in Medicine and Surgery. The Pass Examination the visitors consider a fair test of fitness for Medical practice; but they "venture to suggest that there is room for improvement in the examinations on anatomy and physiology, which might be made more practical." No one will dispute this after the description of the examination given just above; and we doubt not that an improvement will be made. The visitors also think that "the examination of candidates by a single examiner, without any colleague or assessor, is open to objection. We could not but observe," they remark, "how frequently it thus happened that the examiners were called on to examine and report upon their own pupils, candidates being sometimes examined by two or more teachers of their own school or Hospital in the same evening."

The visitors to the Royal College of Surgeons of England—Dr. Sharpey, Mr. Cooper, and Dr. Parkes—report a marked improvement in both the Primary and the Pass Examinations since their report of the previous year. In the Primary Examination, "more physiological questions were asked in the written examination; in the practical part there were a greater number and greater variety of preparations, and microscopical specimens of nerve, muscle, bone, etc., were used." To the Pass Examination a very important addition has been made; "the candidates underwent a practical ex-

amination in bandaging, in applying splints, apparatus for reducing dislocations, etc." This the visitors very justly look upon as "a very great improvement, and they think the College deserves much credit for the alteration," and they observe that they "hope to see it still more extended by requiring the candidate to show on the dead body that he can pass the catheter, plug the nostrils, or perform similar small operations. Their report is, on the whole, very laudatory, but they again have to note that "many gentlemen who have been examined only by the College of Surgeons, and therefore only in Anatomy, Physiology, and Surgery, are engaged in general practice." This defect will, however, be removed when the proposed arrangements with the College of Physicians for requiring a double examination before granting the diploma are completed and come into force.

The report of the visitors to the Apothecaries' Hall, London—Dr. Alderson, Dr. Parkes, and Dr. Quain—is remarkably full, important, and satisfactory. Of the examination in Arts they state that the questions "are not very difficult, but they are well adapted to show that any young man who failed to answer them correctly was not sufficiently educated to commence the technical study of a learned Profession. The examiners conducted the examination with great care and discrimination, leaving in this respect nothing to be desired. The fact that seventeen candidates out of forty-seven were rejected shows that the examination is sufficiently strict to prevent incompetent persons from receiving a certificate." And in proof of the justice of this commendation the examination papers are appended to the report.

With regard to the Professional Examination the report says—"We found the details of the examination had been considerably altered, more especially in reference to the suggestions made in our report last year. And here it is but simple justice to the Society of Apothecaries to say that they have endeavoured to meet the wishes of the General Council, and have most judiciously introduced great improvements into their examinations." In both the first and the second examination the number of questions has been increased; additional subjects have been introduced, and more time has been given for answering. Alterations have also been made in the oral part of the second examination, a freer use being made of morbid and microscopic specimens; and medico-chemical tests, which the candidate performs before the examiners. "Both examinations have, in fact," say the visitors, "been very much improved; and we believe that, as regards the subjects of examination, the kind of questions put in the written and oral examinations, and the time given for answering, the examination is as good as the Medical Council could desire." The report proceeds, however, to state, and comment on, the fact that candidates are not yet required, at the Apothecaries' Hall, to examine patients in the presence of the examiners; but the visitors acknowledge that as the law requires weekly examinations at the Hall it does seem somewhat difficult to arrange for clinical examinations, and they observe, "We have not the slightest wish to urge on this matter prematurely. . . . We suspect the difficulties in arranging for such an examination may not be so great as they appear; but we think the Council may safely leave the matter to the further consideration of the Society." And they add, in conclusion—"Apart from this question of an examination of patients, we have no hesitation in stating that the examination of the Society of Apothecaries is a most excellent one, and quite as extended and as prolonged as can be attempted in the present state of Medical education." We have no doubt that the Society of Apothecaries will manage to institute clinical examinations, and so perfect their scheme. Meanwhile we congratulate them on having received from such competent judges as these visitors so just and generous an acknowledgment of their labours in improving Medical examinations. The reports of the visitors to the Universities of Oxford, Cambridge, London, and Durham, do not call for any special remarks. It may be said that at all these places "the examinations were thorough, and conducted with care," and such as secured that no one passed who did not possess "the requisite knowledge and skill for the efficient practice of his Profession."

The reports from Scotland appear very voluminous, but their bulk is mainly made up of copies of examination papers. The "observations" on the examinations are in general very satisfactory, and often highly laudatory. The visitors especially approve of the clinical examinations in Medicine and Surgery at the Universities of Edinburgh, Glasgow, and Aberdeen, and they say, "From what we saw of such clinical examinations, we are satisfied that arrangements can, without much difficulty, be made, even when the number of candidates is considerable, by which a sufficiency of fitting cases for examination can be provided, and *that* without subjecting patients to any damage in consequence." Clinical examinations have not yet been adopted by the College of Physicians and Surgeons, Edinburgh, or the Faculty of Physicians and Surgeons, Glasgow, but the former was prepared to introduce them, and no doubt the latter will follow suit. Suggestions are made for some improvements in the Preliminary Examinations, especially with reference to the examination papers in English composition and orthography. At the University of Glasgow a system had prevailed of exempting from parts of the Pass Examinations such students as had distinguished themselves in the Class Examinations; but, apparently out of deference to the objections made by the visitors, this has been abolished.

The Irish reports are decidedly curious, and, if we may venture to say so without offence, very characteristic. They illustrate well some of the difficulties with which the General Council has to contend. Dr. Apjohn, one of the appointed visitors, seems to have never visited at all; at least, his signature is not attached to any of the reports. Mr. Hargrave was "prevented by indisposition" from accompanying his colleague in visiting the examinations of the University of Dublin. He attended once at the King's and Queen's College of Physicians, when one gentleman was examined in Medicine and one in Midwifery. Each examination lasted one hour, and both candidates passed, and that is really all that can be got out of the report.

Dr. Aquilla Smith visited, on one occasion, the examinations at the Royal College of Surgeons, Ireland, and writes a short report, in which he states objections to the mode of examining, the length—or rather the brevity—of the examination, the list of subjects examined in, the method of voting on the merits of the candidates, and the general arrangements. He curiously enough complains that the Irish College of Surgeons takes a wider scope of subjects than the English College does; at least, he "considers it an anomaly that the College of Surgeons in Ireland should examine in Materia Medica and the Practice of Medicine, when the College of Surgeons of England does not." One would have thought the difference rather a praiseworthy one. At the end of the report the visitor adds the following protest:—"I have written this report, and the observations therein, in deference to the recommendations of the General Medical Council, and I must take this opportunity of stating my conviction that the mode of inspection instituted by the Council is not likely to accomplish any good so long as the Council has power only to issue recommendations, which have, up to this time, been disregarded, in many instances, by some of the licensing bodies in Schedule A of the Medical Act." Should Dr. Aquilla Smith be again appointed visitor—and it is impossible to predicate what may not be done on the other side of the Irish Channel—we hope he will take courage by observing the good that has resulted from the visitations of examinations as they are carried out in England and Scotland.

The report of the same gentleman on the Apothecaries' Hall of Ireland is a gem in its way. He observes that he was appointed with Dr. Apjohn to visit the examinations of this body in 1865, but "no report was presented or even asked for" that year. They were re-appointed in June, 1866, and in October of the same year he received the following resolution from the King's and Queen's College of Physicians of Ireland:—"That the College cannot give its sanction to its representative visiting and reporting upon the examinations conducted by the Board of Governors of the Apothecaries' Hall of Ireland, inasmuch as (without referring to other grounds of objection) such visitation might be construed into an admission that the College admits the legality of the function which the Board of Apothecaries' Hall has assumed of adding to their Examinations in Pharmacy an Examination in the Science and Practice of Medicine, which the College is of opinion is beyond the functions of the Apothecaries' Hall of Ireland." Dr. A. Smith closes the report by stating:—"I have only to add that I did not visit any of the Preliminary or Professional Examinations held at the Apothecaries' Hall, Ireland." His "deference to the recommendation of the General Council" was merged at once in his deference to his obstructive College, and the visitor never visited. We will only add that the examinations of the Apothecaries' Hall are recognised and legalised by Act of Parliament.

The only real work in examination visiting in Ireland was performed by Dr. Leet, the representative of this excommunicated Apothecaries' Hall. He visited in the Queen's University several times, and reports that "the examinations are conducted with great care and impartiality, but the system needs to be modified" in several prrticulars, which he notes. He has to add his regret "that the other member of the Branch Council, who was appointed to act with him in this visitation, did not attend." He also visited the examinations at the University of Dublin, and reports that much improvement is needed; that the Examinations for a Licence to Practise had better be abolished; and that the standard for degrees ought to be made higher.

THE MEDICAL AMENDMENT ACT.

We cannot congratulate the Profession on the chances of passing the Medical Amendment Act through Parliament this session; in fact, if we say there is not the remotest likelihood of such a consummation to the labours of the General Council, we only pronounce what is plain to every one who has given the slightest attention to the matter. Mr. Walpole's letter to the President affords a striking instance of the cool *nonchalance* with which the Home Office can afford to treat the wishes of the Profession of Medicine on a question which involves directly its interests and those of the public, and of the small influence which the great Council of the Profession can bring to bear upon Her Majesty's advisers. The gist of the first portion of Mr. Walpole's letter is that the counsel of the Home Office had so much to do that he could not attend to the matter, and that the Home Secretary cared so little about it that he forgot he had not received an answer to the letter he had himself written to the former gentleman. On reading this, we really felt inclined to regret that the General Council had not consulted Mr. Beales, M.A., on the best mode of arousing the attention of the amiable and right honourable gentleman. It will be remembered that the original draft of the Home Office Bill gave a power of registering foreign degrees and diplomas both to the Privy Council and to the General Medical Council. The latter body reasonably objected to this interference with their especial duties, and proposed that no foreign Universities and licensing bodies should confer any diploma eligible for registration, except those contained in a list which should be annually prepared by the General Council and submitted to the Privy Council. This decision of the Medical Council furnishes the plea on which Mr. Walpole defends his abandonment of the measure as a Government Bill, and adds what we think we are justified in terming the insulting terms on which he promises non-opposition. These terms are the introduction of a clause which shall confer upon either of Her Majesty's Secretaries of State the power of registering foreign degrees and diplomas without any appeal to the decision of the Medical Council. He lastly recommends that the Bill thus amended should be entrusted to some private member.

It is really a matter of congratulation that a Minister who can thus treat the legally constituted Council of a great profession should have been superseded by a gentleman who has shown not only memory and energy, but some respect for the public value of legitimate Medical science. We hope that the Medical Council will lose no time in bringing, by deputation or otherwise, the matter before Mr. Gathorne Hardy. At any rate, it would be a suicidal act to separate the connexion between the Government and the Council by entrusting a Bill of this importance to a private member. Rather than this should be done, it would be far better to abandon at present any further attempt to procure a legislative enactment. Equally injurious to the interests of the Profession would it be to take this matter from the hands of the Medical Council and entrust it to any voluntary Medical association. The Profession has obtained a legal standing and representation by the Medical Council which it cannot afford to relinquish, and if Government will not attend to them, there is not the slightest chance of their listening to any other body. The whole matter affords an apt illustration of the necessity of the Medical Profession being adequately represented in the House of Commons.

CANDIDATES FOR THE REPRESENTATION OF THE SCOTTISH UNIVERSITIES.

It is very desirable that Medicine and Science should be represented in the person of the successful candidate for the Universities of Edinburgh and St. Andrews, under the new Reform Bill, when it shall become law. Mr. Moncrieff, the late Lord-Advocate, has been spoken of as a legal and political candidate, though it is more likely that Mr. Campbell Swinton will be the favourite. On behalf of Science and Medicine, there is need of a candidate who not only is fit for the duties, but who is likely to get the seat. Many honoured Medical names have been mentioned—for instance, Professor Stokes, of Dublin, Dr. C. J. B. Williams, Dr. Markham, and Dr. Richardson. But it will be fatal to the cause to bring forward any one, whatever his reputation and merits, who is unable to make head against the *local* influence of the non-Medical graduates. Hence attention is turned towards Dr. Lyon Playfair, who, though not a Medical man technically, went through a Medical education, then devoted himself to chemistry, has served in the Health of Towns Commission and many other scientific commissions, and who, as Professor of Chemistry in the University of Edinburgh, takes a most active share in the proceedings of the Faculty of Medicine. In addition to these intrinsic qualifications, Dr. Playfair is a native of St. Andrews, studied at its University, and is a man of independent fortune; he is said to be willing to come forward if no *Medical* or scientific candidate appear whose chances of success are greater than his own. Professors Sir D. Brewster, Syme, Simpson, Laycock, and Balfour are understood to have promised their support. The problem is, to find a better man who is likely to get in; and we must observe that disunion among the scientific constituency would only cause one more lawyer to get a seat in the House of Commons. One objection we have heard to Dr. Lyon Playfair—he is a courtier, a friend of Prince Albert's, and a well-wisher to the mystical and much-suspected genius of South Kensington. The time may come when it will be considered no mean merit to have acquired the friendship of the late Prince Consort; and, as for courtiership, we believe in Dr. Playfair's loyalty to his constituents and his Profession.

THE VACCINATION BILL.

The criticism which we recently offered upon the Bill now before Parliament for extending compulsory vaccination has elicited from Dr. Edward Seaton(a) a reply in defence of those clauses which provide for the registration of successful cases—a process we had ventured to condemn as altogether unnecessary for any practical purpose. As one of the Privy Council Inspectors of Vaccination, Dr. Seaton's opinion merits careful consideration; it may be taken, indeed, as a semi-official exposition of the *raison d'etre* of those clauses to which objection has been taken, but which are evidently regarded at the Council Office as essential to the efficiency of the amended Vaccination Act.

Thoroughly agreeing with Dr. Seaton as to the importance to the Medical Profession and the public of a correct understanding on the points of doubtful theory and practice involved in the arguments for and against the Bill, we feel bound to show wherein, as we conceive, Dr. Seaton fails to establish the perfectibility of the proposed measure. His reasons for advocating the registration clauses are briefly these:—

First.—That registration is necessary for supplying *primâ facie* evidence on which to ground proceedings against recalcitrant parents.

Second.—That to carry out a law which requires that all children should, under penalty, be vaccinated within a specified period from birth, the local authority must know who have and who have not complied with the law.

Third.—That the chief cause of the failure of the Vaccination Act in England has arisen from its defective registration provisions.

Fourth.—That "the question of the practicability of an efficient registration may be considered as quite settled by the results which have followed the system pursued in Scotland."

Fifth.—That it is a great mistake to suppose that, even under the present imperfect system of registration, the vaccination registers are of no use; that no districts show even a tolerable amount of vaccination in which cases are not sought out, and in hundreds and hundreds of districts, including districts in some of our largest towns, these registers are regularly employed for the purpose.

Sixth.—That the interest, though only of threepence per case, in the registration of certificates of successful vaccination has made the registrars in many parts of the kingdom most valuable helpers in the promotion of vaccination.

Seventh.—That two successive Governments and a Select Committee of the House of Commons, "having the whole question before them," have determined to amend, instead of repealing, the registration clauses in the Act of 1853.

Presuming that so able an advocate as Dr. Seaton has presented the strongest points that can be adduced in support of his views, they yet appear to us inconclusive as evidence that the registration of successful cases is a *sine quâ non* in the enforcement of universal vaccination.

We notice, first, that the 30th clause of the Bill makes no reference to any *prima facie* evidence being necessary for the institution of proceedings. According to Dr. Seaton, "a local authority summoning a parent before magistrates for the non-vaccination of a child is in the position of having to prove a negative. The authority says, 'This child is not vaccinated;' the parent replies, 'I shan't commit myself; prove it;'" and the fact that no certificate has been registered is to be relied on as *prima facie* evidence of non-vaccination. The terms of the clause (30) are, that "if any registrar, or any officer appointed by the guardians to enforce the provisions of this Act, shall give information in writing to a justice of the peace *that he has reason to believe* that any child under the age of thirteen years . . . . has not been vaccinated, and that he has given notice to the parent or person having the custody of such child to procure its being vaccinated, and that this notice has been disregarded, the justice may summon such parent or person to appear with the child before him, and . . . . if the justice shall find, after such examination as he shall deem necessary, that the child has not been vaccinated, nor has already had the small-pox, he may . . . . make an order directing such child to be vaccinated within a certain time," &c., &c. Now, we can hardly believe that a registrar or any other informer will, in the face of the proviso which saddles him with costs if the justice should be of opinion that the parent has been improperly summoned, run the risk of discovering that a child may have been vaccinated, although the certificate has not been registered. Take the case of a child whose birth has not been recorded. Circumstances subsequently bring this child under the notice of the registrar, who is prohibited by lapse of time from registering the birth and giving the notice of vaccination. He may be morally certain that vaccination has not been performed, but where is he to get the *prima facie* evidence Dr. Seaton thinks so essential before any steps can be taken under this 30th clause? If it be true that 8 per cent. of births in towns are unregistered, the case we have put will be by no means uncommon. Again, the register must be complete, or it fails to be of any value as presumptive evidence; yet in cases where children are born in one district and then removed perhaps fifty miles away before vaccination, the register cannot be completed. Whatever may have been the intention of the framers of the Bill, the letter of Clause 30 conveys no intimation that the non-registration of the certificate must be adduced as *prima facie* evidence. The informant is only required to state *that he has reason to believe* a child is unvaccinated; the parent must produce the child, and the magistrate is to determine, by examination, whether the operation has been performed or not. There is not a word about registration certificates from beginning to end of the clause.

The second argument in favour of the registration clauses assumes that there is no mode of ascertaining who have, and who have not, complied with the law, short of the elaborate machinery of duplicate certificates, and three- or four-fold index of name and other particulars. We hold that the end would be much more advantageously gained by these simpler means: the registrar to supply a complete list of births to the public vaccinator once a quarter, with whom it would rest to see that vaccination was performed in all cases either by himself or a Medical man, and whose record ought alone to suffice for all purposes.

Is it really believed at the Council Office that in so far as the Vaccination Act has failed to promote vaccination, that failure is attributable to defects of the registration clauses? The vaccinators and the Medical Profession ascribe the non-success of the Act solely to the inadequate remuneration given for the troublesome duties required by the Act to be performed. The public know very well that the chief obstacle to the working of any compulsory sanitary enactment lies in the apathy of the "local authorities," who might long since, if so inclined, have, by energetic action, made examples of defaulting parents *pour encourager les autres*, and thus have secured general compliance with the Act.

Those of our readers who followed the description we gave last week of the working of the Vaccination Act in Scotland will demur to Dr. Seaton's argument in favour of registration as illustrated by Scotch experience. The conditions under which the Act has operated in the two countries are in no wise comparable. In Scotland compulsory registration of births preceded compulsory vaccination, and the arrangements connected with vaccination differ from those contemplated for England in most essential particulars. No duplicate has to be made by the northern registrars of their birth registers for the purpose of recording successful vaccinations; a simple memorandum on the birth register itself suffices.

We must repeat what we have already said as to the use-

(a) *Medical Times and Gazette*, May 18.

lessness of the vaccination register for any practical purpose which could not be more advantageously served in other and less objectionable ways. Dr. Seaton admits the worthlessness of an incomplete register. We can prove that in cases where, from peculiar circumstances, this register is made as complete as possible, it is never referred to either as a ground of proceedings or for any other substantial purpose. Dr. Seaton, we incline to think, disguises the fact that in those districts he speaks of, where the registers are used for the purpose of hunting up recusants, the registrar is himself the public vaccinator, and has consequently a double interest in making use of the register.

It is conceivable that in rural districts with small populations—as in Scotland—where threepences are an object to the registrars, they may work up their vaccination certificates; but in London and other large places, where each registrar may have from 2000 to 4000 births per annum, it is altogether impossible that the complexity of notices, certificates, and registers can be effectively attended to.

Dr. Seaton's final argument, that because two successive Governments and a Select Committee have adhered to vaccinatory registration, it must *ex necessitate* be received without question, would have more weight if he would clear up a few points in connexion with the subject which are not generally known or remembered. May we ask, for instance, if it was not the wish of Lord Palmerston, who was Home Secretary in 1853, when the Act (which was not a Government measure at all) was passed, to expunge the registration clauses *toto cælo*, but was prevented doing so in consequence of the late period of the session when the measure was before the House of Commons? And then, as to the "two successive Governments," it is well known that this is not a Ministerial, but a purely Departmental measure, originated by the permanent officials of the Council Office and adopted by the Government at their instance. The Select Committee took no impartial evidence, and they reported a foregone conclusion, so no weight whatever attaches to that part of the Bill's parentage.

Dr. Seaton remarks, of the constantly recurring epidemics of small-pox, that they are a scandal and reproach to us, and he asks, "Are we to make no efforts to remove it, or is every effort to be frustrated by some misunderstanding or another?" The answer to this question must be, that so long as high-handed attempts are made to legislate on a matter so intimately concerning the Profession and the public without regard to the suggestions of practical experience, so long will the evils which we, in common with Dr. Seaton, lament, be rife in our midst.

It was dinned into the ears of the Privy Council last year that the Bill contained clauses which would never work; that the registration of successful cases was useless; that the system of duplicate certificates was an absurdity: and the effect of these representations is seen in the Bill of this year, which is, to the very letter, precisely similar to its obnoxious predecessor.

The Medical Officers of Health, in their recent interview with Lord Robert Montagu, explicitly declared that the registration system had been, and would be, a failure; and they pointed out that the best mode of enforcing universal vaccination would be by establishing a thorough system of inspection by a well-qualified Medical Practitioner. That compulsory registration of all births is essential to the strict operation of a Compulsory Vaccination Act is self-evident, and now that the Government have had this fact so strongly placed before them, there is no excuse for neglecting to remedy so obvious a defect as exists in our Registration Act.

And as regards the Vaccination Bill itself, much as we desire the spread of vaccination, we should regret to see a good cause damaged by injudicious persistence in a course which secures few friends but many foes; but we especially object to the doctrine that immediate legislation, however crude and ill-advised, is to be preferred to waiting for a sound practical measure, which there ought to be no difficulty in devising for consideration next session.

To our thinking, there are already quite enough unworkable Acts of Parliament on the statute books without adding another.

CATTLE PLAGUE AND DISINFECTANTS.

If Mr. Crookes were not one of the most modest and retiring of men, we should long ago have had a question put in Parliament as to the steps which the Privy Council had adopted, beyond the slaughtering of beasts and arrest of transmission, for the purpose of checking the progress of this new outbreak of cattle plague. The question would have been asked whether any directions or recommendations had been issued to dairymen, inspectors, and stock owners as to the best method of procedure when the disease breaks out in a farm or other establishment of cattle in their neighbourhood. The neglect of issuing such recommendation leaves each inspector at liberty to follow his own devices. We have heard of a shoemaker being appointed by a local authority to such a post, and an appointment of the kind does not necessarily bring with it the requisite knowledge for the proper performance of the duties of the office. In London everybody knows that the committees locally entrusted with the arrangements for checking the outbreak are not constituted of men very learned in preventive medicine, so that, as things stand now, they are very much in the position of blind men being led by the blind. Besides, the absence of any official instruction leaves the general public to believe that nothing further is known as to the method of prevention than that the sick and the healthy should be indiscriminately slaughtered. We are not quarrelling with the procedure as far as it goes; all we say is, that the preventive measures should not stop here. The slaying of cattle, indeed, necessarily puts a stop to any further progress of the disease in the particular herd affected, and so far lessens the chance of attack in neighbouring herds; but still the latter are not safe so long as the virus is undestroyed. And the virus is not destroyed by mere slaughtering. It hangs about the shed; it is concentrated in the manure dropped upon the floor of it or in the fields; it is blown about in dust; it is carried about on the boots of herdsmen, and, in fifty indefinable ways, endangers the whole neighbourhood of an infected place for miles round. So far as the issue of instructions to stock owners goes, the neighbourhood of infected places may continue to be endangered. One would almost think that the Lords of Her Majesty's Privy Council were without all scientific assistance. Certainly, for any practical use they have been to those in authority, Mr. Crookes might never have made the accurate and convincing experiments which he did make in respect of the several methods suggested for the destruction of cattle plague virus. As their lordships and Dr. Williams appear so innocent of all knowledge upon this subject, it will not be much amiss for us to enlighten them a little.

First, then, Mr. Crookes has shown that the favourite disinfectant—namely, chloride of lime—is about the least efficient of any of those substances which are reputed to possess disinfectant qualities. Chlorine itself is very little better. True, it will destroy the virus in time if one uses enough of it; but as it acts by way of oxidation, and as living virus resists oxidation longer than dead oxidisable matter, it follows that before chlorine gas can attack a virus everything else that it can oxidise will be oxidised first—everything, in short, such as sulphuretted hydrogen, which has no more to do with the spread of cattle plague than their lordships' black hats. And if chlorine is so extravagant and questionable a disinfectant, what can possibly be expected from a sprinkling of chloride of lime, perhaps one of the most adulterated disinfectants known—adulterated in the sense that, as commonly sold, it contains an excess of carbonate of lime and chloride of calcium, and

not more than about 20 per cent. of chlorine in a form that is available for disinfection.

Secondly, Mr. Crookes has shown that there exist in sulphurous acid and carbolic acid substances which are absolutely destructive of every kind of living thing of low organisation, such as cattle plague virus is supposed to be—that these substances not only destroy the virus, but attack it at once, and, moreover, arrest all tendency to putrefactive decomposition in animal matters with which they are mixed. But even this is not all that his observations have brought to light, for the deductions of the philosopher have been thoroughly borne out by the observation of the practical sanitarian. Mr. Crookes is a scientific chemist, but this is no reason why his practical observations are to be ignored. In his Report to the Cattle Plague Commissioners several striking instances of the value of these disinfectants are recorded. We will only quote one of them, however, leaving our readers to consult the original report (Appendix to the Third Report of the Cattle Plague Commissioners, p. 194) for he remainder. The instance we refer to is of the nature of a crucial experiment. The farm of a Mr. Lowe, in Cheshire, was situated in the centre of one of the most affected localities in England. The stock consisted of 73 animals—45 milch cows, kept in houses which were regularly disinfected, and 15 two-year-old heifers and 13 yearling calves kept in fields and open sheds. To these latter no disinfectant whatever was used. This was in December, 1865. The disease prevailed severely all round, but no case occurred at Mr. Lowe's farm until February, when a man who had attended a post-mortem examination of some diseased beasts came directly and milked some of the cows. Four cases (three of the cows milked by the man, and one case from further infection) were all that occurred among the 45 cows, and the carbolic acid used in the sheds seemed rather to have improved their health. The same man prepared food for the beasts in the field who were unprotected, and in a fortnight every one of them was dead.

Now, what was done by Mr. Crookes on Mr. Lowe's farm may be done elsewhere, and sheds might be protected in London just as well as in Cheshire, if only there were humility enough in those in authority to take a lesson from a chemist of eminence. We understand that last year, on an outbreak taking place on an estate belonging to the Earl of Lichfield, Mr. Crookes engaged to stop it in a fortnight, and he did it. The method he adopted was a scientific one, and he succeeded, notwithstanding that he was only a chemist. He was not too proud to learn from the pathologist that impending cattle plague is indicated by a rise of temperature above 102°, nor from the observations of Medical men that cattle plague was a disease spreading by contagion. His proceeding, then, was merely an application of what he knew was established as truth, his method being careful separation of all the animals which showed on any day an elevated temperature, the slaughter of all actually attacked, and the free and judicious application of the "colytic" disinfectants. We wonder whether Dr. Alexander Williams ever heard of carbolic acid; if not, the sooner he makes the acquaintance of Mr. Crookes, the better for the country at large. In the meantime, we earnestly recommend the London cowkeepers to lay in a stock of this invaluable disinfectant, to use it daily in the water with which they cleanse their sheds, to sprinkle it freely about the lairs and stalls, to wash with it the walls, rafters, and all parts of their premises that can be reached, and to leave some exposed in some shallow vessel of sufficient extent to charge the air with vapour, and to do this every day so long as cattle plague exists in London.

THE Bishop of Oxford preached last Sunday morning at King's College Chapel in aid of King's College Hospital. A sum of £80 was collected, out of which the Bishop himself contributed the handsome sum of £30.

THE WEEK.

TOPICS OF THE DAY.

WE are happy to announce that the Council of the Royal College of Surgeons have elected Mr. Solly to the vacancy in the Court of Examiners created by the retirement of Sir William Lawrence. It may be that ere long the examinations in anatomy and physiology will be placed in the hands of some younger representatives of the advancing life-science of the day; but until such a change takes place, it is far better that the rule of seniority amongst seniors should not be abandoned. Another resignation is talked of, and we may then hope that the Court of Examiners will be benefited and strengthened by Sir William Fergusson's vast Surgical knowledge and experience. The Profession will readily appreciate the graceful manner in which Sir William is said to have waived his own claims in favour of those of his highly esteemed and accomplished colleague.

The Medical representation of Universities has formed another topic of engrossing interest in Medical circles during the week. As we have treated the subject *in extenso* elsewhere, we shall not enlarge on it here further than to observe that to the list of possible candidates who have been talked of for the University of London might be added the names of Dr. W. Farr, Mr. Simon, and Dr. Quain. We are informed, however, that the latter gentleman would decline the honour, we presume for similar reasons to those which have prevented Dr. Gull from allowing himself to be brought forward.

The loss of a Professional franchise by the vote of the Committee on Sir Roundell Palmer's amendment is scarcely, in the present state of things, a matter for serious regret. There will be very few of our Profession who will not obtain votes either under household or lodger franchise, and the vast extension of the right of voting in boroughs and counties conferred by the Reform Bill diminishes proportionately the value of special franchises. The previous vote of the Committee, that the words "male person" should be omitted in Clause 5 as unnecessary, has certainly gone far to reconcile us to the loss of these fancy franchises. We hope we are not deficient in gallantry, but we do not want to see the Medical Profession distinguished as the only body conferring the right of voting on the fair sex. Medicine seems already sufficiently attractive.

We hope that the new Pharmac opœia will not be thrust on the Medical world in the unceremonious manner in which its predecessor was. The Act 21 and 22 Vict., c. 90, only requires for the publication of the British Pharmacopœia that notice should be given in the London, Edinburgh, and Dublin *Gazettes*. But it is clear that some weeks previously to this final advertisement, which is the legal evidence of the publication, it is the duty of the Medical Council to issue notices of their intention to supersede their former volume by a new one. It is unreasonable to expect that druggists and dispensers in the country shall, without any time for preparation, obtain the book and make themselves acquainted with its contents.

Additional ground for hope that Dr. Livingstone may still be alive was given at the recent anniversary meeting of the Geographical Society. The story of Dr. Livingstone's murder rests entirely on the testimony of one Moosa, a Johanna man. One of the speakers at the meeting, a Mr. Young, gunner of one of Her Majesty's yachts, said that he had had eighteen months' acquaintance with the Johanna men, and believed them to be the greatest scoundrels in existence.

"If Dr. Livingstone were dead, he had certainly not been killed in the manner alleged. This very man Moosa had been at one time under his command, so that he knew him thoroughly. In a season of great famine, a bullock was killed for the party, and the Johanna men had their share; notwithstanding which, portions belonging to the white men were stolen. Moosa accompanied him all through the village in

quest of the thief, but the missing property was eventually found in his own bag!"

In reference to "Serpents *v.* Humanity," the tone of some of our contemporaries is not a little amusing. If we believe them, the whole proceeding affords the most pleasurable sensations of curiosity and excitement to the rabbits and mice. The former commence the acquaintance by sitting on the python's back, and the latter nibble his nose. These apologies are quite unnecessary, for the Zoological Society does not make a public exhibition of this charming lesson in natural history; but they forcibly remind us of the answer of an old huntsman to the Countess of ——, when she refused to visit the meet on the ground of the cruelty of the sport. "Cruel!" replied the old man; "why, my lady, it can't possibly be cruel. We all knows that the gentlemen like it; and we all knows that the hosses like it; and we all knows that the hounds like it; and none of us, you know, my lady, can know for certain that the foxes don't like it."

Lord R. Montagu's answer has disposed of the recommendations of the Charity Commissioners in reference to Dr. Brown's bequest, at least for this session. The money is clearly not sufficient to support a Veterinary Hospital and School, and we do not see that the Charity Commissioners have justice on their side when they propose to divert it from the object mentioned by the giver. Rightfully it belongs to the University of Dublin for the purpose of founding professorships of certain European and Oriental languages, and we hope that the opposition to the Bill the University has set on foot will be successful.

The meeting of the Royal Medical and Chirurgical Society on Tuesday was, perhaps, a better one than usual. Mr. Moore's paper on cancer of the breast recurring after operation, in which he supported his opinion that in the large majority of cases a recurrence of the disease is due to imperfection in the operation, some portion of diseased tissue being left behind, elicited speeches from Messrs. Solly, Birkett, Savory, Hutchinson, Lee, and others, of more than ordinary interest. After the meeting, Mr. Bruce, of University College, exhibited his very ingenious gas cautery, an account of which we publish elsewhere. It was announced that an extraordinary meeting of the Society will be held on June 18 for the purpose of receiving the report of the Committee on Hypodermic Injection.

There is a great dearth of portraits of Medical men in the exhibition of the Royal Academy this season. In the sculpture room there is a good bust of Sir William Lawrence by Weekes. It is a good likeness, and the attitude of the head is characteristic, but, on the whole, we prefer the bust in the possession of the Medical and Chirurgical Society. There is also a very good head of Mr. Le Gros Clark by W. D. Keyworth. The Kirkes medal, a prize for Clinical Medicine, instituted at St. Bartholomew's in memory of the late Dr. Kirkes, is exhibited by J. S. and A. B. Wyon. It struck us that the portrait of Dr. Kirkes which the medal bears does but scant justice to his delicate earnest face and expression. There are also exhibited busts of Dr. W. Clark, the late Professor of Anatomy in the University of Cambridge, and Dr. Burt, late President of the Royal College of Physicians of Edinburgh.

With regard to the dispute about Greenwich Hospital, it is now publicly known that the opinions of Dr. Barnes and Dr. Stephen Ward, the Physicians to the *Dreadnought*, have, from the commencement of the discussion, been in favour of the block offered by the Admiralty to the Hospital authorities. In other words, they coincide with the opinions we have from the beginning expressed. In fact, we believe there is but little difference of opinion amongst unprejudiced persons who have investigated the subject. Dr. Barnes and Dr. Ward have sent to the Committee written statements in favour of the Admiralty block.

HEALTH OF THE PRINCE IMPERIAL.

A French correspondent says:—"Your readers will learn, no doubt with satisfaction, that the health of the Imperial Prince has considerably improved, and that a complete recovery may soon be anticipated. It is whispered about, in official circles, that, on this fortunate occasion, Professor Nélaton will be raised to the dignity of a Senator—a measure which will certainly honour the Profession at large in the person of one of its most distinguished members. No English Physician has been hitherto raised to the peerage. But if military success, legal knowledge, political ability, or even literary eminence (as in the case of Macaulay), form a sufficient claim to the highest dignity which it is in the power of the sovereign to bestow, why should science alone be excluded from the highest of all rewards which have been hitherto granted to intellectual superiority? In this respect I should be happy to see France take the lead."

A "religious" newspaper last week propagated the report that the young Prince had had two gold plates inserted in his thigh! and that recovery was hopeless.

THE ALEXANDER PRIZE.

We call attention to the advertisement issued by the Alexander Memorial Fund. The Committee of the Fund have determined on offering triennially a medal, with the sum of £50, for the best essay on a subject selected by them relating to military Medicine and Surgery. A more fitting memorial to the memory of the late Mr. Alexander could not well be conceived. We trust that many of our Medical brethren in the Army will relieve the tedium of garrison towns, up-country stations in India and elsewhere, by competing for these prizes. The first prize is on the Etiology and Prevalence of Diseases of the Heart amongst Soldiers.

THE FEVER IN THE MAURITIUS.

The dreadful accounts of the ravages produced by yellow fever in the Island of Mauritius which we recently noticed deserve some qualification. Inquiries made at the various Mauritius "houses" in the City show that the mortality was almost exclusively confined to the Indian coolie and creole population, our fellow-countrymen appearing to have nearly entirely escaped. The troops, too, had, up to the date of advices (April 18), not suffered. It seems that, as in all such instances, the outbreak is attributable to the scandalously defective sanitary arrangements of Port Louis. The habits of the lower classes of Indians are filthy in the extreme; and when we add to this the fact that there is an entire absence of house drainage, it is not to be wondered at that so fearful an epidemic did burst out. The mortality was estimated at 13,564 out of a population of 341,000. The death-rate of Port Louis alone was $7\frac{1}{2}$ per cent. for 65 days.

THE HOME OF THE CATTLE PLAGUE.

The Food Committee of the Society of Arts continues its useful investigations, and at each sitting brings important facts to light. It does not confine its search for evidence to members of the scientific world, but hears what all those who have experience upon the food question have to state. Some useful practical information was elicited from one of the witnesses at a late meeting of the Committee. Mr. Herman Gebhardt, a German, who has been engaged in the cattle trade for the last eighteen years, gave it as his opinion, and that of most of the salesmen, that the cattle plague is most frequently introduced into this and other European countries from Hungary. He therefore urges the Government to take steps to prevent the importation of Hungarian cattle. The establishment of slaughter-houses at the principal ports of entry would not only be impracticable, but would, if carried out, be injurious. Two chief difficulties attend this measure

for the exclusion of the Rinderpest—1st. The demand fluctuates enormously, and the same may be said of the supply; hence it is impossible for the salesman supplying a great number of retail butchers to know how many beasts to kill. 2nd. The intense heat of summer would render the meat unfit for consumption before it renched the retail butchers. Mr. Gebhardt suggests, as the only remedy, the appointment of a number of inspectors, who shall examine the cattle as they reach the ports, and destroy infected beasts and those which arrive from infected districts; and the separation of foreign from native cattle by the formation of district markets. The suggestion is, to a certain extent, good, and there are facilities for carrying it out, since the *cordon* system is not only rigidly enforced abroad, but the Continental countries give every information as to the districts in which the Rinderpest has made its appearance. Mr. Gebhardt stated that Hungary is the seat of most of the European cattle plagues, and that this is so well known to the Austrians that they will not allow any Hungarian cattle to enter their territories. If this be true, it offers us a certain guarantee of protection, inasmuch as at least a certain number of the ways of exit for infected beasts are cut off. The matter deserves the earliest attention of the Government, for we perceive, by M. Van Thal's letter of the 28th inst., that the number of cases of Rinderpest in Holland for the week ending May 18 was 84.

SEA-SCURVY.

A MEASURE for the prevention of scurvy in our mercantile navy is at last promised; but we suppose that some time, as in all such cases, will elapse before a thoroughly efficient Act is passed. In the House of Commons, on Monday night, Mr. Cave stated, in reply to a question from Mr. Alderman Salomons, that the President of the Board of Trade "will shortly introduce into the House of Lords a bill for remedying the defects of the existing law." It is to be hoped that the new measure will be more fruitful than the last one. During the passage of the late Acts through the House, the officers appointed to inspect the stores where the lime-juice is deposited were removed from the control of the Board of Trade, and placed under the local marine boards, and these latter have recently declined to appoint inspectors. Hence there is practically, at the present time, no safe provision for the crews of merchant vessels, and until a proper Bill passes the House, we can hope for little abatement of scurvy among our mercantile marine.

THE CHEMISTRY OF RIPENING FRUIT.

DR. DUPRÉ has been publishing the results of his investigations into the chemical changes which occur in fruits which are passing from the green to the ripe state. In a paper lately read before the Chemical Society, he showed that although the relative quantity of acid in fruit diminishes as the fruit ripens, the absolute quantity remains tolerably constant, or, at least, diminishes but slightly. There can be no doubt, therefore, that the sugar increases in quantity, and it seems not unlikely that the development of the sugar may take place through the action of the acid in a manner similar to the production of sugar from starch by the action of dilute acids. Dr. Dupré states that a hundred average-sized apples gathered on September 13, October 12, and November 16, were found to contain respectively 2·5 grammes, 1·9 gramme, and 1·8 gramme of tartaric acid—a result which tends to bear out his opinions expressed above.

THE MEDICAL TEACHERS' ASSOCIATION.

A VERY large and influential meeting of professors, lecturers, and Hospital Physicians and Surgeons took place at the rooms of the Royal Medical and Chirurgical Society on Friday, May 24, for the purpose of forming a Medical Teachers' Association. The meeting, our readers are already aware, was convened principally through the praiseworthy enterprise of Mr. Bernard E. Brodhurst, and we are sure that that gentleman must feel well satisfied with the large measure of success which has hitherto attended his efforts. The chairman of the evening was Mr. Solly, of St. Thomas's, who, in his opening address, insisted upon the benefit and advantages of union, illustrating his moral by the history of the early railway companies, and disclaimed any wish on the part of the Association to put itself in antagonism with the Medical Council or the Examining Boards. Several letters were read from gentlemen who were unable to attend. Amongst them was one from Mr. Quain, who stated that when a former Medical Bill was before Parliament, which he thought contained proposals which would affect injuriously the interests of the Medical schools of London, he had endeavoured to unite the London teachers in opposing it. His efforts, however, utterly failed, except in the case of the Professors of King's and University Colleges. Even this combination, however, succeeded in defeating the Bill. The measures to which he referred had been reintroduced successfully in the last Bill, and he added that the objectionable parts were drawn in Scotland. Dr. Markham moved the first resolution—"That, with a view to combine the interests of the various Medical schools in promoting the advancement of Professional education, it is desirable to form an association of teachers and members of the metropolitan Hospital Medical schools which are recognised by the existing Examining Boards." He answered several objections to the establishment of the Association, such as that a similar scheme had been tried before and had failed—that there was nothing to be hoped from it—that it was usurping the functions of the General Medical Council. In referring to the work done by the latter body of potent, grave, and reverend seignors, whom he poetically designated "the rosebuds of the Profession," and the small influence they had on Medical education, we think he hardly gave sufficient credit for the good done by the visitation of examinations. Dr. Markham also passed under review some of the objects—such as the regulation of the number of lectures and mode of instruction, the question of fees, etc.—which the new Association might reasonably be expected to discuss. The motion was seconded by Mr. Timothy Holmes, who enlarged at some length upon the objects for which the Association might be useful, and on the relation of the teachers to the examining bodies. We think, however, that in the hint he gave, that the Association might take upon itself the office of a tribunal of Medical ethics, he touched upon somewhat untenable ground. An association of Medical teachers could never expect to speak on ethical subjects affecting the whole Profession with the authority of a general society in which all ranks and classes of the Profession are represented. Dr. Headlam Greenhow, whilst not calling in question the benefits to be derived to the cause of Medical education from such an association as that proposed, complained of some irregularities in the way the preliminary meeting had been convened, especially in reference to the non-representation of one at least of the metropolitan schools at that meeting. It was afterwards explained by Mr. Brodhurst and Mr. Campbell De Morgan that the latter gentleman had been invited to represent the Middlesex School, but was prevented complying with the invitation. Professor Williamson and Sir William Fergusson seconded the second resolution—"That the primary object of the Association should be to confer on all subjects connected with the education of Medical students in the schools of London, and to be a medium of communication between the teachers." In the course of his speech Sir William drew a contrast between the Medical teaching by individual teachers, which prevailed in his younger days, and that by schools which obtains now. As good had resulted from the substitution of combinations of teachers for individuals, so nothing but good must result from an association of the different

schools for the purpose of carrying out the great object. Mr. Barwell, in an amusing speech, proposed that the name of the Association should be the Medical Teachers' Association, observing that, as the Society had been conceived and brought forth, the honorary secretary being the parent, and the chairman, laying aside for the time his purity of practice, the accoucheur, he (Mr. Barwell) had to officiate as godfather. The motion was supported by Mr. Holt. An attempt was afterwards made to limit the Society, by affixing the word "Metropolitan" before "Medical." This amendment, however, was negatived. It was ultimately resolved, after a long debate, in which Drs. Markham, Barclay, Andrew Clark, Greenhow, and others took part, that an invitation should be sent to the secretary of each metropolitan school, inviting the attendance of a delegate, in order to the formation of a sub-committee, who should draw up a set of by-laws for the Association, to be discussed at an adjourned general meeting. Votes of thanks were given to the Medico-Chirurgical Society for the use of the room, and to the chairman, Mr. Solly, and the meeting adjourned.

FROM ABROAD.—DEATH OF M. FOLLIN—BANQUET OF CHEMISTS AT THE FRENCH EXHIBITION.

Surgery in France has sustained one of the severest losses that could have befallen it in the premature death of Eugene Follin, President of the Society of Surgery, snatched away just as he was realising some of the rewards of an able and laborious career. The author of the best modern French Surgical Pathology and other works of great merit, he has perhaps conferred most benefit upon the Profession in his own country by the masterly expositions he has contributed of the advances which Surgery has made in other parts of Europe. These have always met a cordial and appreciative welcome at his hands, and the readers of his able and exhaustive critical articles in the *Archives Générales*, of which he was one of the editors, cannot but be aware how much he has contributed to a much wanted expansion of view in France. He, MM. Broca and Verneuil, from earnest competitors thrown accidentally together, became converted into the most attached of friends, and the tributes these two Surgeons have paid to the memory of their lost co-worker are of a most touching character, and elevated far above the region of the commonplaces so frequently characteristic of funereal orations.

One of the interesting *réunions* which are resulting from the French Exhibition recently took place in the shape of a banquet given to the chemists of foreign countries, organised by MM. Fremy, Thénard, and Wurtz, and presided over by the veteran Senator Dumas. The observations with which he prefaced the toast of the "English Chemists" were of the most flattering and appreciative character, enumerating the proud galaxy of names in chemical and physical science we can boast of. Professor Playfair, in reply, was enabled to refer to names no less eminent among our neighbours, and justly characterised the President as a bright example of the union of abstract and applied science. "In the year of a great international exhibition," he observed, "you are, sir, a worthy exponent of this fact, that the resources for the benefit of the human race owe immense developments to the sciences which we cultivate for the love of truth, and which we are well pleased to see so largely applied to the progress of industry."

M. Balard, on giving Baron Liebig's health, after adverting to some of his principal discoveries, observed:—"The chemist whom we are now honouring has done still better than these works: he has also raised up men on every side. He has created in Germany, whence they have radiated everywhere, those grand laboratories to which young *savants* resort from all parts, less for the purpose of learning chemistry than to contribute to its progress—inspired not only, as formerly, by the voice of the master, but also by that of their numerous co-disciples, encouraging, enlightening, and rectifying each other, amidst the errors, the lights, and the ardour of their rivalries. Thanks to this assemblage, the little town of Giessen became a bright intellectual centre in Germany, and from this modest source has issued a crowd of chemists who at the present time rank in all countries among the most respected teachers, though but yesterday the disciples of the eminent man we are now honouring." The Baron, on replying, gave the memory of the two great French chemists, the founders of modern science—Gay-Lussac and Thénard.

"You know, gentlemen," he observed, "why their names have always remained inseparable in the history of science. You are aware of their merits; but there are few of us who have had the happiness of knowing these *savants* personally. The desire I feel of paying my tribute of gratitude to their memory induces me to say a few words concerning them. What they both did for me will enable you to understand what they did for many others. It is now forty-four years since I arrived in Paris, a young student of 19, devoid of any recommendation beyond my desire of learning. I brought with me a little memoir on fulminating compounds, and I applied to M. Thénard to bring it before the Academy, of which body he was then President. He received the young foreign student with the greatest kindness. The note was read by Gay-Lussac, and reported on by Dulong; and from that moment I possessed the warmest friends in Paris. Thénard procured me a laboratory where I could continue my researches, and my happiness culminated when Gay-Lussac admitted me into his house, and proposed to complete with me my investigations of the fulminants at the laboratory of the Arsenal. There it was all my future labours received their direction. 'You must occupy yourself,' he repeated to me daily, 'with organic chemistry. It is there we are defective.' I was, I believe, his first pupil. Never shall I forget the hours passed in Gay-Lussac's laboratory. When we had completed a good analysis, he would say, 'Now you must dance with me, as I used to dance with Thénard when we had discovered something good.' And dance we did. You have often heard Thénard called Father Thénard, and truly he was a father for us all, always stretching out and never refusing his hand to aid the weak in mounting the steps of the ladder and vanquishing difficulties."

Professor Hofmann, formerly of London, now of Berlin, proposed the health of the veteran Chevreul, who, unable to attend the banquet, addressed an affectionate letter to the President.

"In an assembly," Professor Hofmann observed, "representing the intellect of the two hemispheres, the human mind is extended and subdivided into an infinity of ramifications. But these all converge and unite into two great parallel currents—one being pure science or theory; the other applied science or practice. These two great currents very often approach each other, and even become confounded—the one supporting and fortifying the other. Seductive as is the topic, I must not here undertake to exhibit either the numerous services rendered by science to industry, or the promptitude with which industry hastens to pay her debt of gratitude. It is, in fact, to this alliance, one and indivisible, between science and industry, and to the benefits which it showers down upon humanity, that we owe this memorable and brilliant meeting. If, nevertheless, I allow myself for a moment to fix your attention upon these two levers of human progress—science and industry—it is because France has the rare and distinguished happiness of possessing a man whose universal genius and imperishable works have exerted a powerful influence on both of these. Is it necessary that I should name this man? I read in your eyes that his name is starting to your lips, and that I arouse a deep and sympathetic feeling in proposing the health of Chevreul, the founder of both a new science and a new industry. May Heaven protect so precious a life, and accord for a long while yet to this venerated dean of science all that youthful freshness which constitutes at once the happiness of his friends and the admiration of the world!"

PARLIAMENTARY.—THE CRIMINAL LAW BILL—THE CATTLE PLAGUE—BROWN'S CHARITY BILL—THE VACCINATION BILL—THE TANCRED CHARITY—THE SURGEON-IN-CHIEF OF THE METROPOLITAN POLICE—SCURVY AT SEA—DR. WARBOURG'S TINCTURE—EDUCATIONAL AND PROFESSIONAL FRANCHISES.

In the House of Lords on Thursday, May 23, Lord Cranworth

moved the second reading of the Criminal Law Bill (providing for the payment of witnesses for the defence). The Lord Chancellor acquiesced, and the Bill was read a second time.

In the House of Commons,

In answer to a question by Sir J. Hanmer, in reference to the spread of the cattle plague,

Lord R. Montagu replied that he had heard it stated that German cattle were imported into Hull and surreptitiously taken inland, but he did not know it officially. He fully believed it, however, for he was sorry to say that local authorities, even those nearer that House, were very lax in observing the law and co-operating with the Privy Council.

In answer to Mr. Vance,

Lord R. Montagu said that, at the instance of the Attorney-General for Ireland, he had postponed Brown's Charity Bill until June 17. He was then informed that the Lords would not receive a Charity Bill after June 21. Only four days would, therefore, remain in which to get the Bill through this House; and as it was opposed by Irish members, he feared that it stood a poor chance.

In answer to Mr. Barrow,

Lord R. Montagu said the Vaccination Bill would not be brought on until a morning sitting could be obtained for the discussion of it, but it was impossible to name the time.

The Tancred Charity Bill was read a second time, and referred to a Select Committee.

Mr. Grove moved for an address for returns of strength of each division of the Metropolitan Police force on January 1, 1846, 1856, and 1866; of any additions made to the force during the above-mentioned periods, specifying the dates thereof, and the amount of additions made; copies of a communication dated May 11, 1847, from the Secretary of State for the Home Department to the late Surgeon-in-Chief of the police force; of a communication dated June 27, 1865, from the Chief Commissioner of Police to the Home Secretary, recommending a candidate for appointment of Chief Surgeon; and of a communication from the Home Secretary to the Surgeon-in-Chief of the police force, dated July 13, 1865; and his reply thereto.

Mr. Hardy could not agree to the latter part of the return, which consisted of private communications. To the first two paragraphs he had no objection.

The first part of the return was agreed to.

In the House of Commons, on Monday,

Mr. Alderman Salomons asked the Vice-President of the Board of Trade what steps had been taken by the Board of Trade in consequence of the increased number of cases of sea scurvy admitted on board the *Dreadnought* from British ships, and of the representation made by the committee of the Seamen's Hospital Society as to this disease being now almost exclusively confined to the mercantile marine of the United Kingdom.

Mr. Cave said scurvy was caused, as the House knew, by want of vegetable acid, and had formerly prevailed on land, especially in garrison towns. It was not only unknown at the present day in the Royal Navy, but in the French mercantile marine, owing, no doubt, to the use of light wine and vegetables. By the Merchant Seamen's Act, 7th and 8th of Victoria, and the Merchant Shipping Act of the 17th and 18th of Victoria, captains of merchant ships were compelled to carry limejuice, which is by far the best remedy yet known; and masters of ships were bound to serve it out after the crews have been ten days on salt provisions. During the passage of these Acts through Parliament the appointment of inspectors was transferred from the Board of Trade to Local Marine Boards, and it appears from printed correspondence laid before Parliament last Session, that they decline to appoint any. The limejuice might either be bad in itself, or spoilt by storage in improper vessels. There was a penalty in the Act for selling adulterated limejuice, but it was necessary to prove that it was sold to a particular ship; there was no power of inspecting limejuice on the premises, nor any penalty for keeping it in store. There was no provision for keeping the limejuice in proper vessels. For two years past the Board of Trade had inquired into every bad case of scurvy, and in many cases both accommodation and provisions had been excellent. A Bill would shortly be introduced by the President of the Board of Trade to remedy these defects in the law; and a consultation was going on with the Customs on the subject of mixing spirits and limejuice in bond, in order that it might be taken on board mixed, together with the other bonded stores. Hon. members would find the fullest information on this important subject in papers laid before Parliament during the last and the present Session.

Sir R. Anstruther asked the Secretary of State for War what reports had been received as to the efficiency in cases of fever of Dr. Warbourg's tincture, and whether any steps were about to be taken to secure a supply of so valuable a medicine for the use of her Majesty's troops serving on foreign stations.

Sir J. Pakington said there was no occasion to take any steps for securing a supply of the medicine for foreign stations, as under the present practice a supply was forwarded wherever application to that effect was made by the Medical officer in charge. He was quite ready to produce the reports which had been received if the hon. member wished him to do so, but their general tendency was that Dr. Warbourg's tincture had not as good a curative effect as many other medicines less costly.

In Committee on the Reform Bill, in consideration of Clause 5, creating educational and professional franchises in counties and boroughs,

Mr. Powell moved the omission of the words "a male person who," which he said were unnecessary. After a short conversation this was agreed to by the Chancellor of the Exchequer, and the words were struck out.

Subsequently Sir R. Palmer moved the omission of the clause, arguing that it introduced a new principle and a new point of departure—personal instead of local qualification, which was manhood suffrage in embryo, and contained the germ of fresh agitation. Now that the dual vote had been cast aside, the lodger franchise introduced, and the borough franchise based on household suffrage, these fancy franchises were entirely unnecessary. If they were once adopted, they must be extended indefinitely to all professions and many trades.

Mr. Henley and Mr. Goldsmid also opposed the clause, and the Chancellor of the Exchequer, reminding the House that the lodger franchise was not in being when these franchises were proposed, intimated that he would not divide the Committee on it.

Clause 5 was then negatived.

NOTES ON THE PETECHIAL FEVER PREVAILING IN IRELAND.

(*From a Correspondent.*)

We have been furnished with a few notes of some of the cases of that peculiar petechial form of fever which has been prevailing in Ireland, and to which we have directed the attention of our readers. Some cases of the disease occurred among the military, and it is a very noteworthy circumstance that their occurrence was preceded by two or three instances of typhus fever, with which disease it appears to present many points of alliance and analogy. Still, there are several important particulars in which it differs from typhus, or, indeed, from any of the exanthematous types of disease with which we are acquainted. The rapid course and fatal issue of the cases; the gastro-intestinal symptoms in one set of cases and the cerebro-spinal in another; the relative non-acceleration of the pulse in many instances; and the rapid production of livid purpuric spots, varying in size from a mere point to that of half-a-crown, with a cyanotic tint of the skin in all of them—these are points of such dissimilarity to typhus fever, or, indeed, any other disease that has been observed in this country of late years, that there may well be some hesitation as to the name that shall be applied to it. There appears to be very considerable variety in the symptoms in different cases. Some exhibit signs of a cerebro-spinal arachnitis; some have high fever, hot skin, great headache, vomiting, and constipation, or diarrhœa; some di in a few hours, killed by the action of a poisoned blood on the heart and nerve centres; some appear to sink under a form of cerebral apnœa, due to effusion about the medulla and base of the brain; while others die of a mixed form of asthenia and coma. The disease does not possess the etiology of typhus; it does not limit itself to typhus or cholera haunts; it attacks the young, the strong, well-fed, and well-lodged quite as much as the old, the weak, the starving, or the dirty. There are a few circumstances connected with its spread among the military in relation to a "flying column" of a regiment at Birr, Ireland, that would lead us to imagine it may be contagious; but contagion has not assumed the same prominent position as a cause that it holds in typhus. We should like

to see a skilful, well-conceived, and well-executed inquiry instituted into its exact nature, symptoms, pathology, cause, spread, and its pathological affinities to other diseases.

PROVINCIAL CORRESPONDENCE.

IRELAND.

Dublin, May 25.

The Medical Society of the King and Queen's College of Physicians in Ireland has, within the present week, on the evenings of the 22nd and 24th inst., held two special meetings, second in importance only to those recently held by the same body on the subject of the recent epidemic of cholera, and of which I sent you, in former letters, a brief report. The subject under consideration at the meetings which have just taken place was the disease of which, during the past fifteen months, several cases have occurred in Dublin and other parts of Ireland, and which has been variously named, from the rapidity and fatality especially of the earlier cases, "black death," "black fever," "purpura maligna," etc. This disease, though new to Ireland, seems to have long prevailed, from time to time, in various parts of America. The names just enumerated were last night condemned by the unanimous voice of the large and influential assemblage of members and visitors present in the College Hall, as being both incorrect and calculated unnecessarily to alarm the public mind. Though its nomenclature is, perhaps, not yet finally settled, the majority of the meeting appeared to be in favour of the term proposed by the President, Dr. Stokes—viz., "malignant purpuric fever." All, however, were agreed as to the impropriety of designating the disease by the same name as the bubo-plague of the middle ages, from which it differs so essentially. At the meetings just held the plan was adopted which worked so satisfactorily during the cholera debate—the first evening being devoted to the reading of cases, and the second, with one or two exceptions, exclusively to discussion. During the latter each speaker was limited to ten minutes, an arrangement which had the effect of bringing forward a large amount of information in a clear and condensed form. To detail the cases, and record the observations of the several speakers, would exceed the limits not of one merely, but of many letters; I shall therefore content myself with bringing before your readers a sketch of the very able summary with which the learned President wound up the business of these very important and interesting meetings. I feel that by so doing I shall follow the course best adapted to put them in possession of what is at present known upon the subject.

During the past year (observed Dr. Stokes) Dublin has been visited by two forms of essential disease—the first, the affection we have been discussing to-night; the second, cholera. Looking at the invasion of these diseases in the one year, it is difficult to avoid the conclusion that some relation exists between them. The disease, which, for the sake of clearness, I call the *malignant purpuric fever*, seemed to precede the cholera, in some cases in its highest form of development, in others with symptoms of cerebro-spinal arachnitis. Then, during the pressure of the cholera, it became very much less frequent, and after the subsidence of cholera it reappeared, and cases occurred in certain country districts.

This disease has all the characteristics of a most malignant blood-poison, though in the category of essential, or the so-called zymotic, affections, it differs from any form of fever with which we have been familiar. Many cases have been contributed from independent observers, and, though their details as to the symptoms, complications, duration, and mortality vary, there is an amount of generic resemblance among them which compels us to group them under the one head. This disease differs from ordinary maculated fever,—

1st. In its rapid course and great mortality.

2ndly. In the eruption, considered in its character and time of appearance.

3rdly. In the frequency of a special local symptom—namely, the signs of cerebro-spinal irritation—and in the fact that in certain cases the membranes of the brain, and those of at least the upper part of the cord, have been found inflamed.

Let us consider these points. This disease has been fatal in within eight hours from its invasion, while a period of sixteen or eighteen hours has not been infrequent. In another form from five to six days has been the duration, and in a third the disease has run a course of more than a fortnight. The eruption has been various. In the rapidly fatal cases it has been chiefly in the form of petechiæ, running rapidly into large ecchymoses. In the first cases a few hours sufficed to render the whole right upper extremity and a large portion of the chest perfectly black. These vast ecchymoses were not elevated.

In the second form there were elevated spots passing from dusky red to purple or black; and in the third there were circular or crescentic eruptions—delible at first, indelible afterwards. In each of the latter forms larger ecchymotic patches would occur. The roundish and elevated spots, which, during life, were black, assumed in the dead body a red colour more or less vivid. In the second and third forms of the disease, other eruptions, such as vesicles and pustules, distinct from the spots, occurred, while in other cases the ecchymotic patch, or the circumscribed black spot, passed into a vesicle filled with dark-coloured serum. In one case, in the rapidly fatal form, the ecchymoses on the hands and feet and on the skin generally had the colour seen in some anæmic cases—white, with the faintest tint of yellow. A body which Dr. Stokes saw within a quarter of an hour after dissolution exhaled a most overpowering odour.

An important point of difference between this disease and typhus is the range of temperature. In a fatal case the temperature on the third day was 96·7°, and the highest recorded was 98·8° just before death; pulse 80. In a second fatal case the temperature on the fourth day was 99 6°, and before death it rose three degrees. The pulse on the fourth day was but 84.

The occurrence of cerebro-spinal irritation in many of the cases is most remarkable. This was shown by retraction of the head, a low delirium, fugitive but severe pains, and hyperæsthesia of the surface. In two cases which Dr. Stokes saw, the patients could lie only on the abdomen. There was great variety in the degree of these symptoms, and in some there were remissions within short spaces of time. On dissection in many cases, well-marked arachnitis of the upper portion of the cord, the medulla oblongata, the fissure of Sylvius, and the lower portions of the brain, with effusion of serum and lymph, have been found.

But we must not forget that in many other cases neither did the symptoms of this local malady occur, nor were these changes found after death, and so it would appear that the lesion was not primary, but secondary; and all our observation goes to establish the analogy between this and other affections admitted as secondary to a general or essential condition, for these are, though frequent, unnecessary; they are incompetent to explain all the phenomena, and bear no proportion to the intensity or fatality of the disease. Let it not be forgotten that in some of the worst cases the symptoms were absent; and if, as some have supposed, the eruption, the ecchymoses, the failure of circulation, were attributable to the disturbance of the nervous function by the local disease, the worst cases should have shown the greatest amount of local lesion.

That there may be an epidemic tendency to local disease is admitted. Something of this kind was seen in Dublin many years ago, when a great number of cases of abscess of the liver, a disease very rare in this country, appeared; and we all know that for some years past, dating from the period of the observations of the ever-to-be-lamented Dr. Mayne, cases of cerebro-spinal inflammation have been not infrequent. Among other observations, those of Professor Law are very important. But though this cerebro-spinal inflammation has, as it were, been naturalised among us for years, it is only during the last fifteen months that the malady so distinctive and so fatal has appeared. If cerebro-spinal irritation were its cause, why happens it that this malignant purpuric fever was not developed long ago?

Nor are the symptoms of cerebro-spinal meningitis always in proportion to the degree of the lesion. Dr. Stokes saw last year, with Dr. Colles, a case in which the purpuric or, as it were, essential condition lasted only for three or four days. There was so much retraction of the head that the patient could lie only on the abdomen. In this state he continued for upwards of six weeks, in excellent general health, eating, drinking, and sleeping, and making flesh. This boy recovered.

In another case, which began by a typhoid fever, retraction came on and continued to increase to the most extreme degree. When the patient was raised up the face was all but horizontal; yet in the course of a single night the symptom had nearly disappeared, and the next day there was no retraction.

Dr. Stokes alluded also to the great similarity presented in

some cases by the eruption to that of measles. A case which came under his own observation was sufficient, however, to show the distinctness of the two diseases. A child, labouring under the malignant purpuric fever, was attacked with measles. The former disease was suspended, the prostration attending it gave way to inflammatory symptoms, the stimulants previously given had to be discontinued; but when the measles had run through their course the prostration returned, and it became again necessary energetically to support the patient's strength.

Another point referred to was the question of the communicability of the disease. The first case in which there was evidence of its contagiousness occurred in Tullamoore, in the King's County, where an assistant in a large mercantile establishment having died of it after a short illness, his successor was also seized with the disease, and died after nine or ten days of suffering. Since that Dr. Haverty has recorded the cases of three soldiers, in whom the disease could be traced from one to the other; and at the present time there are in the Meath Hospital a mother and child who appear both to have taken it from another child of the same family, who died of the disease a few days ago. The second child sickened a week after the first, and the mother, who got into bed to the first child to take care of it, was taken ill a day later. These two cases are improving.

In conclusion, Dr. Stokes said: The various cases contributed by the members and visitors on this occasion, and on that of the recent discussion on cholera, show the great value of this Society. It is in truth a great Medical observatory, to watch and record passing events, and to discuss them while the facts in question are fresh in our memories.

On the motion of Dr. Moore, seconded by Dr. Gordon, it was resolved that the cases brought forward at the meeting, and the report of the discussion, should be published in full.

The Society adjourned at a late hour.

GENERAL CORRESPONDENCE.

COUNTY AND CITY OF CORK MEDICAL PROTECTIVE ASSOCIATION.

LETTER FROM DR. CHARLES ARMSTRONG.

[To the Editor of the Medical Times and Gazette.]

SIR,—A memorial from this Association, of which the enclosed is a copy, was entered on the minutes of the Medical Council of Great Britain on May 29 last, having arrived too late for consideration in connexion with the question of Medical education. As the memorial is expected to be again before the Council at its sitting this year, may I beg the favour of you to give it the wide circulation which a place in your journal will secure for it?

I am, &c.

CHARLES ARMSTRONG, M.D.,
Hon. Sec.

Cork, May 24.

"*To the President and Members of the General Medical Council of the United Kingdom.*

"The Memorial of the County and City of Cork Medical Protective Association respectfully showeth:—

"That your memorialists look forward with deep interest to the measure which they understand is likely soon to be introduced into Parliament to amend the Medical Act of 1858.

"That this Act must be looked upon as having, up to the present time, fallen short of what was expected from it, in its two principal objects—viz., the protection of the public, and a really improved system of Medical education.

"That with respect to the first of these objects, it appears to your memorialists that registration must continue to be all but nugatory, unless the new legislation render it imperative on the Council to order, through duly authorised officers, the prosecution of all persons incurring the penalty specified in Clause XL. of the Medical Act, or that which may be substituted for it.

"That the vastly more important object of securing a sound and adequate education for all candidates for Medical and Surgical qualifications, is not, in the apprehension of your memorialists, likely to be attained whilst the powers of the Council continue to be limited, as they are at present. To be enabled efficiently to provide for the country a body of properly qualified Practitioners, it appears to memorialists that the Council should be empowered to prescribe and enforce such educational regulations as may be found requisite for the attainment of that important object.

"That no education, memorialists respectfully submit, can be considered sound and adequate, which does not include, as preliminary to entering on Medical studies, properly so called, such a course, both literary and scientific, as will enable the student effectively to master the varied subjects of Professional study with which he will have to grapple, and afterwards to take such a position amongst men of general information as will be calculated to maintain for Medical science the estimation in which it is desirable, for the good of mankind, that it should be held.

"That the course for a degree in Arts in the different Universities should, in the opinion of your memorialists, be preliminary to that for a degree in Medicine, and that a course of education, embodying both classical studies and the various branches of physical science, should be indispensable before entrance on Medical and Surgical education of whatsoever character.

"Wherefore your memorialists would respectfully suggest the expediency of the Council seeking for such a modification of Clause XLI. of the Medical Act as will secure the prosecution of offenders against its provisions; but especially of seeking for the power to establish a uniform curriculum of studies, preliminary and Professional, which shall be binding on all the educational bodies of the country.

"And your Memorialists, etc."

THE NEW VACCINATION BILL.

LETTER FROM DR. SEPTIMUS GIBBON.

[To the Editor of the Medical Times and Gazette.]

SIR,—My eye has just caught Dr. E. C. Seaton's letter in defence of the registration clauses of this Bill. Perhaps you will allow me a word on the subject.

He says that a register of primary cow-pox cases, compiled from certificates passing through the hands of at least *two*—perhaps six—persons, and the Post-office, is the essential basis of compulsory vaccination, because it is, firstly, the only *primâ facie* evidence that a child has been vaccinated, and is necessary to ground legal proceedings against the parents in case of neglect. Assuming that this cow-pox register can be made complete by means of the fines levied—*two* on Medical Practitioners, and *two* on parents—does Dr. Seaton really mean to tell us that the absence of a child's name from this register will be sufficient evidence for any sane person to apply for a summons, or for any magistrate to grant one against the parents? Secondly, it is the chief help and guide for promoting vaccination. Eleven years' experience in the north, as Medical Officer of Health (in a district where, by activity and intelligence, one registrar records the vaccinations of about 80 per cent. of the children whose births are registered) tells me that it is, so far from being useful, rather a clog and restriction on the practice of vaccination.

The stimuli required are a proper fee for the operator—a fee that would cover the cost of his getting a monthly or quarterly return of every birth registered from the district registrar—and as few restrictions and taxes on the parents and vaccinators as possible, such as attendance at stations, certificates B., C., and D., fines, &c.

Should these clauses ever be enforced, I venture to think that a liberal profession, like that of Medicine, will hand over vaccination to the cuppers, barbers, and other unqualified Practitioners.

I am, &c.,

SEPTIMUS GIBBON, M.B. Cantab.

13, Finsbury-square, May 23.

A NEW MEDICAL BARON.—M. Cloquet, known to all Europe as one of the most celebrated of French Surgeons and Anatomists, has just been created a Baron.

THE FRENCH ACADEMIES.—M. Chauffard has just been elected into the section of Medical Pathology of the Académie de Médecine, although M. Nonat had been placed before him on the list presented to the Academy by the Section. For the vacant seat in the Section of Medicine and Surgery in the Académie des Sciences, left vacant by the death of Jobert, the Section has presented the following list:—1. MM. Jules Guérin and Sédillot, *ex æquo;* 2. MM. Laugier and Nélaton, *ex æquo;* 3. M. Maisonneuve.

NEW INVENTION.

A NEW GAS CAUTERY.

At the last meeting of the Royal Medical and Chirurgical Society, Mr. Bruce exhibited an instrument lately invented by himself in which the intense heat of the blowpipe flame is made available as a cauterising agent. The instrument essentially consists of two tubes, about six inches in length, one of which serves as a burner, and is capable of being attached to an india-rubber ball containing the requisite supply of gas, this receiver being easily filled from any ordinary gas-jet by means of one of Dr. Andrew Clark's pump bells; the other tube is attached to the former somewhat obliquely, so that a stream of air blown through it by the operator impinges upon the flame, and converts it from one of rounded form and low intensity into a sharply-pointed conical jet, possessing sufficient heat to fuse the ordinary metals. This may be applied directly to the part, or it may be employed to heat a small platinum cup, which is so attached to the extremity of the tube as to receive the flame, and which becomes almost instantaneously of a bright red heat. The cups are made of various shapes, according to the uses to which they are to be applied, the three most useful forms being the hemispherical, the conical, and the pointed. Shields of various sizes may also be used to protect the surrounding parts during the application of the naked flame or of the platinum points in cases in which it is desirable to limit the action as much as possible. The whole apparatus is packed in a small box, and has the advantage over the galvanic battery both in portability and cheapness. The instrument was made from Mr. Bruce's design by Mr. Baker, of Holborn, who, we are informed, will shortly be prepared to supply them to the Profession.

MEDICAL NEWS.

University of Glasgow.—The following is a list of degrees which have been conferred by the University since April 27, 1867:—

Doctors of Medicine: Otho Francis Wyer, England; William Galloway, Scotland; Joseph H. Menzies, M.B., Scotland; Thomas Fielding, England; William Anderson, Scotland. *Bachelors of Medicine:* George A. Turner, South Seas; Alexr. T. Thompson, Jamaica; James M. Wilson, Scotland; William N. Maccall, Scotland; Robert Hamilton, Scotland; George A. Heron, Scotland; William G. Laidlaw, Scotland; Archibald E. Malloch, B.A., Canada; Eustace B. Thomson, England; James M'Ilroy, Ireland; Gavin P. Tennant, Scotland; Jonathan A. Harrison, England; John Ewan Brodie, Scotland; Duncan Crichton, Scotland; James Finlayson, Scotland; William Henderson, Scotland; Kenneth F. M'Lennan, Scotland; Donald Black, Scotland; John M'Lauchlan, Scotland; Thomas W. Jackson, Scotland; Donald Fraser, Scotland; Donald Campbell, Scotland; Joseph Coats, Scotland; William M'Laurin, Scotland; John Chalmers, Scotland; Frank L. Stephenson, England; Henry Appleton, England. *Masters in Surgery:* William Henderson, Scotland; George A. Turner, South Seas; James M. Wilson, Scotland; Alex. T. Thomson, Jamaica; William N. Maccall, Scotland; George A. Heron, Scotland; Robert Hamilton, Scotland; John M'Lauchlan, Scotland; Eustace B. Thomson, England; Jonathan A. Harrison, England; John Ewan Brodie, Scotland; William M'Laurin, Scotland; Alexr. Cameron, M.D., Scotland; Frank L. Stephenson, England; Henry Appleton, England; William Anderson, Scotland.

The following gentlemen were named as entitled to Honours, to Special Commendation, and to Commendation, on account of distinguished merit at the various examinations for the degrees, viz.:—

I. *Honours:* Joseph Coats, M.B., Scotland; James Finlayson, M.B., Scotland. II. *Special Commendation:* Gavin P. Tennant, M.B., Scotland; Archibald E. Malloch, B.A., M.B., Canada. III. *Commendation:* Henry Appleton, M.B., C.M., England; John Chalmers, M.B., Scotland; William G. Laidlaw, M.B., Scotland.

Royal College of Surgeons of England.—The following Members of the College, having undergone the necessary Examinations, were admitted Licentiates in Midwifery at a meeting of the Board on the 29th ult.:—

Messrs. Philip Downing Hopgood, Chipping Norton, diploma of membership dated April 23, 1867, and Edward James Leverton, L.S.A., Truro, Cornwall, April 25, 1866, students of St. Bartholomew's Hospital; David Havard, Newport, Pembroke, April 23, 1867, and Thomas Frederick Hopgood, L.S.A., Chipping Norton, May 7, 1867, of University College; James Hopkins Walters, Kingston-on-Thames, November 16, 1865, of Guy's Hospital; Robert Carlisle Appleton, Stockton-on-Tees, January 24, 1867, of the Newcastle School; Alexander Oberlin M'Keilar, Oldham, Lancashire, April 24, 1867, of the Manchester School; and Adam Wilkinson, L.R.C.P. Edin., and L.S.A., Shaftesbury, April 26, 1867.

It is stated that four candidates out of the twelve who presented themselves failed to satisfy the Board, and were consequently referred to their obstetric studies until the next meeting of the Board, in August.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 23, 1867:—

Frederick Wallace, 243, Hackney-road; John Amos Woodhams, Bourn, Lincolnshire.

As an Assistant:—

Edward Owen, Newtown, Montgomeryshire.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Ball, A., M.R.C.S.E., has been appointed Surgeon to the York Institution for Diseases of the Eye.

Harding, M., M.R.C.S., L.S.A., has been appointed Surgeon to the Central District of St. Pancras and Public Vaccinator to the Somerstown District.

Jeaffreson, J. R., M.R.C.S.E., has been appointed Surgeon to the Warneford Hospital, Leamington.

Perkins, J. R., L.R.C.S. Ed., L.S.A. Lond., late Resident Physician to the Royal Hospital for Sick Children, Edinburgh, has been appointed Senior Assistant Resident Medical Officer to the Leeds Public Dispensary.

Sieveking, E. H., M.D., has been appointed Physician to St. Mary's Hospital, Paddington.

BIRTHS.

Bastian.—On May 26, at 81, Avenue-road, Regent's-park, the wife of H. C. Bastian, M.D., of a daughter.

Brumwell.—On May 28, at Mopley, near Manchester, the wife of G. M. Brumwell, M.D., of a daughter.

Fairbairn.—On March 31, at Rio Janeiro, the wife of W. J. Fairbairn, M.D., of a son.

Hawkins.—On May 22, at 3, Imperial-villas, St. Saviour's-road, Jersey, the wife of E. W. Hawkins, M.R.C.S.E., of a son.

James.—On May 24, at Parry-vale, Forest-hill, the wife of Dr. A. James, of a daughter.

Longmore.—On May 24, at Hamble, Southampton, the wife of Deputy Inspector-General Longmore, C.B., of a daughter.

Morehouse.—On May 19, at 12, Park-terrace, Blackburn, Lancashire, the wife of J. B. Morehouse, L.R.C.P., L.R.C.S. Edin., of a daughter.

Saunders.—On May 21, at the Devon County Asylum, Exminster, the wife of G. Symes Saunders, M.B., of a son.

Watkins.—On May 26, at 61, Guildford-street, Russell-square, the wife of E. T. Watkins, M.D., of a son.

MARRIAGES.

M'William—Kirkpatrick.—On May 1, at Ballyclare Presbyterian Church, Ireland, W. A. M'William, M.D., L.R.C.S.E., Belfast, to Mary Jane, only daughter of John Kirkpatrick, Esq., Henryfield, Ballyclare. No cards.

Oldham—Bailey.—On April 27, at Nynee Tal, C. F. Oldham, Assistant-Surgeon H.M. Indian Forces, to Harriette Bertha, daughter of the late T. Bailey, Esq., of Gloucester.

Sass—Weldon.—On May 25, at St. Austin's, Aigburth, Liverpool, E. E. Sass, F.R.C.S., of York-place, Portman-square, to Mary Alethea, only daughter of J. H. Weldon, Esq, Oakley-square, N.W.

DEATHS.

Cowan, C., L.R.C.P. Edin., at Auckland, New Zealand, on February 25.

Crawford, A. F., M.D., at Winchester, on May 26, aged 68.

Rumsey, J. H., M.R.C.S.E., at Buenos Ayres, on May 13, aged 27.

Self, W., M.S.A., L.S.A., at 216, Richmond-road, Hackney, on the 28th inst.

Somerville, Thomas Hope, eldest son of D. H. Somerville, M.D., at Croydon, on May 21.

Stott, T. B, L.S.A., at 17, Cornwall-place, Holloway, on May 27, aged 59.

Taylor, James, M.D., M.R.C.S.E., at Castle Carey, Somerset, on the 26th inst., aged 61.

Wilton, J. W., F.R.C.S.E., at Gloucester, on May 23, aged 71.

VACANCIES.

North Riding Infirmary, Middlesboro'-on-Tees.—House-Surgeon.

Wandsworth House of Correction.—Surgeon.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Freebridge Lynn Union.—The first South Eastern District is vacant; area, 14,633; population, 2593; salary, £52 per annum.

Newmarket Union.—Mr. Thomas F. Fernandez has resigned the Ninth District; area, 4976; population, 1925; salary, £75 per annum.

Westbury and Whorwellsdown Union.—Dr. C. P. Combs has resigned part of the Second District; salary, £7 per annum.

APPOINTMENTS.

Bellingham Union.—James Rodger, M.D., L.R.C.P. Edin., L.F.P. and S. Glas., to the Fourth District.

Blackburn Union.—John Grime, M.B. Glas., M.C. Glas., L.S.A., to the First Blackburn District.

Eton Union.—Charles Holmes, M.R.C.S.E., L.S.A., to the Stoke District.

Leyburn Union.—Thomas P. Fothergill, M.B. Edin., M.R.C.S.E., L.S.A., to the Bedale District.

Newport (Mon) Union.—Thomas Linberg, M.R.C.S.E., L.S.A., to the Central District, the Workhouse, and the Caerleon Schools.

Reeth Union.—William Smith, M.R.C.S.E., L.S.A., to the Reeth District and the Workhouse.

Sculcoates Union.—Benjamin Locking, M.R.C.S.E., L.S.A., to the Hessle District.

Stafford Union.—Samuel Cookson, M.D. St. And., M.R.C.S.E., L.S.A., to the Castle Church District.

Tamworth Union.—Edward W. Witten, M.R.C.S.E., L.S.A., to the Clifton Distict.

SIR WILLIAM LAWRENCE.—We are happy to say that Sir William is gradually improving. He is able to walk with less assistance; but his power of articulation has not yet returned.

THE President of the Medical Council entertained a large party of metropolitan and provincial Medical celebrities at his residence on Wednesday evening.

THE LATE SIR ARCHIBALD ALISON.—This accomplished writer was the brother of the late Dr. William Pulteney Alison, the late reverend Professor of the Practice of Medicine in the University of Edinburgh. Talent and energy seem to run in families more conspicuously in Scotland than elsewhere—witness the Rutherfords, Playfairs, Monros, Alisons, and many other examples.

THE LEVÉE.—At the *levée*, held by command of the Queen at St. James's Palace on Wednesday, by his Royal Highness the Prince of Wales on behalf of her Majesty, the following presentations took place:—William Newman Brake, Staff Surgeon, Royal Navy, by the First Lord of the Admiralty; Assistant-Surgeon A. Clarke, Royal Artillery, by Colonel Lynedoch Gardiner; Surgeon-Major W. G. W. Cleminger, Bengal Army, by the Secretary of State for India; Dr. John Davidson, Inspector-General of Hospitals and Fleets, on being made a Companion of the Bath, by the First Lord of the Admiralty; Surgeon Furlong, 6th Enniskilling Dragoons, by Colonel T. R. Crawley; Surgeon Thomas Lowe, Madras Medical Establishment, by the Secretary of State for India; Henry Cooper Rose, M.D., by Lieutenant-Colonel Wilkinson; Dr. Smart, C.B., by the First Lord of the Admiralty; Assistant-Surgeon Charles J. Workman, M.D., by Lieutenant-Colonel Alcock. The following gentlemen attended the *levée*:—Sir Thomas Watson; Doctors George Owen Rees, Cape, Forbes Winslow, Minter; Messrs. White Cooper, Mitchell Henry, Erasmus Wilson, J. Atkins Davis (Deputy Inspector-General), Oscar Clayton, Philip Vanderbyl, M.P.

WE understand that Dr. T. Clifford Allbutt, of Leeds, will read a paper before the Epidemiological Society next Monday evening, "On the Prevention of Typhus and other Diseases by the Improvement of the Dwellings for the Poor." We beg leave to direct special attention to the paper, and may add that the Society invite the presence of all who are interested in the subject.

COLLEGIATE ELECTION.—An advertisement appears in the *London Gazette* of this day (Friday) to the effect that a meeting of the Fellows of the Royal College of Surgeons will be held at the Hall of that Institution on Thursday, July 4, at 2 o'clock, for the election of three Fellows into the Council of the College in the room of Mr. Frederic Carpenter Skey, of Mr. Thomas Wormald, and of Mr. Francis Kiernan, who go out in rotation, but are eligible for re-election. It is understood that these gentlemen will again offer themselves for the honour of a councillor's seat, but will meet with some opposition, as already Messrs. Holden and Spencer Smith's friends have expressed their intention of bringing these gentlemen forward.

WE trust that the recent affair at Marlborough-street Police-court will have some effect on the circulation of the disgusting circulars of late so often referred to in the public prints. We have been handed one in which R. J. Jordan's diplomas are printed at full length, and appended to a pamphlet of a very impure character; yet this had been sent to the private address of a most respectable gentleman. Surely it is time that some remedy were devised for such offences. A slight extension of Lord Campbell's Act, and the thing is done. Really the nuisance of having these horrid circulars sent to every man's dwelling is becoming greater than can be borne. We are also sorry to notice that an Aldershot paper, published apparently for the express use of the military—we mean *Sheldrake's Aldershot and Sandhurst Military Gazette*—still continues to insert advertisements of a character but little, if at all, superior to that of the circulars mentioned. Surely the proprietor's attention need only be called to this to procure their discontinuance.

A DEPUTATION of the Metropolitan Association of Medical Officers of Health had an interview with Lord Robert Montagu at the Privy Council on Friday on the subject of the Vaccination Bill. The deputation consisted of Dr. Druitt (President), Dr. George Buchanan, Dr. J. Northcote Vinen, Dr. Lankester, Dr. Letheby, Dr. Aldis, Dr. Tripe, Mr. Rendle, and Dr. Iliff.

ST. ANDREWS GRADUATES AND PARLIAMENTARY REPRESENTATION.—The Graduates in Medicine of the University of St. Andrews have met during the past week to form a Graduates' Association. The combination is emphatically a union for self-protection. By the thirtieth clause in the new Reform Bill for Scotland, as the Bill at present stands, almost the whole body of the Medical Graduates of St. Andrews in the United Kingdom will be excluded from the right of voting for the member of Parliament whose duty it will be to represent the interests of the University in the Legislature. This in itself is a sufficient grievance, and presses specially hard on gentlemen of education and position, who have undergone a long and difficult examination in order to become part of the University, who paid for many years more than £1000 annually to Government in stamp duty, and who are certainly amongst the best qualified of the community to enjoy the privilege of a vote for those who make the laws by which the community is governed. There is always, in questions of this nature, a particular or professional, and a general or public, interest at stake; and it sometimes happens that these distinct interests clash the one with the other, or seem so to clash. But in the present instance the professional and the public interest go together in the just and simple demand that a body of gentlemen who know the public necessities intimately, and who have earned enfranchisement honestly, shall have it freely.

ARMY MEDICAL DEPARTMENT.—The annual general meetings of the Army Medical Officers' Friendly and Benevolent Societies were held at the Ship Hotel, Charing-cross, on May 25. On this occasion the actuary's report of the last quinquennial examination of the Friendly Society was submitted to the meeting, and ordered to be printed and circulated among the members. It shows the financial condition of the Society to be in a highly satisfactory state, there being a considerable surplus of assets over liabilities. Mr. Brown, the actuary, calls attention in his report to the falling off of unmarried members who now join the Society, remarking—"It is much to be regretted that the number now induced to join the Society is so small, since the institution, by its successful management, holds out such large prospective benefits to them." The contributions to the Benevolent Society during the past year had been of a very liberal character, enabling the committee to recommend the sum of £540 for distribution among the various applicants for assistance.

CATTLE PLAGUE INQUIRY.—For the week ending May 18, 33 attacks of cattle plague have been reported, being an increase of 16 on the last return. The following table gives particulars of the three fresh outbreaks which occurred:—

District.	Date of Outbreak.	Farms, Sheds, or other Places in which the disease appeared for the first time.	Farms, Sheds, or other Places in which the disease re-appeared after an absence of at least 21 days.	Number of Cattle on the Premises when the disease appeared.	Number of Animals slaughtered healthy.	Diseased Animals.		
						Attacked.	Killed.	Died.
The Metropolis:—								
Tower Hamlets .	May 12	1	..	3	1	2	2	..
Ditto . . .	,, 16	..	1	12	6	6	5	1
Finsbury . . .	,, 17	1	..	74	16	25	25	..
Total . . .	..	2	1	89	23	33	32	1

For the week ending May 25, 84 attacks of cattle plague have been reported, being an increase of 51 on the last return. The total number of cattle reported to have been attacked in Great Britain since the commencement is 278,678, and 56,702 animals have, in the aggregate, been slaughtered healthy to prevent the spread of the disease.

THE TOOTH OF A MAMMOTH.—A specimen fossil of the lower molar of a mammoth has been discovered in Nottingham. The centre of the stump is greatly worn by constant mastication, but the enamel lines of the series of grinders are very bright and clear. The tooth was found in the sand drift eight feet six inches below the surface; it weighs about four pounds and a half.

THE FELLOWSHIP.—It is stated that no fewer than thirty-two candidates for the Fellowship of the College of Surgeons have been undergoing their examinations for this honourable distinction during the present week, a number unprecedented since the establishment of the institution. It is the first examination since the new regulations have come into operation, and shows unmistakably how they are appreciated. Of the thirty-two candidates, there were twelve seniors and five juniors, besides fifteen who will only undergo a portion of the prescribed ordeal; the first seventeen, being more ambitious, will aim to acquire the full title at once. On Tuesday the following questions in Anatomy and Physiology were submitted to both seniors and juniors, answers to four of which questions, if correctly given, would be considered sufficient—viz. :—Describe: 1. The development of the human heart and large blood-vessels, and point out the analogy between any of their transient conditions and the permanent conditions in lower animals. 2. The microscopical appearance of the various structures entering into the formation of a movable joint—viz., ligament, articular cartilage, and synovial membrane. 3. The structure of the stomach: the chemical composition of its secretions, and their influence on food. 4. The peculiarities of the blood in the hepatic, the renal, and the pulmonary veins. 5. The prostate: its connexions with contiguous parts, and its structure. 6. Give the structure and arrangement of the membranes of the spinal cord. On Wednesday the juniors were required to make certain dissections, and, on the same day, those seventeen who went in for the whole examination were taken to the Surgical wards of Guy's, St. Bartholomew's, and the London Hospitals, where their knowledge of Surgery was tested by the cases submitted to them by the examiners appointed for that purpose. On Thursday the following questions in Pathology and Surgery were submitted to seniors and juniors—viz. :—1. State the method of diagnosis between a cancerous and a recurring fibroid tumour, before and after removal by an operation, and the results to the patient (local and general) to be looked for after the removal of those growths respectively. 2. Describe the causes which may lead to empyema, and the symptoms by which the presence of pus may be detected or inferred to be present in the cavity of the pleura. Describe the operation for tapping the chest. 3. Describe accurately the successive stages of an operation for strangulated femoral hernia, mentioning the various complications and difficulties which may occur, and how you would meet them. State the causes of fatality in this form of hernia, and the morbid changes observable after death. 4. Describe the post-mortem appearance you would expect to find in examining the bodies of patients who died, the first of phthisis pulmonalis, the second of empyema, and the third of constriction of the left auriculo-ventricular opening. 5. What are the symptoms and what is the treatment of congenital syphilis? 6. Give an account of the appearance of the fundus of the healthy eye, as observed with an ophthalmoscope, and of any morbid conditions occasioning blindness which you have seen by aid of the same instrument, with their treatment. At the close of this day the twelve seniors and the five juniors were required to perform various operations on the subjects liberally provided for them, and without that crowding so much complained of at former examinations. The result will not be known until confirmed by the Council at its next meeting.

COUNTY AND CITY OF CORK MEDICO-CHIRURGICAL SOCIETY.—At the last meeting of the Session, Wednesday evening, May 8, the following officers for the ensuing year were elected by ballot:—*President:* Dr. Johnston. *Vice-President:* Dr. N. J. Hobart. *Secretary:* Dr. F. A. Purcell. *Treasurer:* Dr. Curtis. *Council:* Dr. Popham; Dr. Finn; Dr. O'Connor. *Ditto (three Late Presidents):* Dr. Cummins; Dr. Cremen; Dr. E. R. Townsend, Junior.

THE ITALIAN UNIVERSITIES.—The Commission appointed by the Minister of Public Instruction in order to inquire into the condition of the higher education of the country recommends in its report that the number of universities be diminished to seven—viz., Bologna, Naples, Padua, Palermo, Pavia, Pisa, and Turin. A Faculty will still be kept up at Florence as a *succursale* to Pisa, but only for the two last years of Medical studies and examinations. All the seven Government universities will embrace the study of Medicine and Law, some of them only having courses of philosophy embracing the study of philosophy and literature and the physical and natural sciences. Under certain restrictions the provinces may establish free universities, and the establishments now termed secondary universities will still retain any revenues they possess. The Government may even advance special subsidies to the communes to aid in establishing free universities or other institutions likely to develope public instruction. The most liberal view has been taken of the position of free Professors and their pupils.

ATTORNEY-GENERAL *v.* QUEEN'S COLLEGE, BIRMINGHAM.—(Court of Chancery, Lincoln's-inn, May 27: Before the Lords Justices of Appeal.)—This was an appeal from an order made by the Master of the Rolls on the 7th ult. approving a new scheme for the management of the above College. Their Lordships made two material alterations in the scheme. The first alteration was the introduction of a provision that clinical lectures shall be delivered at the Hospital by the Medical officers of the Hospital to the students of the College in such manner as shall be approved by the Medical Board in London, and that the Medical lecturers of the College shall lecture on other subjects than clinical. The second alteration was a provision that the Professor of Pastoral Theology, when appointed, shall be appointed by the President and Vice-President of the College (who are to be members of the Church of England) and the Bishop of the diocese. Subject to these and a few other trifling alterations, the scheme settled by the Master of the Rolls was approved by their Lordships.

ETHNOLOGICAL SOCIETY.—The anniversary meeting was held on Tuesday at the Society's rooms, 4, St. Martin's-place, Trafalgar-square. The report of the Council and Treasurer was most favourable as to finances and general progress. General Balfour, in proposing a vote of thanks to the President, Mr. Crawfurd, paid a well-merited compliment to his zeal and ability on behalf of ethnological science, and especially his devotion of labour to the advancement of this institution in particular, which eulogium met with a warm response from the Fellows present. The Officers and Council elected for the ensuing year are:—*President:* John Crawfurd, Esq. *Vice-Presidents:* Robert Dunn, Esq.; Sir John Lubbock, Bart.; Professor Busk; General Balfour. *Honorary Treasurer:* F. Hindmarsh, Esq. *Honorary Secretaries:* Thomas Wright, Esq.; D. W. Nash, Esq. *Honorary Librarian:* L. J. Beale, Esq. *Council:* Lord Milton; W. Blackmore, Esq.; Henry G. Bohn, Esq.; Dr. A. Campbell; T. F. D. Croker, Esq.; Sir W. A. Clavering, Bart.; J. Dickinson, Esq.; Sir Justin Shiel; Rev. F. W. Farrar; Dr. Beddoe; Dr. Harrington Tuke; Professor Huxley; Joseph Mayer, Esq.; Sir R. I. Murchison, Bart.; Sir Charles Nicholson, Bart.; Sir Edward Ryan; Lord Strangford; John Thrupp, Esq.; Sir John Davis, Bart.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Student.—We cannot prescribe. Consult the Senior Medical or Surgical Professor at your school.

Elgin.—Dr. Whyte's case shall appear as soon as space permits.

Gloucester.—Mr. Hicks is thanked. A notice shall appear.

Mr. Hickes is thanked.

A Candidate.—The result of the recent Fellowship Examination will not be published until the decision of the Council has been taken.

The British Pharmacopœia.—The new edition will be officially gazetted in the middle of June, and will, after that date, be the only legal Pharmacopœia in existence. The leading chemists are issuing circulars, proposing to adopt the preparations of the new edition in compounding all prescriptions, unless expressly ordered otherwise by the prescriber.

A Metropolitan Fellow.—The information you desire will be found in another column. The meeting will take place on Thursday, July 4. The Festival will take place the same evening, under the presidency of Mr. Green, of Bristol. Mr. Spencer Smith retired from the contest last year in order to secure the election of Mr. Charles Hawkins.

Mercantile Marine.—The disease is rare in this country. There are two well-marked cases of Oriental leprosy in St. John's Hospital. Three o'clock would be a convenient time.

An Old Surgeon.—The annual election into the Royal Medical Benevolent College took place on the 29th ult. The result is published in our advertising columns.

W. Tupman.—Albert Smith was a Member of the Royal College of Surgeons, and the author of "Confessions of a Dissecting-room Porter," which appeared in the early volumes of the *Medical Times* under his *nom de plume* of *Jasper Buddle.*

Chicory and Coffee producing Amaurosis.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Would any of your more experienced correspondents favour me with information as to the presumed tendency to amaurosis produced by drinking mixtures of chicory and coffee? Also, if they have any experience of the utility of galvanism in cases of paralysis of the optic nerve?

I am, &c.

York. A Junior Practitioner.

The London University Calendar.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Will you allow me to correct an error in the "London University Calendar" for this year, and, I presume, for some years past? Among the Medical Institutions recognised in Scotland, King's College, Aberdeen, is mentioned. Now, such a College as King's does not exist, nor has it existed for some time past in Aberdeen, as the two Colleges and Universities were united some years ago under the title of "University of Aberdeen," and which is the only institution in Aberdeen granting diplomas. The names of the Colleges are actually done away with, and they now pass under the name of "University Buildings." The above error in the London Calendar should therefore be corrected.—I am, &c.

London, May 27. Medicus.

Dr. Ballard on the Influence of Weather on Disease.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Will you permit me to correct an error of the reporter of an observation of mine at the last meeting of the Medical and Chirurgical Society? I suppose I did not succeed in making myself understood. I am reported to have said—"He wanted to show that while the total amount of disease was increased by increase of temperature, the general mortality was lessened."

My paper was not upon mortality at all, the subject being only mentioned incidentally. What I said, or intended to be understood, was that "It often happens, when the total amount of sickness is increased with a rise of temperature, that the general mortality is lessened."

The law which governs mortality is not the same as that which governs the sickness of a population. The Registrar-General's Returns show that extremes of temperature in either direction increase mortality.

The only object of my paper was to demonstrate that the natural result of a *rise* of temperature is increase of general sickness, and that the natural result of a *fall* of temperature is a diminution of general sickness, and to show, as precisely as figures would show it, the extent of the influence thus exerted, and how it is modified by other concurrent conditions.

I am, &c.

May 28. Edward Ballard, M.D.

COMMUNICATIONS have been received from—

Mr. Galtelin; Mr. Rowell; Mr. Day; Dr. Gibbon; Mr. Alexander; Mr. Harding; Dr. Lister; A Junior Practitioner; Mr. Hickes; Dr. Marcet; Dr. Sclanden; Dr. Armstrong; Medicus; Mr. Pilleau; Dr. Muspratt; Dr. Dudfield; Dr. Gervis; Mr. Chadwick; Mr. Atkinson; A Student of Medicine; Mr. Heaton; Dr. Carr; Mr. Copney; Mr. Carlile; Dr. Brumwell; Dr. Saunders; Mr. Hadden; Mr. C. J. Fox; Dr. Lawson; Dr. Marston; Dr. Hingston; Dr. Thorowgood; Mr. Kinnaird; Dr. Whyte; Messrs. W. and G. Reid; Mr. J. R. Perkins; Mr. Bedford; Dr. Hughlings Jackson; Dr. Ballard; Mr. Kendrick; Mr. Chatto; Dr. Moore.

BOOKS RECEIVED—

Prize Essays on "Search"—Sargant on the Progress of Elementary Education—The British Journal of Dental Science, April—Fuller on Diseases of the Lungs—Clinical Lectures on Diseases of the Skin, Nos. 1 and 2—North's Management of Workhouses—Supplement to Dr. Scoresby-Jackson's Materia Medica—Thompson on the Treatment of Consumption, second edition—Report of the Newcastle Convalescent Society—On a Constant Water Supply for London—Clouston's Weather Prognostics of Scotland.

NEWSPAPERS RECEIVED—

Laboratory—Gazette Hebdomadaire—Banner of Ulster—Gazette Médicale de Paris—Aldershot and Sandhurst Gazette—Medical Press and Circular.

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 25, 1867.

BIRTHS.

Births of Boys, 1016; Girls, 980; Total, 1996.

Average of 10 corresponding weeks, 1857-66, 1841·6.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	594	524	1118
Average of the ten years 1857-66	614·1	571·1	1185·2
Average corrected to increased population..	..	..	1304
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,388	6	1	2	3	11	4	2	..
North ..	618,210	8	3	4	3	4	10	1	..
Central	378,058	2	4	1	1	5	3	4	..
East ..	571,158	9	3	8	..	5	4	5	..
South ..	773,175	7	3	1	2	16	7	4	..
Total ..	2,803,989	32	14	16	9	41	28	16	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·745 in.
Mean temperature	45·7
Highest point of thermometer	68·0
Lowest point of thermometer	31·9
Mean dew-point temperature	39·9
General direction of wind	N. & E.N.E
Whole amount of rain in the week	1·13

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, May 25, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending May 25.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending May 25.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	1996	1421	1118	68·0	31·9	45·7	1·13	114
Bristol (City) .	165572	35·3	115	74	‡62	63·6	32·3	46·4	0·94	95
Birmingham (Boro')	343948	43·9	266	167	131	70·0	31·6	47·0	0·05	5
Liverpool (Borough)	492439	96·4	390	285	234	68·1	34·0	47·7	0·41	41
Manchester (City) .	362823	80·9	273	205	‡183	71·8	32·0	48·2	0·29	29
Salford (Borough) .	115013	22·2	83	58	48	70·8	31·1	46·5	0·32	32
Sheffield (Borough).	225199	9·9	187	119	70	67·8	32·6	43·8	0·61	62
Leeds (Borough) .	232428	10·8	209	118	111	67·5	30·0	46·0	0·15	15
Hull (Borough) .	106740	30·0	65	49	47	..	..	..	..	..
Newcstl-on-Tyne, do.	124960	23·4	105	66	61	53·0	34·0	41·8	0·26	26
Edinburgh (City) .	176081	39·8	109	85	98	61·7	36·0	45·5	0·00	0
Glasgow (City) .	440979	87·1	365	257	277	60·6	33·5	45·1	0·16	16
Dublin (City and some suburbs) .	319210	32·8	146	‡157	140	66·7	29·7	48·0	0·48	49
Total of 13 large Towns . . .	6187764	34·8	4309	3061	2580	71·8	29·7	46·0	0·40	40
					Week ending May 18.	Week ending May 18.				
Vienna (City) . .	(1863) 560000	..	..	..	383	..	..	§ 61·5	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·745 in. The barometrical reading increased from 29·41 in. on Monday, May 20, to 30·00 in. on Friday, May 24.

The general direction of the wind was N. and E.N.E.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 46·8°.

APPOINTMENTS FOR THE WEEK.

June 1. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

Royal Institution, 3 p.m. Prof. Huxley, "On Ethnology."

3. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

Epidemiological Society, 8 p.m. Dr. T. Clifford Allbutt, "On the Prevention of Typhus and other Diseases by Improvement of the Dwellings of the Poor."

Odontological Society, 8 p.m. Professor Owen, F.R.S., "On the Dental Characters of New Genera and Species of Fossil Fishes from the Low Main Seam and Shales of Coal, Northumberland."

Royal College of Surgeons, 4 p.m. Prof. Hancock, "On the Anatomy and Surgery of the Foot."

Royal Institution, 2 p.m. General Monthly Meeting.

4. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

Anthropological Society of London, 8 p.m. Meeting.

Royal Institution, 3 p.m. Prof. Miller, "On Spectrum Analysis."

5. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 2 p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.

Obstetrical Society of London. 7½ p.m.: Council Meeting. 8 p.m.: Dr. Barnes, "Cases and Remarks illustrating the History of Pregnancy complicated with Small-pox." Dr. Hicks, "On a Case of Extra-uterine Fœtation." Dr. Halley, "Case of Retention *in Utero* of the greater Portion of a Dead Fœtus for a Period of Four Years." And other Papers.

Royal College of Surgeons, 4 p.m. Prof. Hancock, "On the Anatomy and Surgery of the Foot."

6. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

Royal Institution, 3 p.m. Prof. Huxley, "On Ethnology."

7. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.

Royal College of Surgeons, 4 p.m. Prof. Hancock, "On the Anatomy and Surgery of the Foot."

Royal Institution, 8 p.m. Mr. Ruskin, "On the Present State of Modern Art, &c."

Western Medical and Surgical Society, 8 p.m. Annual Meeting; Election of Officers; Report of Council and Financial Report will be read. Dr. Marcet, "Some Observations on a New Process for Preparing Meat for Weak Stomachs."

CHOCOLAT-MENIER.

(Manufactured only in France.)

ANNUAL CONSUMPTION EXCEEDS 5,000,000 lb.

The healthiest, best, and most delicious Aliment for Breakfast known since 1825; defies all honest competition, unadulterated, highly nutritious, and pure.

Sold in Half-pound Packets.

Wholesale, MENIER, 23, Henrietta-street, Strand, London.

Retail by all respectable Houses.

LIEBIG'S FOOD FOR INFANTS & INVALIDS.

Prepared strictly from the Formula of Baron Liebig, by

HOOPER,

OPERATIVE CHEMIST,

Sold in Tins, 1 lb., 1*s.*; 3 lb., 2*s.* 6*d.*; 6 lb., 5*s.*, by all Chemists and Druggists, and direct from Mr. HOOPER'S Establishments,

7, PALL MALL EAST, And 55, GROSVENOR STREET.

Wholesale of Barclay, Edwards, Newbery, all Patent Medicine Warehouses, and Wholesale Druggists.

WHY NOT USE THE BEST?

"MAIZENA"

Is the ONLY "PRIZE MEDAL" CORN FLOUR. It was also reported by Jury of 1862, London,

"EXCEEDINGLY EXCELLENT FOOD."

It is superior to the best Arrowroot; makes in short time, and at trifling cost, delicious Blanc-mange, Puddings, Cakes, Omelets, Creams, and scores of other dishes, and is always an invaluable Food for INVALIDS and CHILDREN. Sold in Packets, with directions, by Chemists, Grocers, &c.

N.B.—The price is *no more* than for inferior articles.

TRY IT ONCE.

Natural Mineral Waters of Vals, Vichy, Carlsbad, Seltzer, Kissengen, Homburg, PULLNA, FRIEDRICHSHALL, &c., direct from the Springs; also the Artificial Mineral Waters prepared by Dr. Struve and Co. at the Royal German Spa, Brighton.—Agents, W. BEST and SONS, 22, Henrietta-street, Cavendish-square, London, W.

The Mineral Water of Geilnau (Nassau), an Acidulous and slightly Alkaline and Chalybeate Water, of very agreeable and refreshing taste, owing to its large proportion of carbonic acid; a valuable Dietetic Beverage in many morbid tendencies through its antacid, diuretic, and tonic qualities.

Specimen and analysis of the Water may be obtained from Messrs. BECKER and JUNG (Ems), the appointed Agents, 9, Rood-lane, Fenchurch-street, E.C., London, who supply also the other German Mineral Waters.

NATURAL MINERAL WATERS OF VICHY,

Efficacious in Stomach, Liver, and Renal Diseases; Gout, Rheumatism, Diabetes, &c.

Also, the celebrated OREZZA MINERAL WATER, containing Iron, and which is extensively prescribed as an invaluable Tonic.

VICHY PASTILLES, the best Digestive Lozenges; and VICHY SALTS for Baths. Also, other French and German Natural Mineral Waters.

VICHY WATERS COMPANY (only Depôt in Great Britain), 27, MARGARET-STREET, REGENT-STREET, LONDON, W.

CRYSTAL COD-LIVER OLEINE.

THE FINEST SAMPLE OF ANIMAL OIL PRESENTED TO THIS TIME.

It is nearly transparent, inodorous, and almost tasteless. It can be taken without any menstruum, and does not create nausea. Expressed and refined from the fresh livers of the fish when in its healthiest state and high-conditioned, there is in it no trace of decomposing organic matter nor of volatile product of decomposition; hence it is entirely free from rancidity and from all fatty acids common to ordinary specimens of the oil. Prepared in a form especially acceptable to the taste of the sick, whilst all the nutritive components are strictly preserved unimpaired, the Crystal Oleine drinks as blandly as new milk, and may be considered a FOOD as well as a medicine, admitting of the easiest digestion and assimilation.

Vide Analytical Reports by WM. ALLEN MILLER, Esq., M.D., F.R.S., Professor of Chemistry at King's College; HY. LETHEBY, Esq., M.B., M.A., Ph.D., Chemical Analyst to the City of London; and Dr. SHERIDAN MUSPRATT, Principal of the College of Chemistry, Liverpool.

May be procured in capsuled bottles, 25s. and 44s. per dozen, and (for Surgeons) in Winchester quarts, 10s. 6d. each, of all the leading Chemists in the United Kingdom and the Colonies; and of the Proprietors,

BEDFORD BROTHERS, 87, Tower-hill, London.

COD-LIVER OLEINE FOR HOSPITAL USE.

BEDFORD BROTHERS, believing that a pure, good, and cheap Cod-liver Oil is one of the great necessities of Hospital practice of the present day, have arranged to supply the demand in the form of a Cod-liver Oleine.

The Cod-liver Oleine for Hospital use differs only from the CRYSTAL COD-LIVER OLEINE imported by Bedford Brothers, and now so generally used amongst the wealthier classes, in that it contains a little solid fatty matter, but not sufficient to interfere with its ready digestion.

The Hospital Cod-liver Oleine, like the Crystal Cod-liver Oleine, is tasteless and inodorous.

In Tins, each 15 or 30 gallons (for Hospitals only), at 6*s.* per gallon.

87, Tower-hill, E.C., 27th May, 1867.

GENERAL MEDICAL COUNCIL.

MEETING HELD AT THE ROYAL COLLEGE OF PHYSICIANS, PALL MALL EAST.

SECOND DAY.—THURSDAY, MAY 30.

PRESENT: Dr. Burrows, President, in the Chair; Dr. Bennett, Mr. Hawkins, Mr. Cooper, Dr. Acland, Dr. Paget, Dr. Embleton, Dr. Storrar, Dr. Alexander Wood, Dr. Andrew Wood, Dr. Fleming, Mr. Syme, Dr. Thomson, Dr. A. Smith, Mr. Hargrave, Dr. Leet, Dr. Apjohn, Sir J. D. Corrigan, Bart., Dr. Sharpey, Dr. Parkes, Dr. Quain, Mr. Rumsey, Dr. Christison, Dr. Stokes, and Dr. Francis Hawkins, Registrar.

The minutes of the previous meeting having been read,

Sir J. D. CORRIGAN proposed an amendment. This proposition was fully discussed, and a wish expressed on the part of certain members of the Council that the discussion should not be recorded by the press.

Dr. ACLAND remarked that on the two first days of the session there had been a notification to the press to be silent on certain subjects. He thought that was a most unsatisfactory thing. Either the Council was sitting in public, or it was not. As far as he was concerned he had not the slightest objection that the whole of their proceedings should be published, but thought it would be better, if any discussion were about to take place which the Council thought should be private, to proceed in the regular manner, and request strangers to withdraw; but he must deprecate any attempt on the part of individual members to dictate to the representatives of the public press what they should record or omit.

The minutes were then confirmed.

Dr. PAGET said that the Committee on the Medical Acts Amendment Bill had performed one part of its duty, and had prepared a draft of the reply to Mr. Walpole, which was now being copied by the clerks. He would therefore suggest that some of the other business upon the programme should be proceeded with until they were prepared to submit the letter to the meeting.

The PRESIDENT: We will now proceed with the third notice of Dr. Alexander Wood—"That on the first day of the session of 1867 a Committee be appointed to take into consideration and report how the Council can best deal with the whole subject of preliminary examination, and that the Committee so appointed be requested to report during the currency of the present session."

Dr. ALEXANDER WOOD: Mr. President and Gentlemen,—The first duty I have to perform is to request leave to erase certain words from the notice of motion, which, from the subject not having been taken up yesterday, are superfluous—namely, "on the first day of the session of 1867." I may say that it is at least three weeks ago since I gave notice of my intention to make this motion. I need not detain the Council by any lengthened observations in support of it, because it is simply craving the appointment of a committee; and those members of the Council who have observations to make upon the all-important subject to which it refers will have ample opportunity of letting their views be known to the Council when the report of the Committee is brought up for our consideration. I will just say that my labour in bringing forward this motion has been very considerably lightened by the admirable observations which you, sir, addressed to us yesterday in regard to the importance of preliminary education. I believe that whoever has had the opportunity which the visitors of examinations have had of supervising the examinations of a number of the educating bodies throughout the country will come to the conclusion, that while there is a considerable amount of uniformity in regard to Professional education, and in regard to the strictness of Professional examinations, there is no such uniformity in regard to preliminary education, and no such uniformity in regard to the manner in which examinations on preliminary education are conducted. We are empowered by the Act of Parliament under which we are constituted to supervise not only examinations of a Professional character, and regulate the education of a Professional character, but also to supervise the examinations and to regulate the education which we can now, for the first time, truly call preliminary, because we have now insisted that that education shall take place before the Medical studies have commenced. I think our work in this direction has been somewhat of a mistaken character. We have shown a great anxiety to cast this burden off our own shoulders, and to delegate it to other bodies, about the doings of many of which we know nothing, and about the objections to many of which we know as little, and with whom we have no power of interfering. Whether we are right in doing that is one very great question. I am satisfied of this, and I cannot do better than quote the language of a very important Royal Commission upon the subject, which states that it is a matter of very great importance that persons who are to practise Medicine should be men of enlightened minds, accustomed to exercise their intellectual powers, and familiar with habits of accurate observation and cautious reflection, and that they should be possessed of such a degree of literary acquirements as may secure the respect of those with whom they are to associate in the exercise of their profession. I think that this having the authority of a Royal Commission—it is the last Commission on the Scotch Universities—is a most important argument in my favour. It is a matter of notoriety that many students are allowed to enter upon the studies of their Profession with an amount of education that would be positively disgraceful even to pupil teachers in schools. (Hear, hear.) I have no hesitation in saying that even in spelling and in English composition they are not fit to stand on the same platform with the pupil teachers of the village schools of Scotland. Now, I say this is a disgraceful state of matters. I say it would be impossible for any amount of subsequent mental training to cultivate the intellects of men who are in that condition, and that while they may receive the very best Medical instruction which our schools can give, the seed of those instructions would be thrown on a barren and unprepared soil if it has not been previously cultivated by preliminary education. I should feel ashamed to stand here to advocate these views at any length. We are not here, as you, sir, very properly told us in your opening address, for the purpose of making speeches or for the purpose of trying to convince one another by rhetoric. But we are here for a plain and practical discharge of duty, and I think the whole question had better be referred to a Committee, whose report will furnish the material for discussion when it is brought up, as I hope it will be before the close of this session. There is just one thing I should like to say in reference to it, and it is this, that we have been blamed for not sooner doing something of this kind. Now, I do not think we were ripe for any action in this direction previously. We have done a great deal for the improvement not only of Professional education, but of preliminary education; but we have done it indirectly hitherto, and until we were able to make it truly preliminary—and, as you are aware, we were not able to do so without a great struggle—we were not in a condition to take up the question as to how it was to be done. It was only last session that we were enabled to insist that, except for special reasons assigned, every Medical student should, before being admitted on the Medical Students' Register, show that he had passed the preliminary examination of some one of the qualifying bodies. But now this has been done, and the great question comes to be what that preliminary examination shall be. Are some of the bodies to insist upon one set of subjects, and others to insist upon others? Is it to be the custom, as I know it is in far too many instances, that men rejected for indolence on certain subjects at one seat of learning shall go three days after to another seat of learning, and shall receive the *imprimatur* of that body, and return again to the one that rejected them to insist upon being taken in again for their Professional education? Is this a state of things creditable to the country? and recollect I am stating a fact the existence of which I am prepared to prove. I say, until you have some arrangement made by which you shall lay down what is the essential education of a Medical gentleman, and until you shall endeavour by that to restore Medicine to what it ought to be if it is to retain its position as a learned profession—which I am sorry to say it has not been for some years past—all your attempts to improve Medical education will be abortive. I do not mean to say—I am very far from saying it—that a man may not be in one sense a successful Practitioner who has not been so educated. There are men of a certain turn of mind who can surmount great difficulties of that sort in after life. But we are not to legislate for individuals. I say, if Medicine is to be a learned and philosophical profession, it can only be restored to the place which it once occupied by having the minds of our students stored with literature and science in their early education at our Medical schools. I shall not detain you any further except to move that a committee be appointed to whom this matter shall be referred.

Dr. STORRAR: I presume, sir, that this is neither more nor

less than a reappointment of the committee that we have had from time to time in preceding years on the subject of preliminary education, and in that view I beg to second the motion of Dr. Alexander Wood, with this proviso, however, that I do not necessarily fall in with the views which he has expressed, or rather shadowed out, that this preliminary examination must be tested by this Medical Council, or by the bodies connected with it. I would rather go into the committee with a feeling that this is an entirely open question. So far as I have any opinion at the present time, my views are diametrically opposed to Dr. Wood's; but if, as Dr. Wood has proposed, we should go into this committee to take a wide and comprehensive view of the whole question, I am quite willing to bring my mind fairly to the consideration of the subject, and if he can adduce evidence strong enough to show that we have the power to institute a direct examination, possibly my views may be modified. In the meantime, they are such as I have stated.

Mr. Hargrave was understood to say that last session there was a very warm discussion on the proposal to make Greek a subject of compulsory examination, and Dr. Andrew Wood seconded an amendment which was proposed by Dr. Thomson; but that amendment was negatived. Ultimately, the motion was agreed to, that Greek should not be compulsory until after the end of 1869. He really thought, with all respect to Dr. Alexander Wood, that while he had no objection to a committee being formed, the labours of that committee, as shadowed forth by the resolution now before them, were to a great extent going over the same ground again, and would be, in fact, a work of supererogation.

Dr. Alexander Wood explained that his object was not so much to alter the programme with regard to preliminary examinations, as to to see how the alteration of the programme could be carried out.

Dr. Stokes: Mr. President, I have no very great objection to some of Dr. Wood's proposals; but I think the Council ought to be reminded that we have no power under the Act of Parliament to interfere with any branch of education except the professional. That is the first thing we should clearly understand. I quite agree with Mr. Hargrave in thinking that time has not yet been given to a trial of the preliminary examination which at present exists. It is well known, by clinical teachers at least, that there has been a gradual and most remarkable amendment in the general attainments of the Medical students for some years past, which can only be attributed to the moral pressure that the Council had brought to bear upon the licensing bodies. I am very strongly of opinion that the power of examining on general literature and on arts should not be exercised by the licensing bodies unless they happen to be Universities. (Hear, hear.) But, notwithstanding that, with the imperfection of the examination of the licensing bodies, and with the temptation to act loosely in the matter, there has been a wonderful improvement in the general knowledge of students—in their attainments in English, in Latin, and in French; and, more than that, there has been a woderful improvement in the earnestness with which they have applied themselves to their work. I do think, therefore, that this Council would be acting inconsiderately if they burdened the present system with any legislation in addition to what is now in existence. That is a totally different question from the question whether the Council should interfere as to taking, or attempting to take, the power of conducting the Arts Examination from the great licensing bodies. But until that matter is settled I do think it would be much better to let the licensing bodies go on as well as they can; for you may depend upon it, great good is being done under our present system of supervision.

Mr. Cæsar Hawkins: I quite agree with Dr. Stokes. It is important to recollect that last year, in reference to this question, we took a great deal of trouble to lay down what was called the minimum of preliminary education, which we said we would enforce after a certain period—the greater part of it after October, 1868, and a portion of it after the year 1869. We also laid down a rule last year which has not yet come into operation—that it should be delegated to the Executive Committee to prepare annually, and lay before the Council for their recognition, a list of examining bodies whose examinations fulfil the conditions of the Medical Council as regards preliminary education. I think, therefore, with these two improvements hereafter coming into operation, it is quite unnecessary to appoint another Committee to inquire into the subject of preliminary education. We have done so. We have already laid down a minimum which every body must adopt, and which the greater number do adopt. The Executive Committee are ordered to inquire into it, and any body which does not adopt this minimum would be taken at once out of the list of recognised bodies. Surely that is sufficient for the present time.

Sir J. D. Corrigan: Mr. President, I beg to offer a few observations upon this subject. I should vote for everything that would improve education, both preliminary and professional. But we have already done as much as I believe it is possible for us to do in issuing recommendations that such and such courses of preliminary education should be followed; and I do not think we can go beyond that. Therefore, I must confess, I do not look with any sanguine hopes towards any effectual or good result to be obtained from the labours of the proposed Committee; and for this reason, that we have no power whatever to enforce any of our recommendations. (Hear, hear.) We may issue recommendations and rules and lay down what we deem requisite for preliminary education; but I think Mr. Hawkins, if he refers to the Act, will find that he has made a slight mistake in saying that we can report any body which does not comply with our regulations, and get it struck off the list of registered bodies. There is no such power, I believe, in any Act. (Cries of "Yes, yes.") I say there is not. There is a power in the Act that, if you suppose any body has a code of education which is not sufficient for the education of Medical Practitioners, you may report that body; but it must be tried on its individual merits before the Privy Council. You have no power to lay down a rule and say, *ex mero motu*—"In our opinion such rules ought to be valid, and any body who does not comply with our regulations shall be struck off the Register." Why, if such a regulation were enforced, it would be possible for us to strike off from our Register any body that required an examination in Greek before 1869. (A laugh.) So that in fact you have the power not only to strike off bodies which do not come up to our standard, but those who are above our standard, for if the one result be true, the other must be so. ("Oh, oh," and laughter.) Therefore, if a student came forward and complained to us that the Universities of Dublin or Oxford demanded Greek before the year 1869, we should forthwith be able to strike off the list those ancient Universities. (Cries of "Oh, oh," and laughter.) I say that is the legal argument; any body that does not comply with our recommendation, it is said, can be struck off; and our recommendation is that Greek shall not be required until the year 1869. (Laughter.) I say if we exercise our power on the one side it must be so on the other. But to come to the point: suppose we issue rules and regulations, do you suppose our rules and regulations will override all the charters and Acts of Parliament in the kingdom? The charter of the Queen's University, which I have the honour to represent here, declares under the sign manual of her Majesty that the matriculation examination for the Medical degree shall be held in each of the Queen's Colleges, and it gives to those colleges the power of determining what that examination shall be. Do you mean to tell me this, that you could go into the Privy Council and say, "We twenty-four gentlemen sitting here have issued a regulation that such are to be the rules as to preliminary education," and that forthwith you would require the Privy Council to strike the Queen's University off the list of registered bodies? Would not the question simply be what is the charter of the Queen's University? It is, as I have stated, to give to the colleges the power of conducting matriculation examinations, and to make them what they like. And would any one support this proposition that the recommendation of twenty-four gentlemen sitting here should override a charter granted by her Majesty? I will confine myself to those bodies with which I am best acquainted, and if I am wrong as to the next body to which I am going to refer, Dr. Leet will correct me. Under the Act of Parliament incorporating the Apothecaries' Hall of Ireland, that body is required to carry out an examination in literature and arts, and they do it. Now, suppose we issue a recommendation for something else, is that to override the Act of Parliament on which the body has been founded. Then, again, if I go to the College of Physicians (and Dr. Smith will correct me if I am wrong), they issue what recommendations they think fit. Then, I ask, will our requirements have any weight before the Privy Council in opposition to their charter? (A voice: "Yes.") Then again, Trinity College, Dublin, has its powers under charters and under Acts of Parliament. Would Trinity College (Professor Apjohn and Dr. Stokes will correct me if I am wrong) submit to have their examination controlled by

this Council? If our recommendations were in accordance with our rules, of course they would be glad to adopt them; but would the Privy Council or any court of law, supposing we went into a court of law against these bodies that I have mentioned, and contended that our mere *ipse dixit* was to prevail against their charters and Acts of Parliament—would any court of law support us in that? I confess I cannot see any good in the world which can arise from this continual harping upon the subject of preliminary education. We are perfectly powerless in the matter, and have no expectation of enforcing our views. I myself within the last three weeks have known of an instance of candidates going from one licensing body to another, and obtaining a licence without being able to write Latin or Greek. The truth is, we have not the power of enforcing education, and, therefore, I see no use in going on with these attempts at legislation until the evil shall arrive at such a height that Parliament will give us the power. With this conviction in my mind, I shall abstain from voting upon this question. I do not like to appear among the opponents of preliminary education; but, on the other hand, I cannot give my vote in support of a resolution that I believe will just turn out as all our attempts hitherto have done—a failure for want of power. We have been in labour now for seven years, and we have brought forth nothing.

Dr. Andrew Wood: If all the twenty-four members of this Council were to be actuated by the principles which have been enunciated by Sir Dominic Corrigan, I think it would be at once better to adjourn this Council *sine die;* let us lay down our functions, and do not let us meet here repeating year by year what would amount then to a simple farce. But I say in opposition to Sir D. Corrigan that this Council has the right to regulate the terms on which students shall be admitted into the Profession of Medicine and Surgery. What was the Medical Act passed for but to give us that right? If Sir D. Corrigan will turn to Clause XX. of the Act, he will see—"In case it appear to the General Council that the course of study and examinations to be gone through in order to obtain any such qualification from any such College or body are not such as to secure the possession by persons obtaining such qualification of the requisite knowledge and skill for the efficient practice of their Profession, it shall be lawful to represent the same to the Privy Council." There is our power. We have never as yet exercised it, no doubt; but does Sir D. Corrigan think that if any of the bodies were at once to say "We don't care one fig for the Medical Council, we will have no preliminary examination at all"—does he think we could not go to the Privy Council with a good case, and that the Privy Council would not endorse what the Medical Council recommended?

Sir D. Corrigan: Indeed, he does not.

Dr. Andrew Wood: I recollect the time when Sir Dominic Corrigan was launching his thunderbolts against the Universities of Scotland because they had in their regulations three or four simple words, "as far as possible." There was no impossibility then in endeavouring to force the University of Edinburgh to strike out those words. There was no mention then of not interfering with these Universities, and of leaving them alone. And what has been the result? Have those Universities been as recalcitrant as the University which Sir D. Corrigan represents—as I shall show you immediately? Have they not, in the most honourable, frank, and manly way, gone to the Privy Council and had those words expunged from their statutes? Sir, I feel it to be my duty to the Edinburgh University, because I know, and the members of that University know, I have not shrunk from telling them when they were in the wrong—I feel it to be my duty to acknowledge when they have done right, and have shown their anxiety to give effect to the recommendations of the Medical Council; and I say it is too bad to tell us that the Queen's University of Ireland has a certain charter which allows such and such a thing to be done, and that they will do as they like, and you, the Medical Council, may do as you like. I beg to call Dr. Corrigan's attention to this—that I find in the regulations of the Queen's University of Ireland one which is in direct opposition to our recommendation. The regulations say the curriculum shall extend over at least four years—that is, the Professional curriculum—and shall be divided into periods of at least two years each. But candidates are not obliged to pass the matriculation prior to the second period—that is to say, not to pass the preliminary examination before they begin their Medical studies. They are not only told that, but they are recommended actually to delay it until two years of Professional study have gone by. Then we find further that they are actually not only recommended to do this, but are allowed to take preliminary examination before this Professional examination at the end of four years. Now, Sir D. Corrigan may talk of charters as he likes, but I say an Act of Parliament overrides a charter of that kind, and I think the duty of Sir D. Corrigan, instead of coming here in rebellion against the recommendations of the Medical Council, as representing the Queen's University, would be to go home to the Queen's University of Ireland, and recommend them to remove from their regulations the blot which is inconsistent with the recommendations of the Medical Council, and inconsistent with what I believe is being adopted universally by all the bodies which are being put under our supervision. Sir, I do say that to come and tell us that we have nothing to do with preliminary education is mere nonsense. I will not qualify my words. I believe it is a thing which is necessary, and which the Council has the power to enforce, that every man who enters the Medical Profession shall be examined preliminarily, and that he cannot possibly obtain the requisite knowledge and skill for the practice of his Profession without such preliminary education. We have already in former years (and I do not know any man who took a greater part in it than Sir D. Corrigan) enforced curricula upon certain bodies. I recollect last year Sir D. Corrigan carried the motion for making Greek compulsory against a considerable number of this Council; and I am not sorry for it now, for I will go along with him as far as possible in elevating the examinations for our qualifications. But it is a very strange thing that all this time when he takes so large a part in laying the burden upon others, there is his own body which he represents actually holding us cheap and not making any attempt to conform with our recommendations. In the last observation Sir D. Corrigan has made, he has stated one of the strongest arguments for going into this committee. He tells us that within his own knowledge men have gone from one body to another who could scarcely spell or write, or something of that kind. Well, I say, if these things are occurring, are we to do nothing to prevent it? Are we to sit down, as Sir D. Corrigan always is doing, groaning over all these imperfections and diseases amongst us, and yet saying, "We will do nothing because we have not the power; let us sit still and allow things to go on as they are?" I say we are bound, if we can conscientiously as members of this Council, to look into these things and to find out the defects and the remedy for them, and that is exactly what we are doing at this moment. Have not we sent visitors to the examinations, and to the preliminary examinations too? I am not aware that Sir D. Corrigan has fulfilled any duty in connexion with those visitations; but I will appeal to those reports when they are brought before us, and I now say that I believe even already, without any great pressure being put upon any of the bodies, they are introducing these amendments in their curricula which the Queen's University of Ireland refuses to introduce. I therefore do trust, without committing ourselves at all to taking any violent steps—for I do not think my friend has any wish to do that at all events—the Council will think we are in a condition to go into committee and to consider whether anything is necessary or not. I think a *primâ facie* case has been made out for it, and then when the report comes up will be the time to take action or not in the matter.

The President: We have summoned Mr. Forman for 3 o'clock, and I think it is now right to bring his case before the Council.

The Registrar then read a letter from Mr. Forman, who, it appeared, had got himself registered in Scotland by a false affidavit, to the effect that he was a Member of the Royal College of Surgeons in England, and having been summoned to attend before the Council declined to do so.

Sir J. D. Corrigan: I now rise to say a few words upon a matter of explanation. Dr. Wood has contrasted the Queen's University's regulations with the regulations of the Universities of Edinburgh and Glasgow. I find he quoted from the last document issued by the Queen's University in support of his statement. Now I quote from the last document in reference to the University of Edinburgh—namely, Churchills' *Directory*—in support of my contradiction, and you will find that it is stated that "the examination on these latter subjects also takes place as far as possible before the candidate has entered his curriculum."

Dr. Alexander Wood: We are not bound by clerical errors which may occur in Churchills' *Directory*.

Sir J. D. Corrigan: A similar thing occurred last year, and the same answer was made. But it is a remarkable circum-

stance that this clerical error has continued during three years, and I must, with great respect, put that regulation as it appears in Churchills' *Directory* on exactly the same footing as documents which Dr. Wood quoted from in reference to the Queen's University of Ireland; and further, let me say that in a dispute upon a printed statement I must decline to recognise a merely verbal denial of what I find here.

Dr. Alexander Wood: The Queen's University of Ireland does not even say "as far as possible."

Dr. Sharpey: I think every member of the Council will admit that the change which has been effected in the education of students through the institution of the preliminary education is one of the most important results of the operations of the Medical Council heretofore, at any rate as regards education. But in reference to the question immediately before us, I was about to say that I think there has been rather a misconception of Dr. Alexander Wood's proposal. I think several gentlemen imagine it is a very serious alteration to the regulations already issued in reference to general education and preliminary education. Now, I do not think that is Dr. Wood's object at all. It is rather to inquire into the operation of the recommendation as hitherto issued. I think that is rather the purpose, to look to the working of the recommendation of the Medical Council in reference to the preliminary examinations, and in that case I think the services of a committee might be turned to very good account. But before I sit down I think I must draw Sir D. Corrigan's attention to a distinction which he has omitted to observe. He says these chartered bodies in Ireland and elsewhere are entitled to conduct their examinations under such regulations as they think right. Now, I should not think of denying that. He says we have not the power to interfere with them in that. But what the Medical Act gives to the Council is the power of registration, and of judging whether they shall be on the register or not. That is the question, and that is stated in the 20th section of the Act, that the course of the examination shall be such as, in the opinion of the Medical Council, shall insure the efficiency and fitness of candidates to practise in the Medical Profession. It is clear that if the Medical Council thinks that an essential part of that course of instruction is to secure such an attainment by a previous preparation of the candidates by preliminary studies, that would come under the operation of this Act. It is not a question of overriding a charter; it is not a question of saying the Queen's University of Ireland shall do this or that; but it is simply stating the conditions on which their degree is to qualify, and that if those conditions are complied with the College will be registered. I think that is a power of the Medical Council which seems to have been forgotten.

Professor Syme said he considered Churchills' *Directory* an excellent work, but surely Sir D. Corrigan did not mean to put a mere statement contained in it in opposition to the positive assertion of a member of the Council.

Dr. Christison: I can give some information on that matter. I must observe at once upon the galling reiteration of the charge made by Sir D. Corrigan on the authority of Churchills' book, that if Sir D. Corrigan will consult the only legitimate authority upon the subject—namely, the annually published *Calendar* of the University of Edinburgh—he will find it contains a great deal of valuable information which it may be well for him to possess himself of before he attacks us. He will find it put down both in this and the last year's *Calendar*, and I think I may say in that of the year before that those four obnoxious words, "as far as possible," have been removed. As I understand it is not probable that there is a copy of that calendar in the library, I beg now to assure him that at the time this change was made I was Secretary to the University Committee, and which is the ruling body over such matters, and I transmitted as Secretary the proposal to make this change, to cut out the words "as far as possible," I received the order of her Majesty in Council authorising that it should be done, and it has been done accordingly.(a)

The President: I think, after that statement from Professor Syme and Dr. Christison, that it is incumbent on Sir D. Corrigan to rise and state that he of course accepts the authority of those gentlemen in preference to Churchills' *Directory*.

Dr. Corrigan: Mr. President, in obedience to your call I rise, but perhaps not fully to accord with your request. Professor Syme has asked me if I prefer Churchills' *Directory* to the verbal statement of a member of this Board. To that I reply yes; I always prefer documents to verbal statements. And I will now ask a question in return. That statement, "as far as possible," meaning that the Preliminary Examination may take place at any time of the Professional studies, has now been upon Churchills' *Directory* for the last three years, and I ask, has any correction of that come from the authorities? If not, the question is, why was not that error corrected?

Dr. Thomson: Allow me to state, on behalf of the Glasgow University, as that has been referred to, that we are essentially in the same predicament as the University of Edinburgh with regard to this matter. The Senate of the University of Glasgow has expunged those words "as far as possible" with regard to the time in which the preliminary examination shall be gone through, and I would also repeat what Professor Christison has said, that with reference to such a matter I think the Calendar of the University is the only reliable document which can be referred to. Churchills' *Directory* may be a very useful work, and I believe it is so, as a compendium of all sorts of Medical information, but it is quite clear that the statement contained there is a copy of an old Calendar, and not of the most recent ones.

Professor Syme: I must say, sir, if we are to meet each other here as gentlemen, I think it is quite necessary Sir Dominic Corrigan should respond to your request.

Sir D. Corrigan: In reply to Professor Syme's proposal, allow me to say, when I have the document before me, I shall determine what course I shall pursue; but I repeat it here, I will not take verbal statements or explanations in contradiction to what is printed in a work like this. (Loud cries of "Oh, oh!" and expressions of disapprobation.)

Dr. Christison: Is it to be suggested that the statement of any man who may print what he likes is to be appealed to as a document to be set up in opposition to the word of members of this Council? I must say it is the most extraordinary statement that ever has been made before this body. ("Hear, hear," and applause.)

Dr. Apjohn: I think Professor Christison occupies so distinguished a position in his University that I will ask him if he ever communicated with Messrs. Churchill that such an error existed in their *Directory*.

Professor Christison: Most certainly not, and I would ask the Council whether such a body as our University is called upon to make such a communication with the publisher of a directory. It was Mr. Churchill's duty to correct the error.

Dr. Apjohn: I may say that that is not the general practice in Ireland. In the event of an erroneous statement of that kind appearing in print, we should at once communicate with the publisher and have it corrected.

The President: That is not the question before the Council at all. The question is whether a committee shall be appointed or not. I think enough has been said upon the other subject. (Cries of "Vote, vote.")

Dr. Alexander Wood: The proposal which I have had the honour to submit to the Council—that a committee should be appointed to consider the whole subject of preliminary education—has been objected to on two or three grounds. The first objection proceeded on the mistaken idea that I wish this Committee to upset all that had been done by the Council in previous years upon this subject. On the contrary, what I want this Committee to do is to apply its powers to show how this recommendation of the Council can be better carried out or even improved, and that is the whole extent of it. Then as to the strong opposition which it has met with from Sir D. Corrigan, I have only to say that sometimes I am at a great loss (and I have no doubt others sitting round me are) to understand the position which he assumes in many questions which come before us. Here we have been sitting for many years, and he has been assisting us in framing certain regulations for professional and preliminary education. He has been carrying motions and amendments against us in regard to these branches of education, and now, when it suits his purpose, he turns round and tells us that we have not the power to do anything, and that all we have been doing for the last seven years has been entirely *ultra vires*. Now, I feel that it would be an insult to the understanding of the Council to answer such statements, and I am not going to do so. They have been most effectually disposed of by my friend Dr. Andrew Wood. But I would ask Sir D. Corrigan why it is that when propositions of this kind come from gentlemen sitting at this side of the table, we are uniformly met

(a) We have the best authority for stating that the retention of the clause in Churchills' *Directory* which gave rise to this discussion was not owing to any want of care on the part of the editors. The article was submitted to the Secretary of the University before publication.—Ed.

with obstructive resolutions, which tend to interfere with the progress of business and to impede our ever doing any good at all in this matter. I confess I do not think it is a good plan for the different bodies at this time to bandy reflections one against the other, and to say this one does this thing, and the other one does the other thing, and we are much better than you. In the allusions I made in my speech, when recommending this resolution to your notice, I carefully avoided naming any body. I thought that would be the better course to pursue. But this I will say—that the original ordinance of the Commissioners imposed upon the Universities of Edinburgh and Glasgow those words, "as far as possible;" whereas the regulation, quoted by Dr. Andrew Wood, of the Queen's University of Ireland, does not even go as far as that, but enjoins us not to take it until after the second year of Medical study. There, I say, is an important difference. But now, sir, before sitting down, I wish to express my regret that Sir J. D. Corrigan did not comply with your request, and apologise for the statement he had made in opposition to the strong assertions made by Professors Syme and Christison. I can only say, as a member of the University of Edinburgh, that it was with great pleasure that I listened to the proposal brought before us by Dr. Christison to rescind those words; and I would just add, in conclusion, that if Sir J. D. Corrigan doubts the moral influence of this Council in improving preliminary and all kinds of education, I point to this strong effect which our recommendations have had in procuring this and other alterations even in the regulations of chartered bodies; and I would also point to the great loyalty which has been exhibited by all the bodies represented at this table, and, I may say, even by the body which he himself represents, and which he would hold up to us as offering a rigid refusal to comply with our recommendations. Nothing struck me more than the fact that it is quite unnecessary for us to issue orders, because our recommendations are attended to in a way which is both complimentary to us and highly to the credit of the various bodies represented at this board. ("Hear, hear," and applause.) Sir, I feel no doubt, if this Committee is appointed, and their recommendations are adopted by the Council, those recommendations, like the former ones, will be followed by that obedience, or rather that compliance, which it has been the pride of all the bodies to show towards this Council whenever they have made suggestions to them.

The PRESIDENT then put the motion that the programme be accepted, and that "a committee be appointed to take into consideration and report how the Council can best deal with the whole subject of preliminary examination, and that the Committee so appointed be requested to report during the currency of the present session."

The motion was carried by a majority of 15 to 5.

The following gentlemen were appointed to the Committee:—Dr. Christison, Dr. Sharpey, Dr. Embleton, Dr. Stokes, Dr. Acland, Dr. Storrar, Dr. Thomson, and Dr. Alexander Wood, Chairman.

Mr. OUVRY, Solicitor to the Medical Council, then read the correspondence and documentary evidence relating to the case of Mr. Forman, from which it appeared that Mr. Forman had got himself registered in Scotland by means of a false affidavit to the effect that he was a Member of the Royal College of Surgeons, England. It further appeared, from a letter received from Dr. Robertson, of Edinburgh, that he had obtained a diploma from the Royal College of Physicians, Edinburgh.

Dr. ALEXANDER WOOD: I think this is the proper time for me to explain that letter. The position of matters is this, that Mr. Forman is entered upon your Register with one qualification only, and that is the qualification of M.R.C.S. I am quite ready to give a full explanation with regard to the letter, and will do it now if you wish it. I may tell you that last night Mr. Hawkins received a telegram, which he was kind enough to show to me, to the effect that Mr. Forman was a Member of the College of Physicians of Edinburgh. I knew nothing about his connexion with that body, and I hurried to the telegraph office immediately to inquire from Edinburgh the meaning of it. The answer I got was—"John Forman, of Carmlington, was admitted a licentiate of this College this afternoon at a special examination." Now I have to explain, in the first place, what the meaning of a special examination is. We hold general examinations at certain fixed times—every month; but if an urgent case presents itself a candidate may be examined specially; that is to say, a special Board of Examiners may be called to examine him, he paying double fees—(laughter)—that is, an extra fee for the calling of the examiners together, who would not otherwise attend for the purpose. In the first place I have to tell you that the proceedings of the Scottish branch of the Council were probably not known either to the Secretary or any member of the College except myself, and that therefore the name of John Forman, of Fettercairn, did not excite any attention. Then in the second place, he did not call himself John Forman of Fettercairn, but John Forman of Carmlington. Now, not being a great geographer, I turned up Carmlington in the *Medical Directory*—that high authority for which Sir J. D. Corrigan has so much reverence—(laughter)—and I did not find that the name of Carmlington occurred in it. However, I had a Gazetteer at hand, and on reference to it found that Carmlington is a chaplaincy in Northumberland; so that it would have been impossible to identify this man, even if his story had been known, as John Forman of Fettercairn. Then comes the question that this special examination would be limited to Medicine, Materia Medica, and Midwifery, because he must have submitted some other diploma. I therefore immediately telegraphed to know what he professed to be, when he was taken on examination, and I got in answer this second telegram—"John Forman, having written to Dr. Haldane, according to the law required by candidates possessing a qualification, came up for examination according to custom. I requested to see his diploma, when he stated that he had left it at home—(laughter)—but he produced his certificate of registration as M.R.C.S. England, signed by Dr. Robertson. The examination consisted of an oral second Professional for an hour—four examiners." (Loud laughter.) So that I cannot blame our officer because this man comes with a certificate from the official authorities, the Registrar of the Branch Council of Scotland, stating that his diploma has been registered; and, under these circumstances, I think the officer was perfectly warranted in taking that as equivalent for the diploma. The subject is an unfortunate one, and I will conclude it by saying that I have telegraphed to the President of the College to call a meeting early to-morrow to consider an important matter which will be contained in a letter which he will receive from me, and I have written that our law agent be instructed to write to Forman stating that he has obtained the diploma by false pretences, and that, if he does not immediately return it, legal proceedings will be taken against him.

Mr. OUVRY: If the Council is of opinion that his name should be removed, he cannot be registered again; and, therefore, I think Dr. Robertson should be informed that on no account can he register him again by any authority which he possesses.

Mr. HARGRAVE was curious to know whether, in the event of the unfortunate Mr. Forman having his name knocked off the Registry, his double fee would be returned to him. (Loud laughter.)

It was then moved, seconded, and carried unanimously, that Mr. Forman's name should be erased from the Register.

Dr. ALEXANDER WOOD: I do not think that our business with Mr. Forman is concluded. If a private individual finds that a person has broken the laws of his country, it becomes his duty to take steps to have that person brought to justice. Now, I think it is clear we all believe that fraud has been committed by Mr. Forman, or, in other words, that he has broken the law of his country; and I think that, as a body, we ought to take the same step which an individual should do, and put the case of Mr. Forman in the hands of the public prosecutor in that part of the country where he resides, for the purpose of being dealt with as a criminal in this matter.

Mr. OUVRY: Under the 39th clause of the Act.

Dr. ALEXANDER WOOD: I do not think we shall discharge our duty unless we do this, and I have no doubt the Royal College of Surgeons of England will give us all the assistance they can in bringing this man to justice. I feel the greater inclination to do this, because of what has happened with regard to the Royal College of Physicians of Edinburgh, which shows not only that he is an impudent person, but also that he is a very great scoundrel.

Dr. SYME opposed this motion on the ground that, from the inquiries that had been made, it appeared the man's general character was good; in fact, he feared there were a great many in the Profession who were a great deal worse. (Laughter.)

The subject then dropped.

The PRESIDENT: Gentlemen, you recollect that, at the beginning of our proceedings yesterday, the first of the *agenda* was to consider the report of the Committee on the Medical Acts in respect of their draft reply to Mr. Walpole's letter. That letter was not copied by the clerks when we met, but it

is now ready for our consideration. I therefore call upon Dr. Paget to read it.

Dr. Paget: The Committee have, in compliance with the first part of the duties committed to them, drafted a reply to Mr. Walpole's letter. I may state that the letter is supposed to come from the President in the name of the Council. It is as follows:—

General Council of Medical Education and Registration of the United Kingdom, Royal College of Physicians, London, S.W., May 30, 1867.

My dear Sir,—I have laid before the General Medical Council your communication dated May 20, containing the draft of a clause which you propose should be substituted for Clause XI. of the draft Medical Acts Amendment Bill, and expressing the opinion that, if the Medical Council be willing to adopt the clause in the form proposed, the Government would not offer any opposition to the Bill; but that it would be well for the Council to entrust the Bill to some independent member.

The Council hope that you will be pleased to reconsider this intimation.

The Medical Act of 1858 was introduced into Parliament, and carried, as a Government measure and public Act. Since then four successive Acts have been passed for amendment, all of which in like manner were introduced and carried by Government. Subsequently the Medical Council became satisfied that the Medical Act failed to effect one of its main objects; and for correcting this and some other defects they proposed an Amendment Bill. Sir George Grey, at that time Home Secretary, suggested that the Bill should be introduced by some independent Member of Parliament, for the following reason—viz., that he did not feel able to undertake the charge of the Bill at that time, "owing to the number of Bills which the Government had before the House of Commons, the progress of which was delayed from day to day from the want of opportunity to advance them."—(See Mr. Murdoch's Letter of May 14, 1866.)

But the Council, in reference to the above communication, unanimously resolved, on May 29, 1866: "That the Medical Council are of opinion, that unless the Bill be introduced by the Government, it would be unadvisable to proceed with it."

The reasons which induced the Council to come to this decision remain in full force. The Medical Acts, as already said, were Government Acts; the Medical Council, which brings the subject under your consideration, is a public body, established by Act of Parliament, and placed in communication with the Privy Council: six of its members are nominated by the Crown, and the rest by great public bodies. The essential part of the draft bill relates to a matter affecting not merely the Medical Profession, but in a larger and more serious degree the welfare and interests of the general public.

To these reasons it may be added that, were the Government, which has hitherto introduced every Bill for amending the Medical Act (1858), to decline the introduction of the Bill now contemplated, the announcement would, in the opinion of the Council, be fatal to its success.

The Council understand that the only point in the draft Amendment Bill as to which the Council and you are not agreed is that which relates to the admission of colonial and foreign graduates and licentiates to the *Medical Register*.

The Council have had under their consideration the draft clause which accompanied your letter, and which was as follows:—

"To be substituted for Clause XI., proposed by the Medical Council.—Every person who has resided in the United Kingdom for a period of not less than twelve months immediately previous to making his application, and who legally possesses a colonial or foreign degree, licence, or other diploma from a University, College, or other body, which qualifies him to practise Medicine or Surgery in the colony or foreign country where such degree, licence, or other diploma was obtained, shall be entitled to be registered under the Medical Act (1858): provided such degree, licence, or other diploma shall have been granted by a University, College, or other body which, in the opinion of the Medical Council, or of one of her Majesty's principal Secretaries of State, grants degrees, licences, or diplomas, after such course of study and examination as guarantees the possession by the holder of sufficient knowledge and skill for the efficient practice of Medicine and Surgery.

The Council are unanimously of opinion that the provisions of this clause are so objectionable, that they could take no part in the promotion of any Bill which should contain it, for this reason, among others, that it proposes to give to one of her Majesty's principal Secretaries of State the power of directing the registration of foreign and colonial degrees and diplomas, independently of the Medical Council—one of whose most important and responsible duties it is to regulate the registration of qualified Medical Practitioners.

In conclusion, allow me to draw your attention to the fact that the Medical Council is now holding its annual session; that the session cannot be prolonged for many days, without extreme inconvenience to many of its members; and that it is its earnest desire to have a conference with some member of the Government. May I, therefore, request the favour of a reply at your earliest convenience, and that you would inform me with which member of the Government you would desire me to communicate in your absence from London?

(Signed) G. Burrows,
President of the Medical Council.

That is the draft of the letter, and I will, in conclusion, as Chairman of the Committee, move formally that the President be requested to address this reply to Mr. Walpole.

The motion was seconded by Dr. Stokes.

Dr. Quain: I wish to make a suggestion in reference to that letter. It appears to me to require a slight amendment in reference to that portion which relates to the Council asking the assistance of a private member. I think in its present form it would be fatal to its success. I wish the Committee to add to that paragraph, "It would also tend to alter the position of the Council in relation to its functions with the Government if it were to seek the assistance of a private member."

Mr. Hargrave: In that letter we ask that Mr. Walpole should reconsider his proposal. Now, do you think there is any use in asking him to do such a thing. My opinion is, he will send us a very short answer and pay no attention to the letter at all. I really think we are going too far in expressing a hope that he will agree to our proposal. I think such an expression ought to be expunged.

Sir J. D. Corrigan: Do I understand Mr. Hargrave to wish to put this in, that we hope he will not accede to our proposal? (Laughter.)

Mr. Hargrave: I say it is useless to put the other in, because I feel certain he will not reconsider his proposal, having made up his mind upon the matter.

Sir J. D. Corrigan: I think it may be said that the Council trusts this amendment will not be persevered in.

Dr. Thomson: On the contrary, I would be inclined to go further, and to use some such clause as this:—"The Council regret they cannot accede to such a proposition."

Dr. Christison: I beg that the Council will consider what was before the members of the Committee—that we must partly deal with this measure as a measure of Mr. Walpole's, and partly also as a measure known to other members of the Government. We must suppose that Mr. Walpole has not stated what was in his letter without communication with the other members of the Government; and therefore we must be particularly cautious in using any phrase that could be interpreted even into a desire not to show due deference to Mr. Walpole—particularly having regard to the great trouble he has taken in the matter. I hope any alterations in this letter will be rather with a view to soften any words that may appear too strong than to strengthen any words that may seem to be too weak. I think the Council should maintain it as it stands, because I know it has been very carefully considered.

Mr. Cooper: I think that inasmuch as Mr. Walpole is at this time very much out of health—(laughter)—I can say that from my own personal knowledge, for from the commencement of the Parliamentary session his business has been pressing so much upon him that his health has suffered, and it was my advice to him that he should keep himself as much from public business as possible. Therefore, I hope in your reply to him you will act with great courtesy and consideration.

The President: We have now before us the proposition of Dr. Quain that this be inserted:—"To these reasons it may be added that were the Government, which has hitherto introduced every Bill for amending the Medical Act of 1858, to decline the introduction of the Bill now contemplated, the announcement would, in the opinion of the Council, be fatal to its success, and altogether tend to change the relation of this Council to the Government." (Applause.)

Mr. Hargrave: I beg to second that.

Sir J. D. Corrigan: I would just rise to entreat Dr. Quain to withdraw his amendment. The letter, I need not tell you, has received a very great portion of our consideration this morning for several hours, and I am not at all sure that the sentence proposed to be introduced by Dr. Quain would run well with the rest of the letter. I am not prepared to endorse the introduction of a sentence into a letter which has cost us so much trouble and time as this letter has cost us this morning; in the case of so important a letter as that, if it is not pleasing to the Council, I think the proper course would be to recommit it to the Committee. I really cannot give my assent to introducing a sentence into a letter which gave us so much trouble in its composition this morning without having time to read it over, nor do I quite understand that the words of Dr. Quain's amendment state any new fact. It strikes my ear as merely a repetition of what we have said more than once. For these reasons, I must vote either for the letter in its entirety or for its recommitment to the Committee to make such alterations as Dr. Quain may suggest, provided that the Committee endorse them. But I must decline as a member of the Committee to assent to the introduction of any sentence which we have not had an opportunity of considering. I agree with every word that Dr. Christison has said, and our object, or one of our prime motives, in going through the composition of that letter was not to let a single sentence or word escape us that in any measure whatever could be, not to say offensive, but even disagreeable. We endeavoured to do that, and I am not at all prepared, as yet, to say what might be the bearing of that sentence, or what conclusion might be derived from it. Dr. Thomson has, I think, also proposed an amendment—viz., that we should express a hope that the resolution which has been forwarded to us will not be adhered to. Now, there is no such expression in Mr. Walpole's letter. There is no resolution whatever—it is mere suggestion.

Dr. PAGET: I now see rather an objection to this. I think that the announcement that the Government did not intend to take it up as a Government measure would not tend to change the relation of this Council to the Government. It would no doubt tend to change the relation of the Council in public opinion; but it cannot be said, I think, to change its relation to the Government, because that is established by law.

Dr. ANDREW WOOD: I think it does both.

Dr. PAGET: It is no doubt a repetition of what we have expressed before.

Dr. QUAIN: Really I think it cannot be too often insisted on that to go begging for a private member is to alter our position in relation to the Government. ("Hear, hear," and applause.) I think these two lines cannot offend anybody.

Dr. ACLAND: I will venture to say one word on the amendment. I have looked at it carefully, and although I was unable to attend the Committee, I confess I am perfectly satisfied with the result of their labours, and I should be sorry to see it altered without a recommittal. When gentlemen take such pains with a matter, I think we ought not to alter a letter which is drawn up by them. I shall, therefore, vote for the recommittal if the letter is to be altered at all. I quite see Dr. Quain's meaning, and to a certain extent I agree with it; but there is this consideration which I mentioned yesterday—viz., that when we remember the extraordinary amount of work which falls on the Government in the session, I do not think it is right to charge them with discourtesy or apathy for a neglect which may be unintentional or unavoidable on their part. Everybody knows that Mr. Walpole is the most obliging man in the world; and the fact is that members of the Government are entirely overpowered with work. I quite agree that it would be wrong for the Council to ask for any assistance from a private member. But supposing the Government were to say "We will place the Bill in the hand of a private member and support him," I think that would be another matter. It would be the same thing as the Government introducing it themselves. That would not change our relation to them in the least. Therefore, if we alter the letter at all, I shall move to recommit it.

Dr. QUAIN: In that paragraph you put forward as an objection to applying to a private member solely the fact that in your opinion it would be fatal to the measure. Strike out that paragraph altogether, and I withdraw my amendment; otherwise, if my amendment is objected to, I shall move that it be recommitted, because I think that paragraph would be very serious indeed in its effects.

Dr. CHRISTISON: The effect of recommitting the letter would be to delay the answer for several days.

The PRESIDENT then put Dr. Quain's amendment to the Council, and it was carried by a majority of one.

Sir J. D. CORRIGAN: I believe now has come the time for Dr. Acland or myself to move as an amendment that that letter be recommitted, and I now do so. As a member of the Committee, I feel very reluctant to becoming any party to inserting a paragraph in that letter which in its main features has been repeated in other parts of it, and the tenor of which I really do not understand. I do not see how the entrusting the Bill to a private member alters our relation with the Government at all. The sentence, to my mind, really carries no very intelligible meaning with it, and on that ground I object to it altogether; but, at any rate, I do ask that, if any alteration is to be made in that letter, you will permit us to reconsider it. I think it is due to us. If the majority of the Committee do not agree with me upon this, of course I bow; but I really think, in a matter of this kind, if the majority of the Committee are of my opinion, in common courtesy you should comply with that expression of opinion. I shall therefore move, as an amendment, that the letter be recommitted to the Committee, with a view to consider any suggestions offered by Dr. Quain and others.

Mr. CÆSAR HAWKINS: With regard to the recommittal, it must be remembered that it would be a great inconvenience to us to sit longer than our usual time; and if the letter is recommitted, it will cause at least a delay of one day, if not more. I would rather, therefore, with all respect to the Committee, see those words omitted altogether than recommit the letter. I would suggest, with the consent of the Council, that the words should be so far changed as this—which would really include all that they mean—"that such a course may be supposed to alter."

Dr. ANDREW WOOD thought that was a good suggestion.

Dr. CHRISTISON: Mr. President, will you allow me to state a reason against the recommittal of this letter, if it can possibly be avoided? And it is especially in reference to our desire to have as early an answer as possible. Now, I happen to know that if that letter be sent on to Mr. Walpole at once, we should have an answer by Monday morning, and Mr. Walpole would have an entire day to consider it. But if you delay another day there will be no answer, in all probability, till Wednesday. That would give us very little time to consider whatever he may suggest in reply, and to discuss what we shall do in the matter; and I really think that, after this Council has passed the amendment suggested by Dr. Quain, there is no reason for a recommittal, because what could the Committee do? They cannot take out those words. It cannot be competent for them to do so, they having been inserted by the Council at large. I humbly beg to suggest, therefore, that we should see what amendments the Council have to offer; and, if there are no amendments of greater importance than this, or which require more deliberate consideration, I do not see, speaking as a member of the Committee, why it should be recommitted to us to consider. We are quite prepared now in a short time to pass this document and forward it to Mr. Walpole, and then we should have a very fair chance to get an answer by Monday morning.

Dr. ACLAND: I shall support Dr. Christison's proposition that, instead of recommitting it, we should just state any verbal alterations which we may think desirable, and finish the matter at once; for by the course which the business has taken we have got into a very curious difficulty—viz., that the only part of the letter which cannot be altered is Dr. Quain's motion. The Committee would agree with the absolute necessity of keeping that as it is. I will suggest the insertion of one word—viz., the word "probably—as modifying the words preceding those which Dr. Quain has altered.

The PRESIDENT: I do not think I can take that into consideration. Dr. Quain's amendment has become a substantive motion, and Sir J. D. Corrigan has now handed me his amendment upon that. It is seconded by Dr. Stokes that the letter read be recommitted with a view to enabling the Committee to consider such alterations as may be suggested for their consideration.

The amendment was put, and lost by a minority of 5 to 12.

Mr. RUMSEY (after conferring with the Chairman of the Committee): I propose another amendment, that, instead of the words which have been added to the letter, these be substituted—"And would convey to the public an incorrect impression concerning the relations of the Council with the Government."

The amendment was carried by a majority of 12 to 8, and the letter was ordered to be copied immediately and forwarded by the same day's post.

The PRESIDENT then asked permission of the Council to withdraw for the remainder of the day, having urgent business elsewhere, and proposed, with the permission of the Council, to delegate his duties to Dr. Christison.

Dr. CHRISTISON having taken the chair,

Dr. ANDREW WOOD, in moving "That a committee be appointed to consider and report upon what ought to be the course of Professional study and examinations to be gone through by all persons seeking entrance into the Medical Profession, in order to secure the possession by them of the requisite knowledge and skill for the efficient practice of their Profession," said—I shall not require to occupy the time of the Council many minutes, because I do not think this matter requires much to be said in its favour. We have as yet only touched upon the subject of Professional studies; we have only given some slight sketches of what we consider right in regard to the curricula to be taken, and in regard to the examinations. We have never gone to work to grapple with the course of Professional studies as we have with the question of preliminary studies. Now, I agree perfectly with what is stated in a very excellent pamphlet of Professor Bennett's, in which he says—"The Profession is now impatiently waiting for an authoritative statement from the Medical Council as to what the Professional curriculum shall be. Such, however, are the difficulties of the subject, so various are the opinions which even the most experienced hold regarding it, and so conflicting are the interests involved in the question, that we need not feel surprised that nothing has as yet been effected. Instead of a uniform and national Medical education for the country at large, a student is still called upon to consider which out of the multifarious systems put before him he ought to follow, or how he shall steer his course that while qualifying himself for his examination at one Board he does not disqualify himself for examination

at another. The intention of this Council, if I understand rightly, is to determine what standard they will erect, a compliance with which is to qualify any person to enter the Profession and become registered; and although, perhaps, it may be the case that to a very large extent the qualifying bodies have come to a very considerable amount of agreement as to subjects which ought to be embraced in a curriculum of study, yet there is so large an amount of discordance in these separate curricula, that it affords an element of considerable embarrassment to students, and in other respects there are such varieties in the way in which particular parts of the curricula are defined, which are also serious embarrassments, not only to students, but to teachers, and to those who have the charge of examining. Therefore, what I should like to have would be this—that a committee should put before us such a scheme of the subjects which they consider that every individual who is to practise his Profession properly should have studied. But in addition to that my object is that the Committee should very carefully consider also the way in which students should be tested upon these subjects and curricula; and I think we are now getting into a position in which we are ready to face the difficulties, which are very considerable. I think we are now in a condition, to a very considerable extent, to grapple with the difficulties, and so improve the curricula of studies and examinations as to make them more uniform through the country, and more efficient also. I believe any one who has read the reports of the visitors of examinations must see that there is not such uniformity in the examination as there is in regard to the curricula, and that there are very many important things to be introduced into those examinations before they can be efficient. I more especially at this moment allude to the fact that I do not think, looking over the system of examination which is required generally by the bodies, that sufficient attention has hitherto been paid to what I consider a most important subject—I mean demonstration and practical examination. I therefore do not wish at all to forestall the discussion which must arise when the report of the Committee comes up, but I do think the time has now come that the Medical Council should commence the consideration of these subjects. I do not say that they will be able to finish it up—to do it perfectly—this session; but, at all events, they should commence the consideration of this subject, and endeavour to devise some directory in regard to the curriculum of study, and in regard to the most efficient mode of examining upon that curriculum, which may help the bodies who are engaged in the most important function of licensing to practise, and which may remove from examining boards a good deal of uncertainty and embarrassment, which they feel just now, and, more especially, will relieve students from the same feeling. I therefore think this is one of the most important of the functions of the Council. I do not at all complain that it has not hitherto occupied our attention as much as it might, because I do not think we were ripe up to this time to commence so important a matter. Now, however, having so far gone on and adopted something which is beginning to tell, and very efficiently, throughout the country, in regard to the preliminary examinations, I think we are in a condition to set to work and do what we can in devising a mode which may be a guide to the Profession and to the boards with regard to the Professional education of students. I therefore beg leave, without saying anything further, to move—"That a committee be appointed to examine and report upon what ought to be the course of the studies."

Dr. Parkes: I beg to second that motion; and on the present occasion I think it will not be necessary to say more than that I feel that the Council will think Dr. Wood has made out a good case for a committee. That is the only question before us; and I think it must be conceded by every one that a sufficient case has been made out for that. When the report comes up will be the time to discuss the different points with which it deals; but I hope the Council will be able to proceed now, without much discussion, to vote a committee. I would beg your attention to the fact that the time is rapidly passing, and that it would only be discussing what will have to be considered after the report if we were to enter now upon a consideration of the subject.

Dr. Storrar: I regret that Dr. Andrew Wood and Dr. Parkes have seemed to have shortened their speeches under the notion that they took it for granted that there would not be any opposition to this proposal. I confess, in its present state, I am not prepared to vote for it. I think my reasons for objection may be stated in this way—that it is exceedingly difficult to bring all the bodies in Schedule A to an agreement upon this subject; and, secondly, that it is not only difficult, but I doubt very much whether it be desirable. As to the difficulty, let any man conversant with the business of education look round the three kingdoms and see the diverse views that are entertained with regard to the best means of conducting Medical education. You hardly get two bodies to agree upon the subject. (Applause.) Some would wish to limit very much the number of courses. Some would rather be disposed to increase them. One man doubts whether anything is to be learnt by a course of systematic Surgery, and thinks the student had better attend to Hospital study and clinical Surgery. Another man—or, at least, another body—up to the present time has thought that not less than three systematic courses of Surgery delivered in class were desirable. One set of bodies commence their session in the month of November, and of course they think that is the very best time. Another begins in the month of October, and, as a matter of course, thinks that is the best time; and I have only recently seen a proposal that Medical education ought always to begin by a summer course. Then we get into all sorts of discussions as to long and short courses, and it almost inevitably follows that bodies connected with particular schools get wedded to their own particular views, and it seems next to impossible to alter their opinions upon the subject.

Dr. Parkes: That is a very good argument for the committee.

Dr. Storrar: Now, as to the desirability of a committee, I very much doubt it. I am one who confesses that he has learnt something since he has been a member of this Council; and one of the things upon which I confess my views have been somewhat enlarged is upon the subject of seeking to obtain one rigid uniform system. There is something very charming in the idea of system. There is something so seductive in it that there is a natural tendency to lead us on to make system as an instrument of education as perfect as possible. We would have everything reduced to that condition of uniformity—that, in fact, education would be an affair of pigeon-holes. Now, the Council will excuse me for a moment if I diverge to a question which has no necessary connexion with this. It has a connexion, and you will see the analogy in the end. I have been now for nearly three years engaged in an inquiry into the school education and the secondary education conducted in this country. Our duty has been to gather a large body of evidence upon this subject. We have not been content with gathering that evidence in the United Kingdom, but we have made inquiries as to the system of education prevailing on the Continent. We have sent an assistant commissioner—a most distinguished man—on the Continent to collect all the Continental views upon the subject. Now, perhaps the most perfect system, as a system, is that which prevails in France. It is said that the Minister of Education in Paris, standing in his bureau, can pull out his watch and say, "It is such and such a time of day; at this moment in all the Lycées of France they are delivering a course of lectures," say on mathematics; and at another hour of the day he can say, "They are now delivering a course of lectures on another subject." All the masters are trained to one model. The whole system moves as a machine, and so much so that, from the best information we can gather, the whole thing is a failure from the very perfection of the instruments; and the explanation of it seems to be this, that the human mind is dealt with as if it were a known quantity. Every intellect is put through the same mill. There is that strong temptation to system that the whole scheme of education is declared to be a mistake, and it stands out as one of the model systems to illustrate that which we are to avoid. Now, sir, allow me to transfer the idea of general education to Professional education. I think, upon the whole, that there is a great advantage in having the Medical education of this country presided over by more than one ruling body. I do not mean to commit myself to the statement that there are not too many examining bodies, and that there are not too many bodies prescribing all these courses of lectures. (Hear, hear.) At the same time, I do think there is a very great advantage in that kind of elasticity which is the outcome of different systems of training. Bear in mind, sir, I say, "systems of training." You will find, sir, that there are certain minds who take up knowledge in a different way from other sets of minds. There is one set of minds which can rarely gather anything from the best lectures, but they can go into a laboratory and make themselves the best of chemists;

they can go into a dissecting-room and make themselves the best of anatomists; they can work themselves up to efficiency in every department without attending any systematic course of training. There are others, again, who acquire a great deal of information from such a system; but I think nothing really can be more unfortunate than to join in the hue and cry of late years for systematic lectures; and I think the existence of what I have stated is a very good reason for not describing hard and rigid lines with regard to such matters. The difficulty of this question—the undesirability, I mean, which would make me inclined to waive the whole question—is, that it appears to me that we have got the master-key of Medical education when we have got a sufficient preliminary examination in arts, without any inquiry into the mode in which that preliminary education is arrived at—(applause)—and in the fact also that we have got four years' prescribed study, and have got a double examination, the visiting of the examinations, and the power of making recommendations as to the best mode of improving those examinations; and I must say this, that, in the course of my last two years' experience, there is nothing which has struck me so forcibly as the proper sensitiveness of the examining bodies to any reasonable recommendations proceeding from the visitors appointed by this Council. I think these visitations—so far, at least, as my experience has gone—have been singularly successful, and I believe that if the visitations were conducted in that genial and sensible spirit which has characterised all those with which I have had anything to do, and, I may also add, of which I have heard anything, the result of them will be that gradual changes will be introduced into the modes of examination which will reflect potently upon the systems of education, and will not render it necessary for us to interfere, or to lay down and prescribe regular or set rules. If, for instance, we require that every man who is examined in Surgery shall know how to apply a bandage; if we require him to perform small operations in Surgery; if we require that he shall go into the wards of a Hospital, and diagnosticate Surgical injuries and the mode of treatment; if we require the same thing with regard to Medicine, and, so far as it can be carried out, an analogous kind of thing with regard to midwifery, the effect is inevitable, that it would put an end to all the abuses of that kind, that it will put an end to every faulty system of lectures or teaching. It appears to me, as I have said, that in this point we have got possession of the master-key of the whole question. We have got this—a perfect goodwill, so far as we have been able to discover, on the part of the examining bodies of England and Scotland—I cannot speak with equal confidence of Ireland, because I do not know that country as I know England and Scotland; still, it is a matter of immense congratulation, as I have said, that we have got the goodwill of the examining bodies in England and in Scotland, and I therefore most earnestly request the Council to pause before they commit themselves to the appointment of a committee to carry out the views which Dr. Andrew Wood has expressed on this matter. This motion is No. 4. Now I look to the one which immediately follows it, "Reports of the Visitors of Examinations," and I find Dr. Andrew Wood proposed to appoint a committee to analyse the reports of those examinations, to compare them one with the other to discover where certain things are good and where they are bad, and to consider what steps it may be advisable to take in order to make the examinations in arts what they ought to be, and also in order to make examinations in Medicine what they ought to be. (Applause.) Now, I will go most heartily in that, and will conclude by saying that, although I have not read the terms carefully, in the spirit of that I entirely concur. But with regard to No. 4, which is now the motion immediately under our consideration, I would ask Dr. Andrew Wood and Dr. Parkes to consider whether they are not making a mistake in going into this matter.

The PRESIDENT: Do you move an amendment?

Dr. STORRAR: I do not.

Sir J. D. CORRIGAN: I should vote with pleasure for Dr. Wood's motion, provided he omits from it the phrase "Professional study," and allows it to read thus—"That a committee be appointed to consider and report upon what should be the course of examinations to be gone through." The reasons for which I would suggest the omission of the two words "Professional study" have been so clearly put forward by Dr. Storrar, and the impossibility of making the course of study on one standard alone, that it is scarcely necessary to dwell much upon that part of the subject. I shall, therefore, only introduce one or two practical illustrations upon it. If we attempt to lay down a course of Professional study, and take up any branch of Medical science in which students are instructed, we find at once a difficulty out of which we cannot get, and it will be impossible, I think, for us to expect that the various licensing bodies will, as Dr. Storrar has so well expressed it, adopt one uniform, rigid standard. The first practical difficulty which occurs to my mind is the study of midwifery. Now, on this most important branch of study there are very conflicting views as to the best way in which a student can learn it. Some of our Surgical bodies insist that attendance at midwifery Hospitals is necessary. Some of our bodies accept midwifery visits of the poor in their own houses; and many of the best informed Practitioners with whom I have conversed on the subject have stated to me that, whether as regards the patients, or the instruction which the students receive, or the study with regard to the improvement of themselves in the actual practice of it in after life, that this department of Medicine is better taught in dispensary practice, and under the individual direction of the person to whom the student may be an assistant, than in the idleness which sometimes takes place of the student, who merely walks into a midwifery Hospital perhaps once in three months for a few hours. (Hear, hear.) Now with regard to another practical point in reference to study. We find one of the licensing bodies admitting Hospitals of thirty or forty beds as sufficient schools of education, and we find others requiring 100 or 150 as the minimum number of beds in such an institution. We find others—among whom I reckon myself—with the impression that a Hospital does not give at all, in itself or by itself, the kind of information required, but that dispensary practice gives a man a vast amount of information such as never can be got at the bedside; and that when he pursues the practice of a dispensary, and sees people in the exact state in which he has to treat them afterwards during his Medical career as a Dispensary Doctor, he is pursuing the best method of Professional education. Well, then, we find all these difficulties in our way, and if we turn to the number of courses to be attended, we find in some colleges three courses of systematic lectures on one subject are required; and the wonderful part of it is, that these lectures, year by year, are precisely the same—the same course, the same lecture delivered on the same day, and on the same subject. I know myself of instances where a smart student has got into the lecture-room before the lecturer has arrived, and has marked on the black board the subjects to be produced and the very illustrations which the lecturer was to give. (Laughter.) Others have observed that systematic teaching is useless, and that a man learns Surgery better in a Hospital, and still better in a Dispensary. Others recommend apprenticeship as the better way. (A Member: We do not recognise apprenticeship.) I consider it a very useful mode of instruction, and I believe members of the College of Surgeons as a body take that view, and they date the commencement of Professional study from the period when the student has obtained his indentures from a member of the College. (A Member: We take no notice whatever of apprenticeship.) I believe you date the commencement of Professional study as beginning at the time when the student may attend a Hospital or a Dispensary. The Council of the College of Surgeons of London has not complied with the regulations of the General Medical Council, and on this there has been a difference of opinion up to the present, for the Council has declared that the course of Professional study shall be dated as commencing from the time when the student begins his studies at a recognised Medical school. Others of our licensing bodies are bound by Act of Parliament to date the commencement of Professional study from the time the young man signs the indentures. They have no option. Now, with all these difficulties staring us in the face, I still maintain the same opinion, which I embodied in a resolution two or three years ago, and which was nearly in these words—that with the courses of Professional study this Council should not interfere at all; that they should leave every licensing body to make whatever rules for the courses of Professional study which, in their own opinion, were best suited to the locality or the circumstances in which students were placed. I think that should be an open thing, and left to the discretion of every licensing body, and that we should confine ourselves altogether to those points which Dr. Storrar has so well put—namely, to make the course of examination so thoroughly practical that it would be impossible for a young man to enter the Profession by a system of cramming—(applause)—or in the way in which I know it is almost universally entered at the present time—namely, that when a

young man is destined by his parents or guardians for the Medical Profession, they go to a "grinder," as he is called, and bargain with him, as you would for the purchase of a horse, that, in consideration of a certain sum of money, he shall pass that young man through some college or other, and that he shall obtain a diploma in a certain number of years. I know that is the practice, and how is that to be met? Not by interference with the course of study, for in no way can you control the lecturers from giving certificates, and in no way can you control the minds of young men so that they shall attend to what is going on at lectures. The lecturer has no way of enforcing attention, and the student may often be found reading a Waverley novel (which may be, perhaps, a better book for him) during the time the lecture is being delivered in the theatre. Now, I quite agree with Dr. Storrar that we cannot and ought not to enforce a standard. We cannot control the students. We cannot control the lecturers. We cannot control those bargains with the grinder with regard to the rules laid down for the course of study. But I will tell you what we can do. We can, by confining ourselves simply and solely to the manner in which examinations are conducted, effect this object, which is, that no man can obtain his diploma without a proper amount of practical knowledge. No man can undergo an examination in practical anatomy—no man can go through the tests of chemistry on the table—no man can examine the sick patient in his bed in a practical examination—no man can distinguish substances of the Materia Medica which are submitted to him, by any system of cramming that ever was invented. (Applause.) Neither can he perform operations in Surgery if his knowledge be acquired by cramming. I think, if we confine ourselves to dealing with the examinations, and seeing that they shall be thoroughly practical, we shall obtain our object; but all our efforts in another way—namely, that of interfering with the course of studies—will be, and ever must be, fruitless. (Applause.) If this phrase, "Professional study," be omitted from the resolution, I shall have great pleasure in voting for it.

Dr. Alexander Wood: Mr. President, when the mover of this motion sat down, I was not quite sure whether I would vote for the motion or not; but, after having listened to Sir J. D. Corrigan, I have now no doubt whatever that we should support this motion, and for the following reasons:—Sir Dominic Corrigan has drawn a fearful picture of the abuses which, according to him, prevail at the various licensing bodies in the matter of students' examinations—a picture which presents so many features of novelty and interest that if one-half of what he says is true, I am sure it is time this Council, by a committee or in some other way, did really ascertain what was the state of matters. Having drawn this dreadful picture, he set up—as is often his wont to do at discussions at this table—a man of straw, in order to knock him down again. He assumed that Dr. Andrew Wood, by his proposal, wished to lay down a hard and rigid rule—a sort of Procrustean bed upon which every student was to be tortured—(laughter)—whereas, as I understand it, the nature of the proposal which he makes is simply to inquire into the various systems, and by no means to lay down one to be rigidly enforced, but to make certain suggestions which may be useful in all systems that may be pursued in each school. But the most extraordinary thing of this most extraordinary speech was where Sir Dominic Corrigan, after urging upon us not to adopt this motion, turned round and told us that the whole virtue of this Council, and the whole power of this Council, should be concentrated upon the visitation of examinations—(no)—upon the ascertaining how examinations were conducted, or how, if possible, those examinations could be improved. He told us there was no hope of improving education; there was no hope of rescinding the standard of education, and that our only hope was to direct our whole attention to examinations to ascertain how they were conducted, and to endeavour to prevent errors in the management of them. Now, this Council has done this. Four years ago I moved for a committee on that subject, and that Committee gave in an elaborate report, which report was thrown out by a majority of the Council. Two years since a learned Professor opposite me proposed a simple plan, and who was it that opposed that plan at every stage but Sir Dominic Corrigan? But when we come to the reports of the examinations before us, and to the Minutes of the Branch Council, we find that if he has been consistent in one thing throughout his whole course of proceeding in this Council, it has been in a violent and determined opposition to the fulfilling the request of this Council, that the visitation of examinations should be carried out by means of members of the Council. Then, when I come forward with a motion that we should try to have a committee to improve preliminary education, I am met by Sir Dominic Corrigan with a resolution that the thing is impossible, and that we have no power, and when my friend comes forward with a motion to appoint a committee with reference to Professional education, we are met with an argument of the same kind from Sir Dominic Corrigan. But, that he may not appear to be obstructive, he says, improve your examinations, and then you will do all that you can do. But when we come to try to improve our examinations in the most legitimate way by means of visitations, we are met again by the obstruction of Sir Dominic Corrigan. He will not have those visitations. He does not approve of them, and, in his own Branch Council, he sets the example of refusing to take any part in them. Now, I ask, in this position of matters, how is this Council to go on? If the views which have been promulgated by Sir Dominic Corrigan were to prevail generally in this Council, where should we be? If every honest effort made at this table to improve the Medical education and the examination of the licensing bodies is to be met in this obstructive fashion, what is the use of this Council meeting at all? Let us try to take another view. Let us rather try, each of us in our own sphere, to do what we can to promote the objects for which this Council was instituted. (Applause.) We have received every encouragement. The difficulties which have been reared up to-day have been, to a great extent, imaginary; and, I believe, if we met them fairly, and by the wise suggestions which a committee would offer, there will be no difficulty in making those improvements which are much more imperatively demanded than I believe most of us had any idea before Sir Dominic Corrigan delivered his speech to-day. I beg leave to second the motion of Dr. Wood.

Mr. Hargrave was understood to say that he did not believe the lectures of this man or that man tended to carry out examinations in a *bonâ fide* way. No man ought to be allowed to pass, unless he gave fair evidence that he was capable of passing them. Sir J. D. Corrigan had said a good deal about the information of Medical students, but he (Mr. Hargrave) must say that since the establishment of the Medical Council a marked change had taken place in the character of Medical students, and there was a degree of energy and resolution about them which there had never been observed before. Another allusion which had been made by Sir Dominic Corrigan was to the system of grinding or cramming. No doubt it would be the greatest improvement in Medical instruction which could be adopted if that could be abolished altogether. The consequence of cramming was that a young man's mind was poisoned. He was rendered utterly unfit for the attainment of excellence in his Profession.

Mr. Cæsar Hawkins: I understand Sir Dominic Corrigan proposes to leave out the words "Professional study." Now, I am going to propose to Dr. Andrew Wood to leave out the word "examinations." If he will consent, so much the better; if not, I shall move it as an amendment. Sir, there are two questions before us, one as to the functions of the Committee as embodying the minimum of Professional study, in the same manner as they have embodied the minimum of preliminary education. The next is as to examinations; No. 5 is with respect to visitations; and No. 6 is a proposal of Dr. Andrew Wood for a committee to report on the examinations.

Dr. Andrew Wood: I am quite prepared to accede to your suggestion.

Mr. Cæsar Hawkins: Very well. Then it is not a question whether it would be wise to embody a minimum of Professional study. On the whole, I am inclined to think it is better to postpone it. The various points brought forward by Dr. Storrar have had great weight on my mind, and I think we had better discuss them when we have fully considered the report of the visitors and known more about the mode in which the studies have been carried on in various ways.

The Council assented to Dr. Andrew Wood's motion being amended by striking out the word "examinations."

Dr. Sharpey: I have been very much pleased with the calm and considerate way in which Dr. Storrar has introduced this important subject, and I have been very much pleased also with the remarks which have fallen from the different members round this table. There was one which fell from Sir Dominic Corrigan that I think requires a little more consideration than it has received from this Council—I mean with regard to the system of apprenticeship.

The PRESIDENT: I do not think it is necessary to go into any detail of that sort.

Dr. SHARPEY: I think apprenticeship is a most important part of Professional study.

The PRESIDENT: I think Sir J. D. Corrigan was perfectly in order in putting into his demonstration of the proof of the great difficulty of dealing with this question, the great variety of ways in which these studies are carried on at present. But I do not consider any person would be in order if he were to go into the advantages or disadvantages of any particular system.

Dr. SHARPEY: I must bow, of course, to the chair, but I may have, on a future occasion, an opportunity of making my remarks upon that. Meanwhile, I would respectfully suggest to Dr. Andrew Wood to take out No. 6, because I think it will come to nothing. I am quite aware he is not proposing to go into all the questions as to the precise mode in which every different thing should be studied. It is rather, I think, subject to Medical study altogether. But Dr. Andrew Wood will remember that we have already agreed upon the subject of preliminary education, and we have agreed that the duration of the Professional studies should not be less than four years. We have also agreed already that the examination should be progressive. Now, is not that a great deal of what has been already done? (Hear.) When you come to extend the subjects of study, you will find there is not such a great deal of difference. If you take what we call the "curricula" of study, they had not before so much as you would at first sight think; but, if you begin to lay down what are to be what Dr. Andrew Wood calls the course of Professional study, you are in fact trammelling the exertions of various licensing bodies, who now exercise their own discretion upon that subject. I will take two cases in point. The University of Edinburgh have proceeded upon their own method; they require attendance upon lectures, and a practical attendance upon various subjects on which they examine. That, I dare say, is a very great improvement. I know it answers admirably, and it has been proved by historical proof, if I may say so. Then, again, take the University of London, which has been going on since 1859. I believe the results of the University of London examinations would not be challenged anywhere, and yet they proceed upon a totally different plan. They prescribe a certain period of study, with a preliminary examination. There are certain examinations in progress—three different examinations. There are certain subjects which they insist upon being attended practically, because they are subjects upon which the student works, such as practical anatomy, practical chemistry, and so on. Then there are examinations, both written, and oral, and practical; but they do not insist upon attendance at lectures on all the subjects. The four subjects which are commonly studied by lectures, they only require attendance upon, not specifying which, but leaving the student himself to find out those particular subjects which he can most profitably attend lectures upon. Some prefer to attend all the lectures. Others, again, do not find it necessary to do so. And this system has also been pursued, and I believe I can challenge anybody to say that it has not worked beneficially. But now, you are asking the Medical Council to come forward and lay down this iron rule.

Dr. ANDREW WOOD: No, no.

Dr SHARPEY: I suggest to Dr. Andrew Wood that he should turn his energies and our energies (because I am willing to serve on a second committee to take up that very matter which he has indicated in the notice paper, marked 6) to "considering the results of the examinations, and to present a report in the present session, embodying such recommendations founded on the various suggestions made by the visitors as may tend to improve generally the examinations." Here you have something to go upon. I think, therefore, I cannot hold up my hand for Dr. Wood's motion, seconded though it be by my friend Dr. Parkes, and no doubt brought forward after much consideration.

Dr. PAGET: I am very unwilling to vote against a motion for the appointment of a committee to consider and report upon a matter of so much importance as that of Professional study; and if I could understand the extent of the motion in the sense in which Dr. Alexander Wood has understood it, I should certainly not vote against it. But I do not so understand it. It seems to me that the functions of the Committee would be limited to reporting what ought to be the one course of Professional study. In fact, it does more than that. This resolution, if it passed, would do more than appoint a committee: it would express an opinion that all persons seeking an entrance into the Medical Profession should go through one and the same course of Professional study. Now, as to the wisdom of that, I for one have considerable doubts about it. I do not think it would be wise to express an opinion in a resolution merely for the appointment of a committee. For that reason I must say, with regret, that I cannot vote for Dr. Wood's motion.

Dr. ACLAND: Mr. President, I feel the same difficulty in this matter that several speakers have already expressed. I cannot help thinking that if Dr. Wood could combine his questions—that is, No. 4 and No. 6—and place the whole matter in the hands of a committee, it would accomplish what we all desire. I wish I could agree with what has fallen from Dr. Sharpey. I have not the slightest doubt that the course which he has suggested is, upon the whole, the right one, and I believe that, as Sir Dominic Corrigan has said, the most important step we can take is to endeavour to improve the examinations, leaving, in full confidence, to the central bodies the superintendence of the way in which students shall prepare themselves for those examinations. That view I have held for at least twenty years, and that view I entertained when I first turned my attention to the subject. I hope I shall bear in mind what has been said as to the impertinence of entering into arguments for the purpose of convincing more competent persons than myself upon matters of this kind. I merely say that I cannot think that is all this Council might do. It is now more than three years since I pressed earnestly on the attention of the Council the advisability of appointing committees upon this subject. I, with all the earnestness of which I was capable of bringing to the task, advised the appointment of three committees to report deliberately to us on the three separate subjects—the course of study, non-Professional and Professional, and the best way of taking examinations. That I did on May 7, 1864, but it was thrown out—I will say with considerable feeling—and it was said I was obstructing the Council in the discharge of its duties; in fact, I was somewhat severely handled on the occasion. Now, I still retain the opinion which I then had, that we should have materially expedited the work of the Council had we done it. I believe, in difference with what I understood to be Dr. Sharpey's motion, that this Council, by its collective wisdom, may very well lay down the subjects which must be required of the different bodies. I do not think there need be such a minimum as to be injurious to any of the licensing bodies at all. (Hear, hear.) It was my intention to go on to prove at that time (and I will give you a proof of this directly) that the Council should require every person put upon the Register to do whatever it thought fit to qualify him to be put on the Register. I know at that time a great deal was said about the uniportal system, as it was called, and the subject was discussed a great deal. But those are all bygones, and we have only to consider what is the best course to pursue now. I will put this simple case to you: Take the University of Oxford, where, as you know, there are very few students, and very few degrees granted in Medicine, it not being likely to be the future function of that University to prepare Medical students; but it may be its function to prepare them for Medical schools by a sound education. Still, they give the licences for Bachelors and Doctors of Medicine. Now, I have had the greatest difficulty in introducing the subject of a moderate acquaintance with what is called in our Latin statutes the *ars obstetrica*, the *ars chirurgica*, and the general hygiene. However, we did introduce them into the statutes, and now the examiners are obliged to require them. Now, we all know the working of this. We all know that persons get on the Register with one qualification, and so on; but it does enable this to be done by the Council, to say what is the minimum required of everybody. I could give you ludicrous questions which have *bonâ fide* been put to me by students. A young Physician said once, "Do you mean to say I am to be called upon to cup a patient?" I said, "I mean to say this, that when you are taken to the Hospital, if you are called upon to do so, and you are not able to do it, you will not pass." Now, I do not know whether that is right or wrong, but I say that this is the body of all bodies in Great Britain which can best advise us upon that subject. I will just refer to the contest we had three years ago to show the difference in what I wanted then and what Dr. Andrew Wood wants now. At the same time, I am quite prepared to support his motion on the whole, because I believe it can do no harm. Nobody need follow it. It will not be coercive, but it will give the sense of the Committee. However, I entirely differ from Dr. Andrew Wood as to the way in which

such a document should be drawn up. My proposal in 1864 was that three persons should be appointed, as Dr. Quain has suggested now, knowing nothing at all of my idea to divide the examinations on the courses of study. There was one other thing besides, to appoint three or four different persons to the different subjects—that is, that they should do their work between the interval of the sessions and report upon it immediately. There I differ entirely from Dr. Andrew Wood—that this is a thing which has become possible. Even with the experience and great knowledge of the members of this Council, I do not think it is a safe thing for the Council to prepare such a document in the course of two or three mornings. I notice in Dr. Andrew Wood's motion that it does not limit the time—(applause)—and therefore if Dr. Andrew Wood will carry a committee for drawing up a serious document, which will appear in the form of a small blue book—that is, a serious analysis of all the experiences of members of this Council of what we now know of the state of the different views in the Profession; and with regard to what fell from Sir J. D. Corrigan and others as to the different character of students and examiners, and so forth, and all the knowledge that we can collect—I say if he and any of his friends and colleagues will lay before us a well-considered analysis of the whole of our knowledge for the last seven years, he will lay on the table in a moderate time, and with very little trouble comparatively, a most important document, and one which will help to guide us in the best possible manner to a solution of this question. In that sense generally I will support Dr. Andrew Wood's motion.

Mr. Syme: There can be no doubt a uniform system would be desirable, but I fear it would not be practicable. I do not wish to detain the Council, but I will allude to the subject of the course of Clinical Surgery in Edinburgh, which I have conducted for a number of years. That has no parallel in London. Each institution carries on the system which it thinks right. Both pursue the same object by different courses, and I take it that observation will apply to many other departments. Therefore, however desirous we may be, I fear we must trust to the examinations.

Mr. Rumsey: I wish to be allowed to make a suggestion to Dr. Wood. He has had several made for the alteration of his motion, and I have one remark to offer. He proposes that the Committee should consider and report on what ought to be the course of Professional study. Dr. Acland supports altogether a different matter. He says what should be the minimum of Professional study. Now, while I should agree altogether with Dr. Acland upon the minimum of Professional knowledge which should be acquired by every one who enters the Profession, I am not at all prepared, nor should I on consideration support the proposition which he made, of enforcing a uniform course of study. There is a very important distinction between those two subjects. The man who wishes to enter this Profession as a General Practitioner at an early age would adopt a different course from that which would be required by the universities of the kingdom from those who are not obliged to commence their practice at an early age, and who may take their time and acquire their knowledge in a different way. Therefore, to enforce a particular course would, I think, be a most unphilosophical act, and I will only say, in conclusion, that if Dr. Wood will alter his resolution in that way I will support it.

Dr. Andrew Wood: I am quite willing.

Dr. Risdon Bennett said, no doubt the difference between those two points was very great. He quite agreed with Dr. Acland that it was exceedingly desirable (and, moreover, the public were looking to the Council to take the initiative in the matter) to issue from this Council some authoritative statement as to what should be the minimum amount of education that a man should have before he was considered fit to go up even for examination to any of the licensing boards. He felt persuaded it was impossible, without some general opinion being expressed by the Council on the subject, that the various licensing boards could fall into any scheme of that sort. Their own interests did not point out such a necessity, and unless a certain amount of pressure were brought to bear upon them, it was not likely that many of them would fall in with any such general plan as that which was advocated. Take, for example, the College of Physicians. It certainly would be very hard to require them to insist that those who came up for examination as Members or Fellows should have devoted the same amount of time to anatomy or pharmacy as other students; and yet they would be quite willing to give an examination which none of the visitors of the Council would be able to say a word against. They would say these examinations, *quoad* the subject to which they refer, are excellent. He (Dr. Bennett) went most fully with every word that had been said by Dr. Sharpey with regard to the undesirability of laying down a fixed rule of Professional study to be pursued by the various bodies represented at the Council, and he thought it was a question whether the University of which he is so distinguished an ornament should be required to call upon their candidates to go through the same course as the College of Surgeons or the College of Physicians. Take the case of the ancient Universities of Oxford and Cambridge. He would be sorry to see the day arrive when they should depart from the course which they had hitherto adopted, by means of which they had insured a class of men more efficient than that which many other Universities had been able to turn out, who had taken a good degree *quoad* Medicine. He thought they must leave such Universities to follow their own course, and it would be most undesirable for the Council to attempt to interfere with them. At the same time he fully recognised the desirability of insisting upon some minimum course of study, and that before the students went up to the examinations they should have undergone a certain amount of study on the subject required by the Council.

The President: I have just had put into my hands, for the first time, the amendment, which, I confess, appears to me equivalent to a negative. It is moved by Sir J. D. Corrigan and seconded by Dr. Apjohn, "That it is not advisable to enter upon the consideration of what ought to be the course of Professional study to be gone through by all persons seeking entrance to the Medical Profession, inasmuch as it appears to the Council more expedient to leave the details of Professional study to the several licensing bodies."

Dr. Apjohn: I have been a long time member of the Council, and have never heard that the minimum of any of the licensing bodies was too low. Therefore I think it perfectly unnecessary to prescribe a fixed course which all the bodies are to conform to. That, I think, is such a monstrous proposition that I hope it will meet with no support at this Board. It is impossible that any two bodies can be brought to agree upon precisely the same course of study. Some require an extraordinary number of courses of Surgery—that was the case in Trinity College, Dublin—which other bodies do not. Then what is the use of attempting to introduce a uniformity which is impracticable? For these reasons I beg to second the amendment of Sir J. D. Corrigan.

The President: If any other member has to address the Council, it is quite impossible we can finish the subject now. I have only one remark to make with reference to this amendment which is put into my hands—namely, that, as the Secretary suggests to me, it is not a proper amendment, and in its present form is quite superfluous; because of course I must put the motion, and in doing so I shall have to put "the contrary," which is, in fact, this amendment.

Sir J. D. Corrigan: Do you object to this amendment?

The President: I object to it in point of form, because it is not an amendment.

Sir J. D. Corrigan: I think it is an amendment, and for this reason—that it gives what is most essentially a reason for not assenting to the resolution itself; and I think, if you will refer to the proceedings of yesterday, you will find a precedent for an amendment being proposed which is much more a direct negative than the one which is now before you. It was a proposal by Dr. Andrew Wood with reference to a resolution of mine that the report of the Committee be adopted. His amendment was that it be not adopted, and even that was admitted by the President, because there was this addition to it, "That it be inserted in the standing orders." With that precedent before us, I must respectfully ask you, Mr. President, to put mine as an amendment, for I do consider it to be such.

Dr. Aquilla Smith: I shall support the amendment, because I entirely agree with what has been said by some members of the Council as to the impracticability of fixing on a special course.

The President: The hour of 6 having arrived, we must ask the permission of the Council to extend the time if this discussion is to go on.

A formal motion for that purpose was made and carried.

Dr. Andrew Wood: I just want to say I am quite willing to give way upon what has been suggested, and to put in the words "minimum course." It will then read—"That a committee be appointed to consider and report upon what

ought to be the minimum of Professional education to be gone through by all persons seeking an entrance," etc.

Permission was given to alter the resolution in this way, but Sir J. D. Corrigan's amendment having been put to the Council, it was carried by a majority of 10 to 8.

Upon being put as a substantive motion,

Dr. STORRAR said that his reason for declining to second the amendment was, that he did not wish to assign a reason, which reason was now in the tail of the amendment; and if he had no alternative but to vote for the original motion or for the amendment as it stood, he must do the latter. At the same time, he was placed in this dilemma, that he was called upon to vote upon reasons which he would rather withhold.

Dr. ALEXANDER WOOD suggested to Sir Dominic Corrigan whether, instead of pledging the Council to a particular reason, he would not consent to leave out the latter part of it, and simply to reject Dr. Andrew Wood's motion without giving any reason.

Sir J. D. CORRIGAN: I quite agree to that, if the Council will permit me to alter it.

Dr. RISDON BENNETT: That alteration will have this effect, that I shall ask to move that the consideration of this subject be deferred until to-morrow.

Dr. ACLAND: I really feel it necessary, in the present condition of things, to second that. The fact is, I agreed to the latter part of the amendment which Dr. Corrigan has just withdrawn, and I therefore second the proposal to adjourn this debate.

Adjourned till Friday at 2 o'clock.

THIRD DAY.—FRIDAY, MAY 31.

PRESENT: As before.

The PRESIDENT: Gentlemen, the Council have now to resume the consideration of the subject under discussion yesterday, at the termination of this meeting—namely, the consideration of Sir J. D. Corrigan's motion, "That it is not advisable to enter on the consideration of what ought to be the course of Professional study to be gone through by all persons seeking entrance into the Medical Profession." Which motion was brought forward as an amendment upon Dr. Andrew Wood's motion—namely, "That a Committee be appointed to consider and report upon the minimum of Professional study to be gone through by all persons seeking entrance into the Medical Profession, in order to secure the possession by them of the requisite knowledge and skill for the efficient practice of their Profession."

Dr. RISDON BENNETT: It will be in the recollection of the Council, that at the last meeting this subject received a very full measure of attention, and elicited a variety of very important observations. In fact, the discussion was altogether to me a very instructive one, and I think will be allowed to be productive of considerable good in enlightening many of us, at all events, on several points of importance connected with this matter. At the close of this discussion, when Sir Dominic Corrigan's amendment had been carried, and was proposed as a substantive motion, I felt that we were in danger of coming, after all, to a very hasty and, as it seemed to me, a very undesirable conclusion on this very important subject. I should not have ventured to make the motion that I did in the shape of an amendment to adjourn this subject, had I not felt that it was one of very considerable importance, and that it deserved very careful consideration before it was shelved, as in point of fact it would have been shelved indefinitely if this motion of Sir Dominic Corrigan had been carried. I trust, therefore, that I need not further apologise to the Council for the step I then took, and for opening the door, as it may appear, to a further discussion, of a more or less prolonged character, on this subject to-day, when I thus state my own full conviction of the great importance of the subject, and the desirability that, in any conclusion we should come to, we should not appear to put aside this subject altogether, as one not being worthy of a decided opinion of the Council, one way or the other, which would have been the state of things if we had passed Sir Dominic Corrigan's amendment as a substantive motion. I will not occupy the attention of the Council by reiterating now any of the arguments that have been urged before on the subject. I will simply confine myself to this observation, that it seems to me that having decided what should be the course of preliminary education, it seems to me to be *à fortiori* necessary that we should say something on the course of Professional study. If we decide that considerable latitude should be given to the various licensing bodies on this subject, it would not therefore follow that we should not express to them our opinion as to what should be the extent and character of the Professional information that they should require from all candidates seeking admission to those respective bodies. (Hear, hear.) I think, having decided this question of preliminary education, we are expected by the public—indeed, I know we are expected by the public—to give an opinion on this, which, as it seems to me, is the greater matter of the two. It seems to me one of the very purposes for which this Council was instituted, and that we should be shirking the most important part of our duty, if, for any reason whatever, we avoided giving our opinion upon so very important a subject as this. (Hear, hear.) Whatever weight our opinion may have, or whatever power we may have in enforcing this opinion, I do not pretend to say; but this I do know well, that whatever opinion we may enunciate as the result of our deliberation here cannot fail to have an influence upon the licensing bodies and the Medical Profession at large; and I am satisfied it will be productive of more or less advantage. Now, Mr. President, I am very anxious, as I said before, not to occupy the time of the Council in discussing this subject, and I should like to put myself very much in their hands as to the mode of procedure from this moment. All I wish to say is, that the subject should not be shelved, that there should be an opportunity of discussing it, and then that we should have a committee appointed to make a report on the subject. I am not calling upon the committee to make a report at any particular time, or with any great speed, but that they should have the opportunity of maturing and considering the subject, and that, having done so, they should bring up their report upon it, and that we should pass a decided opinion upon the question. (Hear, hear.) It seems, therefore, better to my mind, on the whole, that I should endeavour to attain this important object by moving some such amendment as this to Sir Dominic Corrigan's motion, which has been read by you; and I would propose, therefore, without giving further reasons for my procedure, to submit to you this as an amendment—"That having decided what should be the extent and character of preliminary education, it is incumbent on the Council to consider and report on the amount and character of Professional study absolutely necessary for securing the possession of the requisite skill and knowledge by all persons seeking entrance into the Medical Profession, and that a committee be appointed for this purpose."

Dr. FLEMING seconded the motion.

Mr. SYME was understood to say that there was an objection *in limine* to the view taken of this question by Dr. Risdon Bennett, because it was founded on the idea that, because the Council considered it was to supervise the preliminary studies, therefore the rule held good with regard to Professional study. No doubt, at first sight, that might seem to follow, but when it was looked at a little more closely, it would be found that there was no analogy at all, because, while it was quite possible to prescribe what was necessary for preliminary study, it was by no means possible to follow the same course with regard to Professional matters. He would go beyond that, and say that, even if it were possible, it was not desirable. No doubt it was an easy thing to say that a candidate for Medical honours should be acquainted with the Latin language, should be acquainted with chemistry, should be acquainted with anatomy, should be acquainted with pharmacy and practical Surgery. That was admitted on all hands, and upon those subjects it was very easy to lay down a general rule. But when you come to lay down the precise mode of study, how was it possible to do it? He had been a teacher now for forty-five years, and therefore could speak with authority, and his observation had always been that whenever students saw an opportunity of attending instructive lectures, they did attend them. Therefore, he did not see the good of enforcing attendance, at all events upon any particular courses. He thought it would be much better to abstain from so doing. He (Mr. Syme) would lay down the following rules:—He would not allow any man to study Medicine until he had attained a certain age, and until he had shown evidence of that mental culture which was necessary. He would insist upon his studying a certain number of years for that purpose, and not in some small provincial school, but in some large academy, where there was everything necessary for his instruction, and then he would entrust what remained to a careful examination. He thought, in conclusion, that it was premature at present to deal with the matter in the way suggested by the resolution.

Dr. Alexander Wood: We had this question discussed at great length yesterday, and the Council, by a majority (I myself being in the minority), threw out the motion of my friend Dr. Andrew Wood upon Sir J. D. Corrigan's amendment. That amendment then became a substantive motion, and I ask, is it possible, with due order, that a similar motion should again be moved as an amendment upon the original motion? Suppose Dr. Risdon Bennett be successful to-day, as I confess I wish he may be, and that Sir Dominic's amendment is thrown out. It will be quite competent to Sir J. D. Corrigan to move as an amendment again a motion equivalent to the one which he moved before. Then suppose he succeeds to-morrow in that, the next day anybody else can come with a reduplication of the motion, and so we shall go on like Tony Lumpkin driving round the swamp. (Laughter.) Sir, I do call upon you to consider whether any such motion as is now on the paper is consistent with the due order of business of the Council.

The President: There is no doubt that the two motions do upon the face of them appear to be very similar, but I observe there is a distinction to be drawn in this respect—that Dr. Bennett's does not go at once to say that this thing is to take place now, but he begins his amendment in these words:—"That it having been decided what should be the extent and character of Preliminary Examinations, it is incumbent on the Council to consider and report on the amount and character of Professional study." I presume, therefore, if Dr. Bennett's motion be carried, it will not take effect until the Council has decided the previous question. I presume he thinks it will then be incumbent to consider and report on the subject of Professional education, and that, therefore, it will not take effect until the Council has decided on the subject of preliminary education. I see that difference between the two.

Dr. Alexander Wood: The motion of Dr. Andrew Wood comes to this:—"That a committee be appointed to consider and report on the minimum of Professional study to be gone through by students." The motion of Dr. Risdon Bennett begins by the assertion of a fact:—"That the Council, having decided what should be the extent and character of preliminary education, it is incumbent on the Council to consider and report on the amount and character of Professional study." But the real gist of the motion is precisely identical with that which was thrown out yesterday, and I again repeat this, not that I am opposed to the motion, for I wish to see it pass, but I am opposed to a course of proceeding which would prolong our session *ad infinitum*, and which, if persisted in, would preclude our ever getting rid of the subject at all.

The President: I think this motion must stand, because I see this distinction. It will depend to some extent on what Dr. Bennett means. If he means that this Committee is not to consider or report to the Council until the previous Committee has reported upon the subject of preliminary education, then, if carried, it is different to the original motion. Perhaps Dr. Bennett will explain whether he means the motion for the Committee to take effect at once, because if he does then it is identical with Dr. Andrew Wood's.

Sir J. D. Corrigan: I believe the very first sentence is to this effect, "Seeing that the Council have already decided so-and-so and so-and-so." Now, I must tell you I cannot agree with that at all.

The President: If I am called upon by the Council to say whether this motion is identical with Dr. Andrew Wood's, I must say, from the wording of the motion of Dr. Bennett, I do not arrive at a very clear apprehension as to whether he means this Committee to be appointed now and to proceed to its duties, or whether it is to be subsequent to the report on preliminary education.

Sir J. D. Corrigan: I apprehend it states as a positive fact that the Council have already decided upon the question of preliminary education.

The President: That may be a fair objection to the amendment; but it is not a fact, because they have not decided.

Dr. Andrew Wood: They decided last year.

The President: Dr. Andrew Wood must recollect that the Committee was appointed yesterday, and sat this morning for the purpose of taking into consideration the subject of preliminary examinations.

Dr. Andrew Wood: They decided the subjects of preliminary education which are to be taken up, and that is all we have to do now with regard to the Professional.

The President: You seem to ignore what the Council did yesterday in appointing a committee, on the motion of Dr. Alexander Wood, to consider and report on the subject of preliminary examination.

Dr. Alexander Wood: That does not alter the question. The Council yesterday decided by a majority that they would not appoint a committee for a special purpose, and they are asked again to-day to discuss the whole question and to appoint a committee for the very same purpose.

The President: If the majority of the Council yesterday decided against the question, it is not probable you will have altered your minds, and it can be put from the chair now whether you will entertain this or not. But first I call upon Dr. Risdon Bennett to state what he really does mean by this amendment, because I really do not clearly understand it.

Dr. Risdon Bennett: It is, perhaps, not sufficiently expressive; but the meaning of my amendment was, that the Council had determined what should be the subjects and what should be the general course of preliminary education. Is that so, or is it not so? I keep that rule to a certain extent—at all events, the Council have done so. To whatever extent that be true, it was an enunciation of that fact. I will alter my motion in this way. I will say—"That the Council having taken up the subject of preliminary education, it is incumbent upon them to take up this question."

Dr. Fleming, as seconder of the motion, wished to state that he supported Dr. Risdon Bennett in the matter without having the smallest idea what this Council should make a minimum of education. He thought it was a subject which would require very mature deliberation, and he agreed with Dr. Acland and Dr. Risdon Bennett that it was most important that the Committee should not at once report upon it, but that they should take abundant time for its consideration.

Mr. Rumsey: Perhaps I may be allowed to say a word on behalf of those members of the Council who, while supporting Sir J. D. Corrigan's amendment yesterday, did not understand that they were necessarily opposing Dr. Andrew Wood's motion. (Hear, hear.) That was certainly my case, and I believe the case of those on whose behalf I speak. I did not consider the adoption of that amendment at all precluded the appointment to consider and report on the minimum that is considered as absolutely necessary of studies to be gone through by students. I therefore do not consider that motion was defeated upon the adoption of Sir Dominic Corrigan's amendment; and that, I believe, was the opinion of several other members of this Council.

Dr. Andrew Wood: I do most seriously hope that the Council will not let this motion of Sir J. D. Corrigan's weigh on their minds. I think it is a complete abrogation of the mission of the Council to state that they do not consider it desirable "to enter on the consideration of what ought to be the course of Professional study to be gone through by all persons seeking entrance into the Medical Profession." We are a Council upon Medical education, and if it is not desirable to enter upon that, I ask, what is it desirable to enter upon? We thought it advisable last session to enter upon the question, and we did so most thoroughly upon the subject of preliminary education. And what did we do with regard to that? We selected definitely the subjects which we considered ought to form the subjects of examination upon preliminary education. And now why am I to be told that we are not to enter upon the same duty with regard to Professional subjects? Is it that we are incompetent for the task? If so, we ought not to be a Council of Medical Education. Is it that we are indisposed to the task? Then I will only say if we are to be deterred by difficulties, such as were suggested by Dr. Storrar yesterday, from entering upon those duties merely because there are difficulties in the way, it shows a lack of that pluck which I think ought to characterise members of this Council. (Hear, hear.)

Dr. Storrar: I did not say that. I meant that was one among other reasons.

Dr. Andrew Wood: Yes, and one of the most potent reasons I heard adduced seems to me to be the strongest argument in favour of the motion, and that is, it was alleged that there was such an enormous dissonance between the bodies, and that each laid down such different curricula, that it would be utterly impossible to reconcile them, and to lay down anything that would be generally adopted.

Dr. Storrar: Not different curricula, but different modes of following them out.

Dr. Andrew Wood: Very well; and we were also told by Professor Syme that Clinical Surgery was taught in Edinburgh, a fact which I think nobody doubted.

Professor Syme: I said it was taught differently in Edinburgh.

Dr. Andrew Wood: That it was taught one way in Edinburgh and another way in London, and certainly I did not hear him state any one sentence in favour of the way in which it was taught in London. (A laugh.) But what I say is this—here we have a statement that an important subject is differently taught in two different parts of the kingdom; then I say there must be a right way and there must be a wrong way, and it becomes this Council to see which is right and which is wrong. I go to one body, and I find that in its curriculum the student is required to study morbid anatomy; in another he is not required to know anything about it. In one Operative Surgery is required; in another it is not alluded to. Now, I believe, if you are satisfied that the present course of education is proper, let us do nothing more in the matter. But are you satisfied? Is Dr. Parkes satisfied that the present system of education is sufficient? I think not. Surely it has not attained to that sort of perfection that it is not capable of amendment; and if it is capable of amendment I ask whether the Medical Council are not to take it into consideration and see how it can be best amended. I should be very sorry indeed—I am as unwilling as any one—to go out of the ordinary course of business, and my friend, Dr. Alexander Wood, says we are like Tony Lumpkin driving round and round the swamp. I think that is better than getting into the middle of it, and we shall get into the middle of it if we adopt Sir J. D. Corrigan's motion—viz., that while we say it is advisable to lay down rules with regard to preliminary study (which is not so much our department after all), it is not advisable for us to lay down any rule as to the course of Medical study to be gone through by all those seeking to enter the Medical Profession, which I should have thought was a duty which we were most fitted to perform. I therefore trust that Dr. Bennett's motion will be carried. A great deal of opposition to my motion yesterday arose upon a most extraordinary idea with regard to it. The gentlemen seemed to forestall the report that was to come from this Committee, and to suppose we were going to lay down some hard line to which we were to bind all the bodies. Now such a proposition never entered my head, and never could have entered the head of any sensible man.

Dr. Storrar: We stuck to the motion, and not to your idea of the motion. We stuck to the motion, which you yourself have altered since.

Dr. Andrew Wood: Because it suited you better to take the words of the motion rather than the spirit.

Dr. Storrar: Of course. Well, but I tell you now that all I wanted was a minimum, to set down the subjects which were essential to every man who was entering the Profession. I say, we are not only able to deal with the subject, but we are bound to deal with it, because one of our functions is this—to see whether the bodies which have power of licensing exact from their students such an amount of knowledge as shall qualify them for their Profession. And if we are bound to exercise that power, how are the boards to know what is the course of study, and what is the course of examinations which they should approve of, unless you tell them beforehand what it is? I say it is not fair to the bodies; it is not fair to the licensing bodies themselves; and let me tell the Council that those bodies have not that jealousy of interference which some gentlemen seem to think they have. I know, as far as the body I have the honour to represent is concerned, we are always ready to receive suggestions for the improvement of our curricula, and I know the Medical Council think there is an immense difference between the curricula of bodies, and a great deal of deficiency in the candidates who come up for examination, and that the Council is bound in every way they can to rectify these deficiencies and defects, which incontestably exist to the present time. I therefore do trust that this Council, after having done what they did last year on the question of preliminary education, will not stultify themselves by declining, without any reason given or assigned, to enter upon the performance of their proper functions in reference to this subject.

Sir J. D. Corrigan: Sir, I shall make a very few short observations upon this subject. Dr. Wood has said that no reasons have been assigned for the resolution as it stands on the minutes, but if he will have the kindness to carry his recollection back to what occurred yesterday he will find that after the amendment as I first proposed it, I added the words, "Inasmuch as it appears to the Council more expedient to leave the details of Professional study to the several licensing bodies." That was put in as a reason, but, in deference to opinions expressed by friends near me, I omitted that reason—whether I was right or wrong in that, I shall not give an opinion. But the resolution, as it originally stood, expressed that on which we are very much agreed—namely, that the details of the course of study ought to be regulated by the licensing bodies. Dr. Wood has committed another error. He has assumed that if there are two ways of doing a thing, one of them must be right and the other wrong. Now, I do not think that is good logic at all. There may be two right ways or two wrong ways of doing a thing. Again, in Dr. Bennett's argument he has confounded the two words which are perfectly distinct, and must be kept distinct, in our discussions—namely, "study" and "examination." (Applause.) Dr. Bennett has also stated that we are under the impression that we have decided what is the course of preliminary study to be gone through, and Dr. Wood has reasserted it. Now, I assert that on the contrary we have never done any such thing, for I will beg your attention to page 74 of vol. iv. of our Minutes, where you will find that we have turned our attention to examination on preliminary education; but we have not said one word as to the course through which the student is to go in order to prepare himself for that examination. The two things are entirely distinct, and I think it is by ingeniously combining them that Dr. Wood has represented us as having decided upon the course to be gone through. We have done no such thing. We have said to the various examining bodies, of whom, I believe, there are 21 whose certificates we recognise, "Run your pupils through what course you like; have one plan in England, another in Scotland, and another in Ireland, if you please; we do not care which you adopt." All that we deal with in the preliminary part of examination is (again I say it) not the study, but the examination. We must not confound these two together; and, acting on the same principle, the course I have adopted and explained in the resolution which was altered in deference to the wishes of some of my friends was, that we should follow exactly the same plan and deal with Professional examination, but never with Professional study. (Applause.)

Dr. Risdon Bennett: I do not wish to occupy the time of the Council except to inform you that my object is not to ask for uniformity, or to enforce pupils attending a certain number of lectures or courses; nor is it, as Professor Syme would have us insist upon, with regard to a particular sized Hospital or a particular character of institution. But it is to give the whole question into the hands of a committee—(hear, hear)—that they may say to the Council, "This sort of Professional study, and this amount and no less, ought to be required of all candidates for the Medical Profession"—(applause)—and that then the Council should give some public deliverance on the subject. To what extent they have done so on the subject of preliminary education I will not now question; they have to some extent, and they probably will to a further extent give a deliverance on that subject; and I maintain that the public do look to us to give a deliverance on this, which I hold to be the more important of the two. (Hear, hear.) In fact, this is one of the chief purposes of the Council, and I do think, as Dr. Andrew Wood has said, they will abdicate their functions if they do not give expression to their views upon this subject.

The President then put Sir J. D. Corrigan's amendment, upon which the voting was equal, the numbers being 10 to 10.

The President: I shall hold up my hand against the amendment; and I wish to state to the Council why I think it is much better that it should be in the power of the Council, if they think proper, to move another amendment which is more likely to be acceptable, and which is more likely to be the real mind of the Council upon the subject. Therefore it is I have voted against the motion.

Dr. Andrew Wood pressed for the names of the voters upon Sir D. Corrigan's motion, and the names were accordingly read.

The President: I will now put the motion of Sir J. D. Corrigan to the meeting again.

Dr. Quain: I apprehend there is a very wide distinction between the course of education and the subjects of Professional examination. I am not quite familiar with the proceedings of the Council on the subject of the extent of Professional education, without a knowledge of which no one should be allowed to obtain a qualification. I do not know that that has ever been defined by the Council; if not, I shall certainly move to appoint a committee upon it. Referring to the subjects of preliminary education, I see clearly they are defined, without

an acquaintance with which no person should be allowed to enter the Medical Profession, and I cannot see why the subjects ought not to be defined with regard to preliminary education. (Hear, hear.) I am not quite prepared to enter upon this large question now, but I think there would be no great difficulty in defining the subjects which every one should be prepared to pass an examination upon, and I believe that the visitations of examinations, as conducted, would nearly complete all that we want, but for the Council to attempt to define and lay down a curriculum of this system or that system of education would be at present perfectly impossible. (Hear, hear.) On the other hand I think they may say to the various examining bodies "No man shall pass your examination unless he can give evidence of a competent knowledge on these subjects;" and, therefore, I shall move "That a committee be appointed to consider and report to this Council what are the subjects without a knowledge of which no candidate should be able to obtain a qualification to entitle him to be registered."

Professor Syme seconded the amendment.

Dr. Storrar: I do not rise to make a speech, but simply to say that having been one who led the original charge against Dr. Andrew Wood's motion, I shall have very great pleasure in voting for Dr. Quain's amendment. (Applause.)

Sir J. D. Corrigan: If I understand the amendment, it is this—a proposal that the Council shall define the subjects without a knowledge of which the candidate is not to be allowed to enter the Profession, or at all events to be registered. Now, I would respectfully submit for your consideration that this is not an amendment at all. It may stand as a substantive motion, and if it were put in as a substantive motion, I probably should not oppose it. But the subject we have to deal with at present is the course of Professional study. That has nothing to do with the subjects of examination in which the candidate is to show that he has satisfactory knowledge. Therefore, I must respectfully submit that that amendment relates to examination alone, and that that discussion we had relates to Professional study alone; for you will recollect Dr. Andrew Wood, in his original resolutions, included Professional study and examination, and that he advisedly excluded "examination" in his amended resolution, and we allowed him to make that alteration, as we always do in courtesy to members who are proposing resolutions. Having, then, acceded to this proposal to exclude the subject of examination altogether from the resolution and from the instructions to the Committee, we are dealing in the discussion now before us solely and altogether with Professional study. If the amendment were to amend anything with regard to study, it could be enforced; but what I submit is this, that being with regard to examinations it has no reference to the course of study, and was not an amendment at all. Therefore, as you, sir, think fit to put it from the chair, I will vote against it—not upon its merits, but because I do not think it is pertinent to the resolution. If Dr. Quain brings it forward as a substantive resolution afterwards, as far as I can see I shall be inclined to support it.

Mr. Rumsey: I hope I may be allowed to say one word, and it is this—I hope that the President will preserve this Council from the false position in which we are going to be placed. Both Sir J. D. Corrigan's original motion and Dr. Quain's amendment are in themselves distinct propositions, which a number of us would be quite ready to support. They are not necessarily contradictory, and if by supporting Dr. Quain's amendment I am precluded from supporting Sir J. D. Corrigan's motion, I shall be deprived of my expression of opinion, and so will several other members of this Board.

The President then put Dr. Quain's amendment, and it was carried by a majority of 16 to 5; subsequently, it was put in the form of a substantive motion, and carried by a majority of 17 to 3.

Dr. Quain: At present it will be necessary to form a committee. I suppose the Council will allow me to postpone it until later in the afternoon.

The President: We will go on to the second branch of the programme, with reference to the reports of the visitors of examinations.

Mr. Cæsar Hawkins: I move that the reports be received and entered upon our minutes, and that a copy of these be forwarded to the several bodies named in Schedule A of the Medical Act.

The motion was seconded by Dr. Paget, and carried unanimously.

Dr. Aquilla Smith: Before the Council proceeds to the consideration of this subject, there is a matter which I consider of great importance, and to which I have to draw the attention of the members. There has been a breach of confidence or privilege committed against this Council which, if it pass unnoticed, may be made a precedent for similar acts. It is simply the fact that these reports of visitations, which were printed, circulated, and marked "confidential" on the first page, have got into the hands of certain persons, who have published them. I find in the *British Medical Journal* of last Saturday, May 25, four days before this Council was assembled, criticisms on these reports, and it is only necessary to read one sentence in order to show what I mean. I think the Council will agree with me that whoever has been so unwise as to put these reports into the hands of the press should be warned that it is a breach of confidence, in order to guard against any similar act occurring hereafter. The only passage which I shall consider it necessary to read is this—"The reports adopted by the Branch Council for England of June, 1866, have just been issued to the members of the Council, and we are enabled to give some highly important information on the subject." Now, I think there has been a gross breach of confidence and dereliction of duty on the part of some one. It was extremely improper for any person to have sent those reports to the editor of any journal, and in drawing the attention of the Council to this very important matter, I only wish that there should be some expression of opinion which may have the effect of preventing this very inconvenient and very improper course from ever taking place again.

The President: I hope your observations will appear in the Medical journals, together with the rest of our proceedings. I have no doubt they will, as I see the reporters are here. Of course, I quite agree with what has fallen from Dr. Aquilla Smith—namely, that papers which are marked "confidential," and which are communicated to members of the Council only, ought strictly to be regarded in that light. It must lead to a great deal of inconvenience and misunderstanding if confidential papers are allowed to be circulated generally. Who may have been the person in fault it is very difficult for us to say, but I think that as a body we ought to feel ourselves bound in honour, whenever we have any communication marked confidential, until the proper time has arrived, not to send it to the public press. The time will arrive of course, as soon as they appear on our minutes, when they will be open to the public journals, and then they will be at liberty to print or to pass any comments they please upon them; but as long as they are marked confidential it ought not to be done. (Applause.) I now call upon Dr. Andrew Wood to proceed with his motion.

Dr. Andrew Wood: Mr. President, I am sorry that this duty has devolved upon me, because I would much rather that my friend, Dr. Parkes, had undertaken it, he being so much more qualified for the task. However, since no one else has given notice, I rise to make a motion which I think I am entitled to believe will be adopted by this Board. I must take care, after what happened yesterday, not to state the grounds, because we rather took it for granted that there would be no opposition in appointing the Committee to consider the subject which we then brought forward. But in regard to the present subject I do not believe there can possibly exist in this Council a single difference of opinion as to the absolute necessity of making the greatest possible use of this report. (Applause.) Our reports of last year, unfortunately, were not lodged with the Council until a late part of the session, and therefore we were not in a position to discuss them *seriatim*, as we ought to have been. Besides that, it was the first year of reporting, and there was a want of certainty on the part of the visitors as to what was exactly required of them. Therefore it is that some of the reports were formed upon one model and some upon another—the consequence being that there was a very considerable discrepancy in the form of the reports given in. But last year the Council issued a *Directory* for the visitors of examinations, which I need not read because it was alluded to by yourself in your opening speech, and in pursuance of that *Directory* to a very large extent (I wish I could say to a universal extent) the visitation of the examinations has been carried out by a large number of the members of this Council. Now these are very lengthy reports, and it would obviously be quite out of the question to consider and discuss them at a meeting of the Council. But at the same time, lengthy as they are, it is my decided opinion that every page of them is pregnant with suggestive matter of the highest importance. I myself doubt very much whether there is any matter we

have had to deal with hitherto during the nine years we have sat at this Council Board which is of more practical importance than this very matter that is now before us. (Hear, hear.) We have now got a very large body of evidence, and a very large amount of commentary upon that evidence, before us, extending to more than 100 pages, and any one who looks through these reports will see that there are very many points of suggestion as to the improvement of the examinations in general for giving qualifications in Medicine and Surgery, and also some very important hints as to particular defects in particular examinations; which, I believe, only require to be pointed out to the bodies in order that they may take immediate steps to remedy them; and I have no fear but that the bodies will remedy them, because on looking back to the last year, even with the imperfect visitations which we had then, I found that already on the face of those reports it appears that in some most important points these alterations had been already begun. Now, sir, I think this is bringing the moral suasion of the Council to bear in a most beneficial direction, and I feel myself perfectly satisfied that, if the Council will only go on for a few years carrying out as faithfully and as conscientiously and as forbearingly the visitations which they have entered upon, it will be good for all concerned—for the public in the first place, for the licensing bodies in the second place, and for the Medical Profession in the last place. I therefore do think that what we have to do now is to send these reports to the Committee, and a request that they will peruse the whole of them—in the words of my motion, which I will now read, "That the reports of the visitations of examinations during the past year be referred to a select committee, whose duty it shall be to go carefully through them, and to bring before the General Medical Council, during their present session, a report embodying such recommendations, founded on the various suggestions made by the visitors, as may tend to improve generally the examinations for the licences to practise Medicine and Surgery, and to remedy the defects in particular examinations which have been pointed out by the visitors."

Dr. Storrar then seconded the motion.

Mr. Cæsar Hawkins: The object of Dr. Andrew Wood's motion is of course exceedingly praiseworthy, and it is one that at some time or other we must adopt, but I am not at all satisfied that we should proceed so hastily as it is proposed to do by acting on this motion in the present year, and for this reason: our reports at the present day are imperfect. It will be remembered, as he has said, that last year no suggestions were made as to the mode in which the visitations were to be conducted and the reports made, and accordingly, with one or two exceptions, there was no suggestion made last year. Then the Council reported that in every account of preliminary examination there should be a statement of the facts as to the efficiency of the examinations, and also such remarks and suggestions as should occur to them, or as circumstances might indicate. That was ordered last year, but unfortunately it was not carried out to the extent indicated by that order. With regard to the English reports there is one deficiency in relation to Durham University. There we have three examinations, Preliminary in Arts. No report was given in by the visitors to Durham in the first instance, because unfortunately the Branch Council was not called together in time to visit the examinations there. Since we have met, however, a report has been issued upon one of those three forms of preliminary examination. With regard to Scotland, though not perfectly conducted, it is, on the whole, a very valuable report. Notwithstanding, for example, with regard to all the five Scotch Universities they have an examination preceding the entrance of the student upon Professional study. As far as I can gather no report is made from any one of those.

Dr. Andrew Wood: Oh! yes.

Mr. Cæsar Hawkins: Not as separate from the other.

Dr. Andrew Wood: Yes; you will find Edinburgh and Glasgow are reported.

Mr. Cæsar Hawkins: With regard to the Glasgow University their degrees are mentioned, but I am speaking of those which are preceding the Professional studies.

Dr. Andrew Wood: Those are all included.

Mr. Cæsar Hawkins: It is not so with regard to all; at all events not with regard to Glasgow.

Dr. Andrew Wood: Yes; twice.

Dr. Paget: Not with regard to the Faculty of Physicians and Surgeons.

Dr. Andrew Wood: No.

Mr. Cæsar Hawkins: With regard to Ireland it is still more important, and I really think that after the Branch Council of Ireland have seen the great labour and pains which have been devoted to the subject in England and Scotland, they will, for very shame, be led to report in a more satisfactory manner to the Council. They were ordered to do so last year, and they decidedly undertook to do so. (Hear, hear.) I thought all these imperfections must be gone into before we could advantageously enter upon the suggestions proposed with regard to some, if not all, the subjects of preliminary and Professional examination. I think we ought to give another year for these new suggestions to be considered by the various bodies, according to the motion which is now made, and a copy should be sent to each of those bodies; and we should give them another year to adopt them if they think fit, or to give some reason why they do not. I think if we had these reports more perfect another year, we could arrive at a more satisfactory conclusion. I throw it out for the consideration of the Council that, instead of adopting the whole of this motion, we should go on with it as far as the word "report"—"That the reports of the visitations of examinations during the past year be referred to a select committee, whose duty it shall be to go carefully through them, and to bring before the General Medical Council, during their present session, a report."

Dr. Parkes: I think all who look to these reports will see how very full they are, and what an excellent account is given of every examination throughout the kingdom; and nobody can read this information which Dr. Leet has given us without seeing how important these suggestions are which have been made. With regard to the preliminary examination, that is a matter of the least importance. I would, therefore, strongly urge that the Council do not delay the appointment of this Committee for the year. We shall gain nothing by delay, but we shall lose something. We shall lose the great opportunity, now the time of these examinations is commencing, to suggest improvements. We shall lose those opportunities of carrying on those improvements. If we lose this opportunity we shall never get such a good one in future; and I cannot conceive, if the Committee think it is desirable next year, why it should not also be desirable this year. We shall expect from this Committee the same care and the same thought that these visitors have taken, and we cannot suppose that they will act otherwise. I think, therefore, we should receive this motion without any opposition.

Dr. Stokes: With reference to the Irish Branch, I think the term used by Mr. Hawkins was at least unbecoming. I allude to the word "shame." He said we should do it for very shame. I am quite sure on consideration he will withdraw that expression.

Mr. Hawkins: I do not want to offend anybody, but I cannot help seeing that there is a great contrast.

Dr. Stokes: With regard to the Irish Branch, Sir D. Corrigan, in an open and manly way, declared from the first his entire disapprobation of the whole thing; and it is not to be expected that after those strong expressions of disapprobation any pressure should be put upon him to assist in carrying out an institution which he so strongly disapproved of, and for which disapproval he gave his reasons, as we all know. With respect to the other members, I think they have done their duty to a certain extent; and I do not think the term "shame" is in any way applicable to them. Last year the examinations of the College of Surgeons were inspected, and the examinations of the College of Physicians and other bodies were inspected also. This year I was appointed, and I wish to state why no report was made with regard to the College of Surgeons. It was not with any desire to disobey the wishes of the Council—quite the reverse. It was simply this, that the Registrar of the College of Surgeons did not send notice to our branch to attend the examinations. Notice was sent of the second examination, but then it was utterly impossible for me to go. So far with regard to my relations with the College of Surgeons' examinations. Dr. Aquilla Smith went to the College of Surgeons, and his report is on the paper. I think it right to state these things, although I myself hold a strong opinion as to the inutility of the Council visitation, but holding that opinion I will obey the desire of the Council; still, you cannot expect that when one or two members hold opinions so strongly adverse to these matters, that they will be so enthusiastic in the discharge of their duties as others who hold an equally strong opinion the other way. I shall sit down now, but before doing so I wish to assure the Council

that, so long as it is their pleasure to have these orders carried out, so far as I am concerned I shall do my best to give effect to them.

Mr. HARGRAVE, speaking for himself, had always from the very beginning a great objection to these visitations, and but for its having been carried by a large majority in the Council he never would have attended them. The year before last he attended the College of Physicians of Dublin, and was present at several examinations. He was prevented by extreme illness from attending others. He really thought it was almost useless to attend any examinations of the College of Physicians, for the reason that the examinations appeared to be so well and so fairly conducted that there was very little opportunity of improving them; so that it became wholly a work of supererogation to attend any visitations there.

Dr. PAGET: I think the reports of the visitors of these examinations in all three divisions of the kingdom are such as not to require any apology from me. I think so, although there are certainly some omissions which might well be supplied, and which can be accounted for. I observe there has been no report whatever on the examinations of the University of St. Andrews either last year or the present. Now, no doubt either that probably arises from some incidental pressure of engagements which prevented the members of the Scotch branch from making the visitation which otherwise I am sure they would have done. And I do not draw attention to it from any ill-will or for any other reason of that sort. There is also an omission in the reports for Ireland which has been already referred to, but there has been no report with regard to the examinations of the Apothecaries' Hall in Ireland, and that is a substantial omission which I must allude to. I hope I may not be misunderstood by Mr. Hargrave by referring to his report, and I say, although it is excellent so far as it goes, and clear and to the purpose, yet it is not a complete report. As to the report of the visitation of the examination of the King's and Queen's Colleges of Physicians, I understood him just now to say that he had made a report of the visitation of that College last year, and such was my impression, but on referring to the collection of reports in volume iv. for last year I don't find it.

Mr. HARGRAVE: I certainly did.

Dr. PAGET: I do not find it on the Minutes.

Mr. HARGRAVE: I gave it to Mr. Cæsar Hawkins last year.

Dr. PAGET: The report is only of the examination of a gentleman who was already a Practitioner of some years' standing. He was examined only upon practical subjects, and, therefore, it gives no account of any of the examinations conducted by that College in Anatomy, in Physiology, or in Medicine. There is also another report on midwifery, and I observe that Mr. Hargrave is alone in these visitations. As far as I can judge of the matter, the reports are very good, and quite to the purpose, but still they are not complete; and although agreeing in the main with the motion of Dr. Andrew Wood that these are omissions that ought to be supplied in order to make our information on these matters thoroughly complete, I believe as they are or ought to be taken with the reports of last year we have formed a body of information respecting the Medical education of the Kingdom exceedingly valuable, and such as cannot but do credit to the Council, and this has been achieved by the efforts of individual members at great inconvenience in many cases. May I ask Dr. Andrew Wood if he has any objection to include in his motion the reports of last year too, because otherwise the thing would be incomplete, information having been afforded last year as well as this year? I know the only report with which I had any concern was intentionally incomplete, because full information had been afforded upon the subject in the report upon the examinations for the previous year.

Dr. ANDREW WOOD: I shall be very happy to make the change, and to add "during the last two years."

Mr. HARGRAVE: Dr. Paget says my report is imperfect. I wish to know in what respect he means.

Dr. PAGET: My meaning is this—the examination visited by Mr. Hargrave was an examination at which there was one candidate only, and that candidate was a Practitioner of some years' standing, and therefore, although, as I have said before, I do not at all object to it either in the way it was done or in the way it was reported, still, as this gentleman was examined only on certain practical subjects, I think the report does not contain any information of how this College conducts its examinations on other subjects, which it would have done if the candidate had not already been a Practitioner.

Mr. HARGRAVE produced the book containing his report of last year, and explained to the Council the mode in which the examinations were conducted.

Dr. PAGET: I hope Mr. Hargrave has not misunderstood me. I understand what he has said fully, and all I wish to say is, that the fact of the candidate being a person who was already a Practitioner precluded the examiners from asking questions upon those subjects, and of course precluded Mr. Hargrave from making any report upon them.

The PRESIDENT: The question before the Council is the appointment of this Committee, moved by Dr. Andrew Wood and seconded by Dr. Storrar. To that an amendment has been moved by Mr. Cæsar Hawkins, and a further suggestion by Dr. Paget to add the words "during the past two years." That has been agreed to by Dr. Andrew Wood. Is it now your pleasure that with that modification the motion shall be adopted?

Carried *nem. con.*

Dr. ANDREW WOOD: The names of the gentlemen whom I propose to form the Committee are Mr. Hawkins, Dr. Paget, Dr. Storrar, Dr. Thomson, Dr. Leet, Dr. Sharpey, Dr. Parkes, Dr. Christison, Dr. Stokes, and Dr. Apjohn.

Dr. PAGET: I have a motion which has more connexion with the subject we have just been considering than the motion which immediately follows it. It is an important motion, and has immediate reference to these reports which have just been read. May I be permitted to take it out of its turn?

This course having been agreed to by the Council,

Dr. PAGET proceeded: My object is to propose to supply this omission which we have been referring to in the reports of the examinations. I need not say much upon the matter, because of course it is known what those omissions are, except that what I propose is with the most perfect goodwill towards the bodies whose examinations have not been visited, and of course with no intention whatever except to supply what are omissions in these reports in order to make them quite complete. I shall propose it in this form:—"That the Council should depute two of its members to visit these examinations in cases where omissions have taken place—the University of St. Andrews and the Apothecaries' Hall in Ireland (and also I shall have to say something about another case presently)—and report to the Council upon them." I propose that these gentlemen shall be paid their travelling expenses and fees on the same scale as if they were attending the General Medical Council, because I think in a case of this sort it is quite unreasonable to ask gentlemen to continue to give services of this kind without a partial remuneration for their loss of time; and I should not propose to restrict the visitors in these cases to gentlemen who live in that portion of the kingdom where the examinations are conducted, because I think it is time for us now to consider that we are no longer bound by that restriction, although it has worked well hitherto. There is a convenience and an advantage in some interchange between the different divisions of the kingdom. It has a tendency to assimilate the plans and proceedings in the three different countries. Of course it has not a tendency to assimilate what it would be impossible to assimilate—the different courses of study—(hear, hear)—but what it is desirable to assimilate, namely, the modes of examination in testing the qualifications of persons who aspire to be put on the Register. My proposal would be that A. B. and C. D. (the names to be afterwards settled by the Council) be appointed as visitors to such a seat of learning. My first motion would have relation to the University of St. Andrews, which would be followed by like resolutions relative to other cases. I ought to mention the case of King and Queen's College of Physicians in Ireland, where, as I said before, with no fault on the part of Mr. Hargrave at all, the report is, as it seems to me, incomplete. In that case I should suggest to the Council to consider whether they would not depute Mr. Hargrave, or some other member of the Council, to repeat the visitation in the course of next year, and to report upon it.

Mr. HARGRAVE said he would like to know from Dr. Paget whether, if he were deputed to visit the examination of the King and Queen's University, he would receive the same remuneration as gentlemen from this country. (Laughter.)

Dr. PAGET: Excepting your travelling expenses, of course.

Dr. PAGET then moved the following resolution—"That A. B. and C. D., members of the Council, be deputed visitors of the examinations of the University of St. Andrews, and report thereon to the General Medical Council, and that the visitors be paid their travelling expenses and fees on the same scale as for attendance at the General Medical Council."

Dr. Alexander Wood: I think what I have to say will solve this question. I beg to second the motion which Dr. Paget has made *pro formâ*, but he will allow me to suggest that this is far too much a matter of detail for the Council to settle all at once. With regard to the payment to visitors of the examinations, I think there cannot be a doubt that it should be done. The unfortunate position in which they were placed for the last two years was owing to a motion made at the close of the meeting by a gentleman who had all along protested against this duty being discharged at all, and at the last moment interposed a motion which there was no time to resist in the way it ought to have been resisted—that if gentlemen were determined to do the work, at all events they should not be paid for it. I think it is high time the Council rescinded that motion. However, that is a very secondary matter, and what I wanted to call attention to is this—that if we are going on with this system of visitation of examinations they should be made the subject of consideration by a committee, who should digest all the information we have upon the subject, and bring forward their ideas before the Council. I could not assent to particular individuals being delegated to be sent down to individual bodies. I think the best way will be for Dr. Paget to consent to be chairman of the committee to be appointed to consider the whole subject. I am delighted the suggestion has come from another quarter with regard to the interchange of ideas between the three kingdoms in regard to examinations, because I speak as one who has tried to discharge, as well as he could, the duty imposed upon him in visiting these examinations, and I have derived a great deal of good from seeing the way in which other parties conduct their examinations. I think, therefore, it would be well that we should see as many of these examinations as possible, and I am sure there are other advantages which would obviously suggest themselves. We are likely in that way to get a more impartial account of our own shortcomings from friends at a distance than we should ever receive from our own colleagues. The whole matter is one of great delicacy, no doubt, but I have been told at this council-table to-day that there are certain gentlemen who do not approve of the plan at all, and who therefore will not yield obedience to the Council, and will discharge their duties not in the best possible manner. We are further told that there are other gentlemen who take up a stronger position, and who will not discharge their duties at all. Well, we have no power to compel and no wish to compel unwilling members, nor to shame them, as has been expressed, into doing their duty. But what we must do is, we must discharge the duty imposed upon us by Act of Parliament in some way, because the Act of Parliament distinctly lays it down. If we cannot get it done in that way, we must do it ourselves.

Sir J. D. Corrigan: Perhaps you will quote the section of the Act to which you allude.

Dr. Alexander Wood: It is the 18th clause of the Act of Parliament. [Dr. Alexander Wood then read the clause.] Now, I think I shall be able to appeal to any one who knows anything about Acts of Parliament, that when the word "may" is used it means "this is the duty which is prescribed by the Act;" and I say this is the duty which is prescribed for this Council to discharge; and I think the effect of this Council's action, imperfectly though it may as yet have discharged that duty hitherto, has shown that it is one of the most important functions that it can be called upon to discharge. I was about to observe, when interrupted by Sir D. Corrigan, that it was of extreme importance we should obtain a report on the examinations as conducted by every body that is under our suzeraincy; and as it appears that, of our friends in Ireland, some refuse, and some unwillingly consent, to perform this duty, and as we have neither the wish nor the power to compel them to do it, the only alternative for us is to send somebody else to do their duty for them—(hear, hear)—and while I should wish and could have hoped it would have been discharged by them in the same way as it has been discharged in England and Scotland, yet, if they tell us, as they have told us to-day, that they will not do it, then I say it must be done by others. I think, therefore, the whole question under our consideration—the question of how these visitations of examinations should be conducted next year—should be referred to a committee; and if the Council and Dr. Paget will agree to this, I will propose, with your permission, to withdraw my motion, which comes next upon your programme of business, and which is to consider the other alternative—namely, that of sending down special examiners to superintend the examinations. I may add, I have been most agreeably surprised by the complete success of the manner in which the supervision of the examinations has been conducted by the members of this Council. It has succeeded in a way that I could not have anticipated. But there is another thing upon which I hold a very strong opinion—namely, that no Medical teachers or examiners should conduct the Examinations in Arts connected with any licensing body—(hear, hear)—and I also hold the opinion that they are not the proper persons to supervise or report upon such Examinations in Arts. There it is, I think, that we should call in the assistance of persons familiar with those subjects to see how our Preliminary Examinations are conducted. (Hear, hear) If the subject is taken up by the Committee, and if that motion is carried by Dr. Paget, I shall be quite satisfied to relieve the Council from any discussion on the subject.

Dr. Christison said that, having been among the first to move in this matter, he naturally felt great pleasure in seeing the position which it had assumed. With regard to St. Andrews University, if the visitors had not attended those examinations it was not from any want of goodwill on their part, and he was about to ask the mover of this motion if he would withdraw that portion which relates to St. Andrews. Most undoubtedly the Branch Council of Scotland would take up the visitation of St. Andrews in the same way that they have done in the case of other Universities. He thought it would be a very much more discreet course to act in this way than to issue any orders of this Council, because the public might think there was thereby an imputation cast upon the Branch Council of Scotland of neglecting their duty. Matters were very different in St. Andrews from what they were in other Universities. That University was bound by the same rigorous rules, both for the studies of the graduates and for their examinations, as all the other Universities of Scotland, with this exception, that the candidates were not required to reside during any period of their pupilage in the University. In Edinburgh, Glasgow, and Aberdeen, students must reside for stated periods in the Universities, whereas in St. Andrews that was not required. There was no doubt the examinations were much improved, and he could say this much for the gentleman who held the post of Professor of Medicine there, that they might rely upon his doing his duty to the Profession and to the Council. At the same time, the question was whether, under the peculiar circumstances, St. Andrews ought or ought not to be exempt from visitation. It has been said that it is not likely students will come over from England or Ireland and go to St. Andrews to take a degree; but on the other hand, we could easily imagine that if gentlemen from some parts or other are not able to go through an examination at one place they might easily be tempted to go to St. Andrews if they thought they could get through more easily. (Laughter.) He thought that was a reason why the visitation should be made, and he could answer for the Scotch Branch of the Council that they would take care this summer, when he had no doubt there would be an opportunity of enforcing the visitation to St. Andrews, to see that it was not omitted.

Dr. Paget: I hope I may be allowed to say again what I did say at first—namely, that I certainly did not intend to cast any blame anywhere, and especially not with regard to St. Andrews or the members of the Scotch Branch of the Council who have furnished us with this excellent body of reports which I hold in my hand, and which are quite admissible in every respect. Allow me to say with regard to what Dr. Christison has suggested about withdrawing that portion of the resolution relating to St. Andrews, it would be quite impossible for me to do so. I am going to end by following out a suggestion of the President, which you will not, I think, object to. I could not possibly withdraw one of the resolutions without withdrawing all, and I therefore will, if you please, withdraw them all, because I could not persist in the resolutions in reference to Ireland if I withdrew that with regard to St. Andrews. I beg to suggest that it be an instruction to the Committee which is appointed to report as to the best means of supplying the few omissions in the reports of the visitations of examinations now received.

Dr. Alexander Wood: We can carry them out next year.

A Member of the Council: I shall be happy to second that motion.

The President: First of all, let me understand whether the Council will allow Dr. Paget to withdraw what he first proposed, and substitute this recommendation.

Dr. Acland: I should like to say a word upon that, which is this—that we had at the beginning of the meeting to-day an instance of the awkwardness which arises from discussion taking place on a matter of considerable consequence, and then, after a considerable debate, substitution of another motion for it. On various occasions I have noticed that; I cannot tell why, but it is the custom of this body that when that operation is performed for our convenience it is not recorded on the minutes. I therefore suggest that Dr. Paget's original motion do stand as it is, and then by permission of the Council it may be withdrawn, and the following words substituted. That is what always happens in the House of Commons. Then the real thing as it has taken place is recorded on the minutes. Otherwise, if this debate had continued for a long time to-day, we should have had perpetual allusions to words which do not appear on the minutes —(hear, hear)—thus giving rise to great inconvenience. I therefore propose that, instead of withdrawing the words of Dr. Paget's original motion without any record on the minutes, they stand on the minutes, and by the permission of the Council be withdrawn.

The President: The Council have already assented to that, and now it is only a question of whether the original motion shall appear on the minutes.

The motion was then put to the meeting.

Dr. Alexander Wood: That will never do. We must first have it made out what the omissions are.

Sir D. Corrigan: I think on consideration Dr. Paget will withdraw them altogether. There are objections, and very serious ones, to it. The first is the assumption that there are omissions. Of that we know nothing yet; and this is already pronouncing a judgment upon it. We must wait for the report of the Committee. We are asked to assent, according to that resolution, to a proposition before we know that there are omissions. But there is a more serious thing. Suppose an omission occurred, as in the case referred to by Dr. Paget, that an examination was not attended some six months ago, how is it possible to supply that omission? (Laughter.) I would ask, therefore, that we take no further steps until we have the reports of the Committee before us.

Dr. Andrew Wood: I think if Dr. Paget will leave the matter to the Committee, we shall not fail to supply omissions.

Dr. Paget: I have not made such a mistake as has been imputed to me by Sir Dominic Corrigan. We have received these reports, and, therefore, we have something definite to go upon, and it is quite within our power to act upon them and to refer to omissions. Moreover, it was never in my mind that the Committee should out of their own heads at the present time supply those omissions; but the terms of the proposal are, that they should suggest the best means of supplying those omissions—not at the present time, but at any convenient future time.

Dr. Thomson: I propose to second this motion, because I think it has now assumed the form which I all along thought it should have. What I objected to in Dr. Paget's former motion was the selection of numerous omissions which might in themselves be imperfect, but might have the appearance of being invidious. I also rise to confirm the statements which have been made by Professors Christison and Syme. It was simply on account of the circumstance that the Branch Council of Scotland were aware that no ordinary examinations for degrees had taken place at St. Andrews recently that their apparent omission to visit those examinations occurred. I had also another reason for supporting this motion in its present form, and it is this—that it is obvious the General Council deputed to the Branch Council this duty of arranging for visitation of the examinations; and, therefore, I should not like the Council now to interfere by any indirect steps in sending visitors to examinations while that previous arrangement with the Branch Council subsists. The Branch Council should be allowed to make such arrangements as they think proper to supplement the report.

The President then put Dr. Paget's motion as amended, and it was carried by a majority of 1, the numbers being 8 to 7.

Dr. Alexander Wood: If the Council will permit me, I will substitute for my notice of motion this—"That it be an instruction to the Committee" (by the bye, I do not know why it is to be called a select committee) "appointed this day for considering the reports of visitations of examinations to prepare a scheme for the visitation of examinations next year, and especially to consider the best means of supervising the Arts Examination." I think that would bring out all that would be necessary.

Dr. Andrew Wood: I think it will burden the duty of the Committee too much.

Dr. Alexander Wood: You must remember the position in which matters stand. We have for seven years been attempting to get a plan for the supervision of examinations. A committee of which I was chairman drew up a report recommending that we should resort to the second alternative in the Act, and that we should appoint special examiners to go to these examinations. This report was drawn up, and for two years nothing was done in this very important direction. Two years ago, Professor Syme moved "That it be remitted to the Branch Council to take up this question, and to deal with it," and I think he may well congratulate himself upon the success of that motion. But now I think the time has come when there should be a little change, for the reasons I have already indicated. I think, instead of sending it down to the Branch Councils, who can only, of course, regulate it with regard to the separate divisions of the kingdom, we should appoint another committee for the purpose of arranging as to the manner of conducting these visitations of examinations next year. I will just ask what would be the use of sending it down to the Branch Council in Ireland after we have had a declaration that they will not attend even to the present system of examination which is now in force.

Dr. Stokes: There is no such declaration.

Dr. Alexander Wood: I am surprised Dr. Stokes should make that statement. If he will take the trouble to turn to the Minutes, he will find how they have dealt with this matter; and I can only say, if they put in print one assertion, and then state another at this Board, "I prefer the document." (Laughter.) If you will look at page 424 of vol. iv. of our Minutes, you will find under the head of Irish Branch Council —"The Council resumed the consideration of the manner in which the recommendation of the General Council as to the supervision of examinations can be carried out. Resolved—That the following gentlemen be appointed to undertake the duty of visiting the examinations, preliminary as well as Professional, conducted by the qualifying bodies in Ireland, and to report the result of their observations to the General Council:—Dr. Stokes and Dr. Smith to visit the examinations at the Royal College of Surgeons; Mr. Hargrave and Dr. Apjohn to visit the examinations at the King and Queen's College of Physicians; Sir D. Corrigan and Mr. Hargrave to visit the examinations at Trinity College; Dr. Leet and Dr. Stokes to visit the examinations at the Queen's University; Dr. Smith and Dr. Apjohn to visit the examinations at the Apothecaries' Hall. Sir D. Corrigan having declined to act, resolved—That Dr. Leet be requested to act with Mr. Hargrave in inspecting the examinations in Trinity College." Not only did Sir Dominic Corrigan refuse to act, but when we take up the report submitted to us to-day we find that Dr. Aquilla Smith and Dr. Apjohn, when appointed by their Branch Council to visit the examinations of the Apothecaries' Hall in Ireland, received this letter:—"Dear Sir,—I am directed to forward for your information the annexed copy of a resolution passed by the College at its meeting on the 8th inst. I have the honour to be, dear sir, your obedient servant, (signed) Lombe Atthill, M.D., Fellow and Registrar. 'Resolved—That the College cannot give its sanction to its representative visiting and reporting upon examinations conducted by the Board of Governors of the Apothecaries' Hall of Ireland, inasmuch as (without referring to other grounds of objection) such visitation might be construed into an admission that the College admitted the legality of the function which the Board of Apothecaries' Hall has assumed of adding to their examination in pharmacy an examination on the science and practice of Medicine, which the College is of opinion is beyond the functions of the Apothecaries' Hall of Ireland.' I have only to add that I did not visit any of the Preliminary or Professional Examinations held at the Apothecaries' Hall, Ireland. (Signed) Aquilla Smith." And we have Sir D. Corrigan without assigning any reasons—

Dr. Corrigan: I did assign reasons.

Dr. Alexander Wood: They are not stated in the Minutes; and we have heard no reasons why a member of this Council refused to discharge the duty which this Council and his own Branch Council imposed upon him, and which the Act of Parliament gave us authority to impose upon him. Again, we have another gentleman who professes his willingness to go, but who is intercepted by a letter from his colleague, who

says that if he ventures to go at all he will discharge him from further attendance.

Dr. Aquilla Smith: State the thing properly.

Dr. Alexander Wood: I have read the document; I prefer it to a verbal statement.

Dr. Aquilla Smith: What Dr. Alexander Wood is talking about is an unfounded and unfair charge against me.

Dr. Alexander Wood: I am making no charge at all. I am stating that it is contrary to common sense that a body of such intelligence as the King and Queen's College of Physicians in Ireland could think that the mere sending of Dr. Aquilla Smith to visit the examination could be construed into a recognition or sanction of the proceedings of any body at that examination.

Dr. Aquilla Smith: If you read the resolution you will find that it refers to Dr. Apjohn, and not to Dr. Aquilla Smith. (Laughter.)

Dr. Apjohn: I beg to state it is not true that I have ever declined to act as visitor of examinations. I have done so ever since 1866; and it was also my intention to attend the Preliminary Examinations as well as the Professional Examination; but, upon further inquiry, I ascertained that the College of Physicians had ceased to hold preliminary examinations, and had resolved to accept such examinations held in other institutions. With respect to the nature of those examinations I know nothing, except this, that I can state some, at all events, of the examiners are perfectly competent. I merely wish to repeat that I have not declined acting in this matter. I attended twice this last year at the College of Physicians, and I must tell you why there is no report. On the two occasions the persons examined were already possessed of Medical licences, and the examination of them was confined entirely to particular matters. I have no hesitation in saying that the examination was most complete and perfect of its kind, but I thought it was not the kind of examination I should be expected to report upon.

Dr. Alexander Wood: I have never for a single instant doubted the perfect competence of the Irish Branch Council to supervise the examinations; and I will go a step further than that, and will say that some of the specimens which they have given us have only made us feel how desirable it would be that they should show a little less reluctance to carry out those visitations. (Applause.) But we are as much responsible for the Irish Apothecaries' Hall as we are for any other body that is under our supervision. I ask, then, are we or are we not to have a report of those examinations? Are we to have a statement of this kind, that because a gentleman has a feeling on the subject we are to be deprived of that information which we require? I say, if that is the case, why do not the Branch Council appoint somebody else; and if they appointed Dr. Apjohn, why did he not report? It comes to this, that we have not been able to get at a reason for it, and we have it on the face of this printed document that another gentleman has declined to do it. I say, under these circumstances, it becomes necessary to consider how it must be done—for done it must be. The next thing that some arrangement must be made about is, that however well the supervision of examinations with regard to Professional matters may be carried on by members of this Council, I do not think they are the people to act in respect of examinations in arts; and the best way will be to devise some other method by which we can secure that all these examinations are such as to fit the mind of the Medical student to receive those Professional studies which will follow afterwards. I beg leave to move that a committee be appointed to prepare a scheme for the visitation of the examinations next year, and especially to consider the best means of supervising the Arts Examinations.

Dr. Parkes: I beg to second that, and I will reserve my speech until I hear what observations may be made in opposition to it.

Dr. Aquilla Smith: I have a few words to say in reply to Dr. Alexander Wood's observations personal to myself, because I think they are calculated to create an erroneous impression on the minds of the Council—namely, that I had determined not to entertain any visitation of the examinations at all.

Dr. Alexander Wood: You have quite misunderstood me.

Dr. Aquilla Smith: I never expressed any unwillingness to visit the Apothecaries' Hall, and it was fully my intention to have done so, and had I done so I should have given my report with the same candour as I did with regard to the College of Surgeons. Dr. Wood made another most unwarrantable attack with regard to the College of Physicians, and in reply I beg to tell him that they are a body of gentlemen quite incapable of doing what he has charged them with. The moment that resolution came into my hands, I had not the slightest hesitation in coming to the conclusion what course it was my duty to adopt. Otherwise, it was my full intention to have gone, and, as far as I personally was concerned, I had no objection to do so.

Dr. A. Wood: I think that is a very good explanation so far as Dr. Smith is concerned, but that is not what we have to do with. We want to know how the Apothecaries' Hall examinations are to be supervised, because it is quite evident Dr. Smith will not do it.

Dr. Aquilla Smith: I will not as long as that resolution stands.

Dr. A. Wood: Then I ask, are there any other of the Irish representatives who are not debarred from doing it?

Dr. Aquilla Smith: Any member of the College of Physicians may do it.

Dr. A. Wood: My impression was that the College of Physicians would neither allow you nor any other member.

Dr. Aquilla Smith: Read it, and you will find it applies to no one but myself.

Dr. A. Wood: Then you ought not to be deputed by the Branch Council.

Dr. Aquilla Smith: I was deputed before that was written; if you will look at the dates you will find that is so.

Sir J. D. Corrigan having called attention to a point of order with reference to Dr. Parkes being allowed to reserve his speech until after the opponents of the resolution had spoken, thereby involving two replies instead of one, proceeded to say: I must object in form altogether to Dr. Wood being allowed to substitute this motion for the one on the paper. If it tended to make the other more clear, or was a mere verbal alteration, I should not object; but if we are to let in this principle, that a member of this Council giving notice for a resolution for a certain purpose is to be allowed, without notice or preparation for us to consider it, to substitute another amendment which has nothing to do with the original one, it is perfectly impossible for us to get on with the business if that is pursued. The present motion has no more relation to the former than if he were to substitute for it a resolution to consider the Reform Bill. But let us see something more about his resolution. It has a more important bearing than the members of the Council seem to have quite caught (Dr. Wood giving us no time for consideration before he brings on his motion) upon a resolution which was passed in this Council on April 6, 1865—namely, "That each Branch Council, or such of their members as shall be deputed from their Council, shall from time to time visit the examinations, Preliminary as well as Professional, conducted by the several qualifying bodies in the respective divisions of the United Kingdom, and report the results of their observations to the General Council." Now, I say, Dr. Wood has been permitted to commit two irregularities—the first to substitute one motion for another, it having no reference whatever to the motion which we received notice to consider to-day; and secondly, with that resolution standing on our books, we are called suddenly to rescind it and to take up his motion, which we have not had five minutes to consider. Before going into the merits of it, I have another observation to make with reference to the allusion of Dr. Wood to the College of Physicians of Ireland. He asked, did any man really believe in the reasons inserted in their letter? In other words, he imputed to a body of gentlemen, who stand as high as any in the kingdom, that they were base enough to conceal their real reasons, and to put forward a pretence; and not only was Dr. Wood guilty of that, but he made an observation for which I was called to order on a late occasion; he said, when Dr. Aquilla Smith placed before him his explanation, "I prefer documentary evidence to your mere verbal statement." (Cries of "Oh, oh!")

Dr. Alexander Wood: I was quoting your words.

Sir J. D. Corrigan: They were words which when I used yesterday I was called to order for. (Ironical cheers.) Dr. Wood next said that I never adduced any reasons for not performing my duty. Now, I will not go over my reasons, which I did at such great length—to an extent which perhaps was unbearable—(a laugh)—last year, and I remember my friend Dr. Sharpey called me to order. (Hear.) But I did not regret the length of time which I spent upon that, because, not having the same facility as Dr. Storrar who cries "Hear" to my observation, it takes me more time to make myself understood than it takes him. (Laughter.) I called the visitation

examination a farce before; I think it is something worse now, and my additional ground for believing its utter inefficiency is the fact that came before us yesterday, upon another matter, when we learnt that the College of Physicians of Edinburgh, in passing Mr. Forman, passed him at an examination obtained by means of a double fee. (Laughter.) Now, what occurs in regard to those extraordinary examinations? My friend Dr. Wood talked of the deficiencies of the Irish reports—is there a single notice in any of the Scotch reports that the College of Physicians of Edinburgh has two doors to its temple?—(laughter)—and that on particular public days, like boarding schools which have show girls in them—(laughter)—the visitors are informed that there will be examinations, but that there is another door at which persons who do not wish to pass the ordeal can enter on another day, and to them the College says, "We will have a quiet examination, privately, at 6 o'clock—the dinner hour—(a laugh)—we will not send any notice to the visitors, and we will pass you provided you pay double the money." (Loud laughter.) Now, do we suppose that any man in one case out of a thousand who is able to pass a public examination would pay double the money to get a private examination at six o'clock in the evening? With such a system as this going on, what is the value of visitations? It is worse than nothing; it is a cheat. And whatever my reasons were, from the beginning I had no faith in it; but I confess the revelations that came before us yesterday with regard to these private examinations—namely, that for double the money, and on the understanding that every examiner gets a double fee, thus giving the examiners an interest in the matter, and with the understanding (for I say that is the inference) that it will be an easier examination than those which are conducted in public—all this tends to show that the visitation of examinations is—what I must call it—a mere humbug. (Laughter.) Dr. Wood has alluded to the fact that there are special examinations in Dublin similar to those in Edinburgh. Gentlemen, there are special examinations in the College of Physicians of Dublin, but there the similarity between the two cases totally ceases. I remember last year one of the strongest advocates for the privacy of examinations was Dr. Wood, and I can now understand the reason for this. But the difference between the special examinations of Edinburgh and Dublin is this. In the Dublin College of Physicians we have about two hundred members and licentiates who reside in the City of Dublin. We have a reading-room, a library, and a public hall, and a notice of every examination, special or otherwise, is posted up in those rooms. That examination is open to every member and licentiate to be in attendance, and there is not one of them who has not an interest in taking precious good care that nobody shall get his diploma for a double fee. (Laughter.) That is the difference between the two bodies. I have now, I hope, satisfied Dr. Wood, if he was never satisfied before, that I have a reason, at least sufficient in my own mind, for not being a party to the visitation of examinations under any circumstances. I now, in conclusion, respectfully submit to the President that the resolution which has been substituted for another has no relation to the notice which we have received, and that such a practice ought to be stopped at the very threshold.

The President: It is a question which is not in my hands. It is a matter for the Council. If you permit a motion to be handed in, and moved and seconded, and allow the discussion to go on upon it, I cannot stop it now.

The President being called away on important business, delegated his duties, with the consent of the Council, to Dr. Acland.

Dr. Parkes: Until I heard what other members of the Council had to say, I thought it was unnecessary to make any speech in support of this motion, and having waited until this time I confess I have not heard an objection of any kind to the appointment of this Committee, and therefore I suppose it is really the sense of the Council that a Committee ought to be appointed to report on the best means by which these visitations can be carried on for the future. From what has been said it is plain that the examinations in Ireland, and other places as well, have not been properly visited. I will say no more, because I feel that the motion has been hitherto practically unopposed.

Mr. Rumsey: I cannot allow this motion to go finally to the vote without making a few remarks; and I must beg the Council to excuse their being somewhat of a personal character. Rather unmeasured language has been used at this council-table to-day with regard to those members of it who have thought it their duty and their privilege to decline taking any part in the visitation of examinations. There are not many who have taken this course; but there have been some two or three, and I am one of them, and so I contend that in doing so I have availed myself of my legal rights. But it has been assumed by Dr. Alexander Wood that there is a legal compulsion upon members of this Council to take their part in these visitations.

Dr. Alexander Wood: I said the very reverse.

Mr. Rumsey: You said there was a legal obligation in this clause of the Act upon the Council and the Branch Council, and the members of the Branch Council.

Dr. Alexander Wood: I said most distinctly the law renders it imperative upon this Council, because the word "may" is, in an Act of Parliament, always to be interpreted as a direction to do a certain thing. Our resolution rendered it imperative on the Branch Councils; but we cannot compel individual members of those Councils to do their duty in this respect. I guarded myself most particularly in saying that.

Mr. Rumsey: I will accept Dr. Alexander Wood's explanation to a certain extent, but I do not with regard to the legal obligations of the Council. For nothing can be clearer than that an alternative was provided by the Act—Dr. Alexander Wood being conscious of that alternative, and he expressed it on the notice of motion which stands on our programme to-day; and it is that alternative which I will endeavour now, with your permission, to say a few words in defence of. It is because that alternative exists in the Act of Parliament that I, for one, decline, as a member of the Council, to visit the examinations. I believe that visitation would be far more efficient and far more true, far more worthy of the confidence of the Profession and the public, were it undertaken by persons not belonging to this Council. (Hear, hear.) I will not go into my reasons for that opinion. I have given them. I gave them to the Council which asked me to visit, and I have since done so publicly. I will not, therefore, take up the time of the Council by repeating them; but I think I may say they are not foolish or absurd reasons, nor are they reasons which have no foundation of truth or right in them—(hear, hear)—and having said that, I do very much regret that this Council does not, on the present occasion, acknowledge that there is an alternative which they may legally pursue, and which may enable those members of the Council, who feel they ought not to take a part in these visitations, to abstain from doing so, and to be released from being further invited in future to act in the matter, and to establish (which is the real method of doing this) an inspector or assessor as visitor, who should be constantly at work, having it as his function to attend every examination for a certain time. These assessors or inspectors should be gentlemen who are not members of this Council, and therefore in no way whatever to be accused either of partiality, or to be placed in any invidious position. Having said that, I may be allowed once more to add that, the Branch Council having accepted my excuse, I think I ought not to be held up as one who has violated any law, or committed any breach of enactment, from having declined to act in this matter.

Dr. Alexander Wood: Allow me, in the first place, to say that I agree with what fell from Sir Dominic Corrigan in regard to the irregularity of the proceeding which I adopted in substituting the motion which we are now discussing for that which I gave notice of. I was the first publicly to proclaim this irregularity. I pointed out the course which the matter had taken, and asked to save the time of the Council by substituting this motion. At that time any member was at liberty to say that this was an irregularity, and I would have at once sat down. But the matter having been permitted to go on, and Sir D. Corrigan having at great length, and with considerable vehemence, made a speech, the reply to which, I dare say, he would be glad to escape if he could—(laughter)—I think it is rather too late to ask that, after that, all further discussion upon this subject shall be foreclosed. The second observation I have to make is in regard to what Sir Dominic has said, that this is in violation of a regulation passed by the Council two years ago—that it was to be remitted to the Branch Council to make arrangements for these examinations. It is perfectly evident that that was a measure passed for that year only. It has been repeated last year; but it does not necessarily follow that it is to be repeated next year; and it is quite open to us to take the sensible course of referring the matter to a committee to consider and to report (and perhaps they may report that that is the best plan to continue) upon the best manner of carrying out these visitations. Then, with

regard to what fell from Mr. Rumsey, I thought that, having made a clear statement with regard to the law, and which was corroborated by several gentlemen round this table, he would have accepted my explanation in full, and not in part, as he professes to have done. I made no charge against him, or Sir D. Corrigan, or any individual, with respect to breaking any law by refusing to carry out the visitations of examinations. I merely said the law prescribed it to us to carry out those visitations; that we had fixed upon that plan for carrying them out; that these gentlemen had refused to follow our recommendation; that we had no power to compel them to do so; and that we must get reports from other persons, for reports we must have. Mr. Rumsey regrets that the original motion was withdrawn; and, perhaps, so do I. I have been always of opinion with Mr. Rumsey that the best plan to carry out these visitations was by means of special examiners, just as Government carries out its visitation of the schools under its superintendence by special examiners, who are constantly engaged in going about performing their duty. Accordingly, I was appointed chairman of a committee so far back as 1860, and you will find in the Minutes that in drawing up this report I had the valuable assistance of Dr. Storrar, and I will now read an extract from it, showing that that was the conclusion at which we arrived. [The extract was read.] This report lay for a year upon your table, and then it was brought up for discussion, and was most vehemently opposed by the representative of the College of Surgeons, who led the opposition; but I remember nobody was more vigorous and determined and violent in his opposition to it—as I may say he is to most recommendations with which I am in any way connected—than the learned Baronet on the other side of the table. Therefore, I say he cannot deliver himself from the charge—as Mr. Rumsey can do—because he first refused the one alternative, and then he refused the other. I can point him to that clause of the Act, and I can say the Act does call upon us to visit examinations either by ourselves or by deputy. I proposed that we should carry out the desire expressed in the Act by deputy, to which he answers, "I will have nothing to do with that; we cannot have strangers coming in amongst us."

Sir J. D. Corrigan: I did not say that.

Dr. Alexander Wood: I do not profess to give the exact words, but, however, the learned Baronet did oppose that report. We gave him his choice, and when the other alternative came before him the same result followed; there was, strike high or strike low, no pleasing him: he would have neither one nor the other, and therefore I think I am entitled to say that he has done his very best to prevent this Council from carrying out this clause of the Act of Parliament. Now, with regard to the learned Baronet's obstructiveness in reference to this matter, I really must compliment him upon the ingenuity which he has displayed in his attack upon Edinburgh. There is a sort of *bete noir* in his mind——the College of Physicians of Edinburgh (a laugh)—which, whatever be the subject under discussion at this Board, always contrives to force itself upon his fertile imagination. He never can get rid of it, he never can get beyond it. The College of Physicians of Edinburgh always seems to him to be an answer to every argument, a point to every joke. (Loud laughter.) He draws a contrast between the King and Queen's College of Ireland and the College of Edinburgh, which may be very satisfactory to himself. He was for a long time President of the King and Queen's College of Ireland, and I have no doubt he thinks it the best college in the kingdom. I admire his modesty for telling us so; perhaps I differ from him. But I think it is due to the Council to explain a little more clearly than I was able to do yesterday the exact connexion of the College with Mr. Forman, and what Sir D. Corrigan calls private examinations—which are not private, but which are special. And I do this for the obvious reason that these statements are made in order that they may be circulated. What I wish to explain is this, that the College of Edinburgh has certain days upon which ordinary examinations take place; that those days are communicated to the visitors of the examinations, and that they are open to their attendance; but that it has always been the practice of the College, as it is the practice in certain other bodies, that if there are (as occasionally there will be) special circumstances, a special examination is appointed. It happened the other day a man was obliged to start suddenly for the Mauritius. He was in every way a deserving subject, and could not wait for the ordinary diet to be examined. He therefore presented a petition asking—not for a private examination, but for a special examination. Now, I should state that the College set their faces as much as possible against these special examinations. They throw every impediment in the way of them. The person applying has first to satisfy the examiners that there is some cause for urgency; secondly, he is called upon to pay an additional fee, on the principle that no man will do that unless there is some strong ground for it—(a laugh)—but I beg to correct Sir D. Corrigan when he says that the double fee finds its way into the pockets of the examiners. No such thing takes place; and these special examinations are conducted in every respect in the same way as the ordinary examinations of the College. They are conducted by the same examiners, and are as open as the other examinations to the visits of all privileged persons.

Sir J. D. Corrigan: Who are those persons?

Dr. Alexander Wood: The visitors of examinations. I know Professor Syme has been asked to attend special examinations, in the hopes that it would suit his convenience, and he will bear me out in that. Therefore, I say, Sir D. Corrigan has no more right to call these examinations private than any others, and that, with regard to his insinuation that they were easier examinations, it is an assumption which is utterly false on the face of it. I do think he should apologise for such a statement that a body like the Edinburgh College would allow any student to pass his examination more easily for the sake of a double fee. He had no right to have made any such statement, and I need not assure you that it is entirely false. Having made this statement, I beg to say it has nothing whatever to do with the business before us—it has been brought on by the act of Sir D. Corrigan for a special purpose, and I think must go to show how very weak his defence is for his violation of the Medical Act, and how very weak his apology to the Council is for refusing to obey its instructions, when he is obliged to descend to a personal attack as a shelter from the censure which he was evidently receiving from every member of this Board.

Sir J. D. Corrigan: With regard to Dr. Wood's statement, I would just ask Professor Syme whether he was ever present at those private examinations; because, in the reports of the Scotch Council, there is not a single notice of any examination before the College of Physicians at which Professor Syme was present.

Dr. Alexander Wood: That is not the fault of the College of Physicians. Professor Syme was very much engaged, but he knows I repeatedly asked him to come to those examinations, and he will bear me out in this, that every facility was given for him to be present.

The Chairman put the motion, which was carried by a majority of 14 to 4.

The following gentlemen were nominated for the Committee:—Dr. Fleming, Dr. Stokes, Dr. Paget, Dr. Storrar, Dr. Andrew Wood, Mr. Syme, Mr. Hargrave, Sir J. D. Corrigan, Dr. Sharpey, Dr. Quain.

Mr. Syme: I cannot consent to serve on any committee with Sir Dominic Corrigan.

Sir J. D. Corrigan: I shall ask the Chairman to call the member to order who has given utterance to such a sentiment as that. However, I decline to serve on the Committee unless Mr. Syme serves also.

Sir D. Corrigan's name was then withdrawn, and Mr. Syme's restored.

Dr. Embleton moved, "That a committee be appointed to report upon—1st, the registration of Medical students; 2nd, the returns from the bodies in Schedule A of Professional examinations and their results."

Dr. Storrar: I have great pleasure in seconding this motion. It is one of those committees which we are greatly indebted to Dr. Embleton for originating. A great deal of useful work has been done, and done chiefly by Dr. Embleton as chairman of the Committee. But in saying that, may I ask him to withdraw my name, as I am disinclined to act upon it?

The motion was put to the Council and carried unanimously.

Dr. Embleton: It is advisable to have another committee appointed, "to consider and report on the communications addressed to this Council by the Indian and Colonial Universities and the Universities and from the Registrar of the Council of Upper Canada."

Dr. Andrew Wood: I beg to second that.

Dr. Paget: I have just been in communication with the chairman of the Business Committee, with the intention of proposing that these communications be referred to the Committee on the Medical Acts. Certain of them have reference to the Medical Amendment Act, and particularly to that clause of

it which the Committee on the Medical Acts is empowered by the Council to discuss—Clause 11. You will observe the communication of the University of Melbourne has reference to that clause. The same with regard to the communications of the University of Calcutta and of Sydney, praying for the recognition of their examinations; and the same from the Medical Council of Upper Canada, and the second communication from that body. There are three others about which I am doubtful whether or no they refer to that particular clause of the Medical Acts Amendment Bill, but they do refer to the Bill if they do not refer to that clause. I conceive, then, that it would be the duty of your committee to report to the Council what the nature of them is and any comments they may have to offer upon them. With the exception of those I have mentioned, all the others plainly refer to that particular clause with reference to the registration of persons with colonial diplomas. Therefore, I was going to propose to-morrow, but I shall do it now with pleasure if the Council will allow me, that these particular communications—not all on the list, but those which I have specified—should be referred to the Medical Acts Amendment Committee.

The Chairman: Then do you second Dr. Embleton's motion, or do you ask him to modify it in that way.

Dr. Paget: I do not second it; I should move an amendment to that effect.

Dr. Embleton: I have put down no names on the committee, and if the committee Dr. Paget mentions is competent to take cognisance of this matter, I think it will be better to refer it to them.

After some discussion,

The Chairman said that the Chairman of the Business Committee was in possession of the Council at present, because just now they deferred the usual order of the arrangement of these committees by his consent, and he was about to call upon Dr. Andrew Wood to propose what should be the course of business.

Dr. Andrew Wood: I wish to get on the minutes the returns from the Army and Navy Medical Departments.

The Chairman: In what way do you propose to deal with this matter which Dr. Embleton has moved in?

Dr. Andrew Wood: With regard to these petitions my objection to referring them to a committee in this offhand way is that they are communications from some very important universities, and from the General Council of Canada, and I say it is not respectful to them just to say that you will throw them into the carpet-bag of a committee in that way. I was going to propose that they should be read before the Council, and that a committee should then be appointed to consider and report on the communications addressed to this Council by the Indian and Colonial Universities, and the Universities, and from the Registrar of the Council of Upper Canada.

Dr. Storrar: I may mention that it was that feeling alone which has just been expressed by Dr. Andrew Wood, which prevented me from seconding Dr. Embleton's motion. I think these petitions ought to be received and read before the whole Council, and then if there is anything in them to be referred to a committee let them be referred. I move that the communications from the Director-General be received and entered on the minutes, and be put on the programme for Monday next.

The motion was seconded by Dr. Parkes and carried unanimously.

Adjourned to Saturday at one o'clock.

Fourth Day.—Saturday, June 1, 1867.

Present: As before.

The President: Gentlemen, I have received a note from the representative of the Royal College of Physicians, Edinburgh, which I should like to read before commencing the regular business of the day. It is to the following effect:—

"June 1, 1867.

"My dear President,—I am sure it will be satisfactory to you and to the Council to be informed that I have this morning received a written statement from the Secretary of the Royal College of Physicians of Edinburgh. For obvious reasons this cannot at present be made public, but it is satisfactory to know that no possible blame can attach to the College or its officials for the admission of Mr. Forman as a Licentiate, and that, at a meeting of the Council held yesterday, the law agent of the College was instructed to take all necessary steps for his removal from the roll, and, if necessary, to proceed against him in the Criminal Court."

I think it is very satisfactory for the Council to know there is another circumstance which has been brought under my notice by the representative of the University of Edinburgh. He wishes to make a communication to the Council before the business commences.

Professor Syme: I have this morning received from Edinburgh the *Edinburgh University Calendar*. It is published by authority, and contains the whole of the regulations of that institution. I beg to place this volume on the table, and I hope that Sir Dominic Corrigan, when he perceives that the expression which he has so frequently objected to is no longer there, will be inclined to express some regret for not accepting my first assurance, and that of Dr. Christison, that it had been expunged.

The President (after examining the *Calendar*): I have not a word to say, except that I have satisfied my curiosity.

Sir J. D. Corrigan: Perhaps you will be kind enough to let me see the book. [It was handed to the learned Baronet.] Sir, this is the *Calendar* for the present year, and the sentence reads thus:—"And the proficiency of the students in those branches is ascertained by these examinations prior to the commencement of their Medical studies." The words to which I referred are omitted, but I should like clearly to know from Professor Syme what it is that he expects from me on this occasion. I think, if I understood him rightly, he said that I should express my regret for not having accepted his statement and that of Dr. Christison at once, in contradiction of the published documents in Churchills' *Directory* for the present year. Am I correct in that understanding?

Professor Syme: I understood Sir Dominic Corrigan to express his opinion that a published statement in Churchills' *Directory* was better evidence as a matter of fact than my personal assurance. (Hear.)

Sir J. D. Corrigan: Does Professor Syme expect that I am to express my regret for that?

Professor Syme: Certainly.

Sir J. D. Corrigan: Then I beg to state that I did not say it was better evidence; what I said distinctly was—and I repeat it now—that I would not accept a verbal contradiction of a printed document. Those were the words I used, those words I repeat, and for those words I have no apology to offer. Yesterday, in the course of our debates, the very same circumstance occurred. Dr. Alexander Wood quoted from a printed document. Dr. Smith got up and stated his word in reply to it; there was a difference. Dr. Alexander Wood—and I think very properly, for I take his view of it—said that he would prefer a printed document to any verbal evidence. I would not, in private life, doubt the word of any man whose acquaintance even I possessed, because if his word were not worth believing I certainly would not have his acquaintance. But that is a totally different matter when we come to transact public business, and I say that when a document was quoted that I should have been met by a document, and that this document should have been brought here, put into my hands, and then at once I would have acknowledged that one document was corrected or contradicted by another. Now let us see what led to this. It is not a new thing. As long ago as the year 1861 there was a discussion of a very angry nature relative to the College of Surgeons of London, and Professor Syme moved a resolution, which you will find at volume ii., page 100, of our Minutes, "That the regulations lately issued by the College of Surgeons of England for their licences are not in accordance with the regulations or recommendations of the Medical Council, and are not such as to secure the possession by persons obtaining such qualifications of the requisite knowledge and skill for the efficient practice of their Profession." We were asked to send that libel on the College of Surgeons out with our *imprimatur* upon it. I rose then and objected to the course, and the defence I took was this—(Cries of "Question.") It is necessary for me to mention these matters in my own defence, because it is necessary to go back to the time which originated what occurred. I refused to be a party to that, and what was the defence I took? That it would be unjust to send out such a statement—that because the College of Surgeons of London did not at once consent to adopt our rules, therefore it was not competent to send forth Practitioners sufficiently educated to practise Surgery in civil life or in the army or navy. (Interruption.) If you will not interrupt me, I shall be shorter. I claim from the President the right to explain the whole matter from beginning to end, and I will not sit down until I have done it.

The President: I am quite sure Sir J. D. Corrigan will not diverge from the point immediately before us.

Sir J. D. Corrigan: I will not by one sentence. And the reason I am referring to this is, that it originated the dissension about the University of Edinburgh. I proposed an

amendment to that resolution, which you will find; and the line I then took was this, supported by Dr. Stokes, that it would be unfair to select the College of Surgeons of London, inasmuch as the whole of the bodies in the United Kingdom were nearly in the same predicament, and I proposed an amendment to that effect—namely, "With regard to all the licensing bodies that did depart from the regulations, as well as the College of Surgeons, it should be ascertained in what particular they departed from our regulations, and that they should request that all the licensing bodies whose regulations were different, make such observations or explanations as they might think fit to offer." Now I am coming to the point. In support of my views on that occasion, I instanced all the Universities and Colleges in England, Ireland, and Scotland, that departed from the regulations. I did not spare my own University, the College of Surgeons of Ireland, and the King and Queen's College of Physicians. I instanced also Edinburgh and Glasgow and St. Andrews. Dr. Christison and Professor Syme at once took objection to my mentioning them, and to my observations to those words, "as far as possible," and I think Dr. Storrar may now admit I am coming to the point.

Dr. Storrar: I do not.

Sir J. D. Corrigan: Well, you do not understand me.

Dr. Storrar: That is very likely.

Sir J. D. Corrigan: That was in 1861. Dr. Christison and Professor Syme took exception to my statement, and said that "as far as possible" was immediately to be altered. They said there that Churchill was incorrect, or that it would be immediately altered. That, you will remember, was as far back as the year 1862. In the following year, 1863, a similar circumstance occurred. I again quoted Churchills' *Directory*, and again I was contradicted by Dr. Christison, and was told he was not responsible for what appeared in Churchills' *Directory*. 1864 came, and the same thing again took place; and again in 1865, and, lastly, in 1866 the same thing took place again. So that for three successive years I expected the contradiction of those printed regulations from Dr. Christison and Professor Syme, from one or from both; but when, notwithstanding the notice that occurred at this Council year after year, these regulations appeared in such a document as Churchills' *Directory*, and were never corrected, and led students to understand that they might pass at any time during their Professional study, I think I was quite justified in the course I took, and I only regret I did not do it before. After years of patience, and receiving over and over again the verbal corrections to Churchills' *Directory*, I at last stated, the day before yesterday, what I will again say, that in the discussion of a public matter I will not accept a verbal contradiction of a document. I waited for four years, and I must say, that having done so, and never having seen Churchills' *Directory* corrected, I was perfectly justified in the course I took, and I will not make any apology.

Dr. Alexander Wood: For what possible purpose Sir D. Corrigan is diverging into this discussion I cannot conceive; but I have one word to say in personal explanation: if the rest of the Council suppose I did anything so rude and so improper as to tell any gentleman at this table that I did not accept his word in preference to a document, I beg most humbly to apologise to that gentleman and to the Council—(applause)—but I am sure that every member of the Council, with the exception of Sir D. Corrigan, will bear me out in this, that my allusion to receiving a printed document in preference to oral testimony was a jocular allusion made to Dr. Smith in reference to a proceeding that had taken place the day before. I feel perfectly certain that no other gentleman except Sir D. Corrigan conceives it possible that I would tell any member of this Board that I preferred a printed document to his oral statement. Having said so much personally, allow me to say that we have had a long statement, and I still think an irrelevant statement, in regard to this matter; but the plain state of the facts appears to me to be this——

Sir J. D. Corrigan: I rise to a point of order. I believe, in the course of an explanation, the President only hears the parties immediately concerned.

The President: That is true, but, unfortunately, you adverted to similar conduct having been committed by another gentleman.

Dr. Alexander Wood: Exactly, and I think that perfectly justifies me in explaining the difference of our conduct. The course which matters took the day before yesterday was this, that Sir J. D. Corrigan took up Churchills' *Directory*, a book which is entirely unauthorised, for which Mr. Churchill and his editor are alone responsible, and from that book he read a professed regulation of the University of Edinburgh. The representative of that University at this table immediately got up and corrected it, and told him the *Directory* was wrong in this particular. He was followed by the official secretary of the University, who here solemnly gave his evidence as to the truth of Professor Syme's statement. I think I am correct in saying that, in any court of law, the parole evidence of an official secretary of such a body would be taken in preference to any printed document whatever, and yet, notwithstanding that, Sir J. D. Corrigan persisted in stating that he preferred the evidence of Churchills' *Directory* to any verbal statement. With regard to Sir J. D. Corrigan's charge against me, I beg to state that what I said yesterday was, in the first place, jocular, and in the second place, it does not bear the slightest relation to the conduct that Sir J. D. Corrigan——

Sir J. D. Corrigan: I must beg to state that you have inaccurately represented what I said. I did not say I would not believe Dr. Christison's word, or Professor Syme's word; I said that a document should be met by a document, and that I would not receive a verbal statement in preference to a statement in print.

The President: You do not seem to see, Sir Dominic Corrigan, what most of the other members of the Council do perceive—namely, that you preferred an unauthorised document to the authority of the representative of the University of Edinburgh, backed also by the Secretary, who had to draw up the regulations of the University.

Sir J. D. Corrigan: Sir, I say I said no such thing. That statement has been continued for four years in Churchills' *Directory*; and, never having been corrected, and I having received a verbal statement in contradiction of it for four years, I thought it was full time for me to say that a document should be met by a document, and I believe it is the rule of the House of Commons, and of every public body, that where a document is quoted, a document should be put in in correction of it.

Dr. Christison: Allow me to say a few words in reference to the statement of Dr. Corrigan regarding my say in this matter for some years past. I do not profess to have that very accurate memory which Sir Dominic yearly claims for himself, and by which he can tell not only the statements, but the very words of the statements, which have been uttered by me so far back as 1861. But if I may trust my own recollection I never made any statement on the subject in 1861 at all, and I can tell Sir Dominic Corrigan my clear recollection of the statement which I put forth subsequently and prior to last year. My statement was to this effect, and any member of the Council who has the same accuracy of recollection as Sir Dominic will be very much inclined to think that I am now stating correctly what I said on former occasions—I said when a complaint was made against this little passage "as far as possible," that the Senatus of the Medical Faculty of Edinburgh could not help themselves, that it was part of an ordinance of the Universities Act of Scotland which could not be changed without a most tedious and roundabout process. I then stated what that process was, and added that we were determined to make the change, but that it must be begun by the Medical Faculty; then be approved by the Senatus of the University of Edinburgh; then by the University Court, which is a court of appeal, of which I am Secretary; then it would require to go before Lord Brougham, the Chancellor of the University; and then, after all, it required to go through the very tedious process of removal by order of her Majesty in Council. I think there must be some members that will recollect that I stated this very lengthy process by which alone we could make that trifling change. I said we had already begun the change. How long ago that is I cannot say, but the result was that the removal was even more tedious than I expected. It was put off from year to year, and at length the order came down some time last year, but too late to be introduced into the *Calendar*, which is printed in the last days of April, and, of course, must be prepared a considerable time before that. Consequently, it did not appear in the *Calendar* of last year, but it appeared in the sheets of instructions for our students in November last, and, if proper attention had been paid to them, this error would not have occurred. Whether it is our officials who may have undertaken to supply Churchill annually, or whether it is Churchill's editor or himself who ought to have applied annually for copies of our regulations—who is to blame I do not pretend to say; but in one way or another it has happened that Churchill has not

given the exact regulations in this respect. I do not blame Messrs. Churchill for this, because I hold it is a book with an immense number of details, and I must say it is a book highly creditable to the editor, and of very great utility indeed to every Medical Practitioner. ("Hear, hear," and applause.) I may say, indeed, that there is no book I should be more unwilling to be deprived of than Churchills' *Directory*. (Hear.) I think it is only fair I should say so much now after what has been said upon this subject. The regulation appears in the last *Calendar*, which is the first in which it could appear. I hope you will well understand, therefore, how it is that what appeared to be a sluggishness on the part of the University of Edinburgh in making that change occurred. But now I appeal to you, sir, and to every gentleman present, to say whether there is the least probability that I, acting at the time for the University, and having that tedious business to conduct by correspondence—knowing that the regulation had not been passed—I ask you is it possible I could have said at a meeting of the Council, as is alleged by Sir Dominic Corrigan, that it was passed? He has alleged that I asserted in 1861, 1862, 1863, 1864, 1865, and 1866, that it had been passed. I ask Sir Dominic Corrigan himself whether he thinks there was the slightest chance that I—when I was the official through whose hands all that correspondence passed, and knowing very well that this regulation had not been altered—I would have dared to say that it had?

Sir J. D. Corrigan: I do not think you understand what I said. I said that in 1862 and 1863 you said exactly what you have stated now again in 1865 and 1866, and particularly in the last year—you distinctly said to me it was incorrect, and that it was an error of Churchill's.

Dr. Christison: Last year was the first time I made that statement, and it was the first year in which I could have made that statement. I am perfectly certain that I cannot have made that statement before.

Sir J. D. Corrigan: Then I will say a year ago, and that is sufficient for my purpose.

Dr. Christison: Then it comes to this, that Sir Dominic Corrigan's memory is not so good as he would have us to believe.

Professor Syme: I do not think it necessary, after what Dr. Christison has said, to go into any explanation with regard to what I may call the apology for an explanation which Sir J. D. Corrigan has offered, but I must allude to his remarkable statement that five years ago he had been constantly met with the assurance that it was an error of Churchill's.

Sir J. D. Corrigan: I did not state so.

Professor Syme: I appeal to the Council. He said he was constantly told it was an error of Churchill's.

Sir J. D. Corrigan: I did not say any such thing.

Professor Syme: Pardon me—I appeal to the gentlemen present.

The President: In his first statement he said he called your attention to the regulations of the University of Edinburgh with regard to this phrase, and that the answer was that steps would be taken to alter it.

Dr. Paget: My recollection of what Sir J. D. Corrigan said is the same as the President's.

Professor Syme: I will not follow Sir J. D. Corrigan through his statements. I rely simply upon this, that upon a question as to the regulations of the University of Edinburgh as stated by Dr. Christison and myself, he has stated that he prefers a printed statement in Churchills' *Directory* to our word. I feel, for my part, that this was a most unwarrantable imputation on our veracity, and, considering that veracity is essential to all men who wish to be considered gentlemen, and most especially men holding the honourable position which we do at this Board, I ventured to hope that he would have expressed some regret which would enable me to act along with him in carrying on the business of this Council. That was my object in bringing forward this matter, and I feel that I have done all I possibly can to attain that object.

The President: Now we will proceed to the programme of business for to-day. The first item is a report by the Pharmacopœia Committee.

Dr. Quain: I move that this report be handed in and placed on the programme for Monday.

Dr. Quain handed in the report accordingly.

The President: We shall proceed now to the adjourned consideration of the second recommendation of the report from the Executive Committee—"That the Committee in that capacity should consider and prepare reports upon any subjects that may suggest themselves to the Committee, or may be suggested to them by the Branch Councils, as requiring the attention of the General Council."

Dr. Andrew Wood: I wish, with the permission of the Council, to leave out those words "in that capacity," they being no longer necessary, the first recommendation having been negatived.

Dr. Alexander Wood: So you deprive the Committee of its capacity! (A laugh.)

The President: Gentlemen, I think, as an *ex officio* member of the Executive Committee, before we proceed to the consideration of this second clause or recommendation of the report, I should like to state to the Council generally that it gave me some little pain, when we came to discuss the first recommendation, that such an extreme jealousy was still exhibited towards the Executive Committee and its proceedings. Because I confess I had hoped that when we adopted the wish of the Council last year, by enlarging the Executive Committee and admitting into the body representatives of the Scotch and Irish Councils, that it would have commanded the confidence of the Council more perfectly, and to a fuller extent than it had done before, when it was formed exclusively of members of the English Branch Council. The Executive Committee as it is now composed merely brings before you the consideration of recommendations by individual members of the Council who take an interest in our proceedings, and are anxious to see the business conducted with greater order and success. These recommendations, I say, come from independent members of the Council, and the subject was forced upon the Executive Committee, and being so forced upon them, it was their bounden duty to give it their best consideration and offer any suggestions to the Council that seemed to them under the circumstances likely to effect the purpose in view—namely, that of advancing the progress of the business. And on further consideration I trust there will not be the same kind of jealousy exhibited towards the Executive Committee, as though this was a thing which they wished to thrust upon the Council. If it does not fall in with the feelings of the Council generally, I am sure the Committee will be most willing to withdraw a part, or even the whole of it, because it does not come from them, except as a matter of duty. I must tell you, however, I am not authorised by the Committee to say that they are willing to withdraw this, because it is the result of their calm and careful consideration, but I only say in their name that the Committee do not feel themselves so pledged to it as if it were their own child, if I may use the expression; and if the Council do not like these suggestions, the Executive Committee would not feel themselves aggrieved if they were negatived.

Mr. Hargrave moved that the recommendation be adopted.

Dr. Fleming seconded it.

(To be continued.)

M. Nélaton's Election into the Académie des Sciences.—As our readers are aware, the section of Surgery and Medicine presented its list of candidates for the place left vacant by the death of M. Jobert, having at its head the names of MM. Guérin and Sédillot. The Academy, on Monday, did not accept this disposition. There being 58 voters present, a majority of 30 was necessary for success. At the first ballot M. Laugier obtained 20, M. Sédillot 13, M. Guérin 13, and M. Nélaton 12 votes. At the second, M. Laugier 21, M. Nélaton 18, M. Guérin 10, and M. Sédillot 9. At the third, M. Nélaton obtained 32, and M. Laugier 26 votes.

Lady Practitioners in the United States.—The Medical Practitioners in the United States seem determined to make a stand against the encroachments of the ladies. The Harvard University authorities have rejected the application of two ladies to be admitted as students in the Medical school; and the Philadelphia County Medical Society, after a protracted discussion on the relations to be observed between its members and lady Physicians in Philadelphia, unanimously adopted the following resolution:—"That, in conformity with what they believe to be due to the Profession, the community in general, and the female portion of it in particular, the members of this Society cannot offer any encouragement to women becoming Practitioners of Medicine, nor, on these grounds, can they consent to meet in consultation such Practitioners."—*Boston Journal*, April 25.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0

Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

Terms of Subscription for India, £1 15s. per annum.

The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.

Post-office Orders and Drafts on Army or Navy Agents, should be made payable to Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d.	A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d.	A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, JUNE 8, 1867.

THE GENERAL MEDICAL COUNCIL.

On Wednesday, the 29th ult., the General Medical Council met for their annual session, and, as they are still without a local habitation of their own, they were again housed by the courtesy of the Royal College of Physicians. After the introduction of the new member, Dr. Risdon Bennett, representative of the London College of Physicians, the session was opened with an excellent, clear, and business-like address from the President. This has, doubtless, been very generally perused, and all probably will allow that the President was justified in congratulating the Council on the value of the three great subjects that have for long chiefly occupied their attention, and on the success that has resulted from their labours. The importance and value of the enforcement of a good preliminary examination in subjects of general education cannot easily be overrated; the establishment of visitations of examinations has already been productive of great good, and we have now a really admirable national Pharmacopœia. The Profession at large will heartily endorse the President's tribute of praise and thanks to Dr. Quain and Professor Redwood for the untiring labour and care they bestowed on the production of this work. A considerable part of the President's address consisted of an account of the way in which he had, most faithfully and energetically, carried out the wishes of the Council in pressing the Medical Acts Amendment Bill on the attention of the Government, and of the way in which the Government had, or rather had not, met him. In conclusion, the President remarked that he trusted that the discussions of the Council would be conducted with calmness and dignity, and their observations be made "with conciseness of diction and courtesy of manner"—remarks which it might have been hoped that every member of the Council would have kept faithfully in mind for some time at least, if not throughout the session, but which, alas! in some instances, seem to have fallen on very stony ground.

The discussion of Mr. Walpole's letter, on which we commented last week, and the reply of the Council, consumed a very considerable part of the first and second days of the session. The late Home Secretary had, undoubtedly, been overburdened by the cares and anxieties of office, and he had unhappily also been suffering from ill-health; but all this, however far it may excuse, cannot justify his treatment of the General Medical Council. In his behaviour to them, and, through them, to the whole Profession of Medicine, he seems to have laid aside even the courtesy and amiability for which, at least, his greatest detractors have always given him credit. We are glad this week to enable our readers to contrast with his letter the dignified and courteous answer of the Council; it will, perhaps, recall the right honourable gentleman to his better self. But we must venture to express a hope that we shall not have to depend in any degree on his services in the future, such great, urgent, and constant pressure is required to excite and keep him up to any definite course of action.

The name of a Mr. John Forman, of Fettercairn, was ordered to be erased from the Medical Register, "it having been proved to the satisfaction of the Council that the entry of his name was fraudulently made." This gentleman seems to be "considerable smart." Having had notice that the Council were about to investigate a statement that he had been registered in Scotland, on the strength of a false affidavit that he was a member of the Royal College of Surgeons of England, he coolly replied (May 27) that he had no evidence to adduce in his favour; that he could only suggest that the date of the diploma might have been wrongly recorded, but that he must bow to the decision of the Council. He then applied, as Mr. John Forman, of Carmlington, a registered Practitioner, for a special examination at the Edinburgh College of Physicians, and on May 29 he was examined, and admitted a Licentiate of that College! On the Secretary of the College asking for his diploma, "he stated he had left it at home, but he produced his certificate of registration as M.R.C.S. Eng., signed by Dr. Robertson." He is not likely to enjoy his ill-gotten diploma long, as Dr. Alexander Wood, the representative of the College in the Council, has already moved the authorities of the College to demand the diploma back on the ground that it was obtained by false pretences. It does not seem easy to altogether acquit the College of carelessness; at least the subject is, as Dr. Alexander Wood observed, "an unfortunate one." Mr. Hargrave was "curious to know" whether, if Mr. Forman lost his diploma, he would get back his double fee for the special examination; and the "unfortunate" business gave occasion for a tirade from Sir Dominic Corrigan, whose tender regard for the Edinburgh Colleges and their representatives compels him to an unsparing, never-sleeping application of the lash.

A report from the Executive Committee on some standing orders for regulating the discussion of reports, proposed by Dr. Alexander Wood, was considered. It was very short, and was against the adoption of the propositions, but it made Dr. Alexander Wood very wroth—not, he declared, with the rejection of his proposals, but because the Committee had been foolish enough to give a reason for that rejection; whereupon he fell fiercely upon the said reason, mauled it with great zest, lauded the resolutions, and insisted on their absolute necessity, and finished by moving that the report be rejected, and the resolutions added to the standing orders. The expression employed by the Committee—viz., "that the said resolutions were unnecessary, because they give to the members of the Council no powers which they do not already possess"—was not the happiest possible, certainly, as the "powers" of the Council are derived from this Act of Parliament, but the meaning was sufficiently clear; they considered that all the rules of procedure contained in these resolutions were already in force in the Council, and that therefore, however good they might be, they were superfluous. The Council thought so too, and adopted the report.

The last business taken on the first day of the session was the consideration of another report from the Executive Committee. It had been remitted to them last session "to consider the whole form of procedure hitherto followed in conducting the business of the Council, and to report on the first day of next session any alterations which, in their opinion, would tend to expedite the transaction of business;" and in this report they recommended the adoption of a series of resolutions which they believed would expedite the business of the Council, and tend to shorten the length of its sessions. The report excited a considerable amount of opposition. It will

be remembered that last year the Executive Committee was enlarged by the addition of one Scottish and one Irish member, some degree of jealousy having arisen from its having hitherto consisted of English members only. Dr. Alexander Wood now objected to its recommendations on the ground that it was trying to establish an *imperium in imperio*, and to absorb into its own hands all the power of the Council, and he moved the rejection of the report. It was, however, determined to discuss its resolutions *seriatim;* and the first, which was "That it should be delegated to the Executive Committee to act as a Business Committee during the recess," was negatived as being "a pure surplusage." The Council then adjourned, and the rest of the report was discussed on Saturday, the fourth day of the session, when another of the Committee's propositions was rejected, and two were amended; and then the amended resolutions, reduced from six to four, were adopted and incorporated with the standing orders. These, as passed, will be found in our report of the daily proceedings of the Council. They will no doubt facilitate the progress of business. The original resolutions proposed that the Executive Committee should prepare for the Council reports on subjects suggested to them by the Branch Councils, as well as on such subjects as they might themselves think requiring attention; and, further, that any members of the Council who wished to bring propositions before the Council should first submit them to the Executive Committee. These were rightly rejected, we think; they would have greatly increased the labours and enlarged the power of the Executive Committee, while interfering with the rights, and perhaps lessening the sense of responsibility, of the individual members of the Council.

On Saturday, also, reports were received from the Branch Councils. They had been requested to report to the General Council "as to whether the column headed 'Place of Study' in the form of register of Medical students now adopted, should, in future, define more clearly the manner in which it is to be filled up," and, if so, how. The Branch Councils all reported against the necessity of any alteration.

A letter, with accompanying resolutions, from the President of the British Medical Association to the President of the Medical Council, was received, and ordered to be entered on the Minutes. The Association wishes to support the General Medical Council in their efforts to amend the Medical Acts, and to improve Medical education; and the Association thinks that the constitution of the Council ought to be amended, "so that the great body of the Profession should be fairly represented."

Having thus given the results of the Saturday's sitting, we will now notice the rest of the business—most of it of a highly important character—transacted on Thursday and Friday.

Dr. Alexander Wood moved, "That a committee be appointed to take into consideration and report how the Council can best deal with the whole subject of preliminary examination, and that the committee so appointed be requested to report during the currency of the present session." Not a little doubt as to what Dr. A. Wood wanted the committee to do seemed to prevail in the Council, and caused a lengthy discussion, in the course of which Sir Dominic Corrigan made more than one very characteristic speech; but Dr. A. Wood explained that he did not wish the committee to upset all that has been done by the Council in the subject of preliminary examinations, but "to apply its powers to show how the recommendations of the Council can be better carried out, or even improved;" and in the end the committee was appointed. Several members of Council bore witness to the improvements observable in the general attainments of Medical students. Dr. Stokes especially declared that there "has been a wonderful improvement in the general knowledge of students—in their attainments in English, in Latin, and in French; and, more than that, there has been a wonderful improvement in the earnestness with which they have applied themselves to their work"—an excellent proof, we may add, of the improved character and extent of their preliminary education.

Dr. Andrew Wood proposed the appointment of a committee "to consider and report upon the minimum of Professional study to be gone through by all persons seeking entrance into the Medical Profession, in order to secure the possession by them of the requisite knowledge and skill for the efficient practice of their Profession." It may, *primâ facie*, seem to our readers that this is not only a very proper subject for the Council to take up, but a subject upon which it is imperative that they should legislate. But some of the members of Council determined that Dr. Wood intended the committee to interfere with the curricula of the schools, and to lay down a pattern course of Professional study; and, holding that this would be mischievous or useless, or both, Sir Dominic Corrigan moved and carried, as an amendment, a resolution, "That it is not advisable to enter on the consideration of what ought to be the course of Professional study to be gone through by all persons seeking entrance into the Medical Profession." When this was put as a substantive motion, Dr. Risdon Bennett moved, "That the Council having decided what should be the extent and character of the preliminary examination, it is incumbent on them to consider and report on the amount and character of Professional study absolutely necessary," etc., and that a committee be appointed for that purpose. This also was greatly objected to. It was said that the resolution confounded together examination and study, and that the Council had not decided on the extent and character of the preliminary examination, but only recommended a minimum of subjects for that examination; and the amendment was finally negatived by the casting vote of the President, who explained that he gave his vote against it in the hope and belief that some other amendment more generally acceptable to the Council might be proposed. Dr. Quain then moved "That a committee be appointed to consider and report to the Council what are the subjects without a knowledge of which no candidate should be allowed to obtain a qualification entitling him to be registered." This, having been carried, was then put as a substantive motion, and agreed to.

We congratulate Dr. Quain on his success in framing a resolution so narrowed and rounded off that the most sensitive representative of a teaching body could hardly refuse it; it was carried by seventeen to three; some members apparently did not vote—a weak negative of their position; Sir J. D. Corrigan voted in the minority, not because he was opposed to the sense of the resolution, but because he thought it was not, properly speaking, an amendment to his own motion. The President had objected to the form of Sir Dominic's motion when put as an amendment, but that irrepressible gentleman insisted on its being put, and now, having vainly tried to "insinse" the chair into rejecting Dr. Quain's amendment, he sulked into the opposition. The two other votes in the minority we cannot explain.

The last very important subject we shall notice, as having come before the Council during these four days, is Dr. Andrew Wood's motion to refer the reports of the visitations of examinations during the past two years to a committee, who shall carefully go through them, and bring up, during the present session, "a report embodying such recommendations, founded on the various suggestions made by the visitors, as may tend to improve generally the examinations for the licence to practise Medicine and Surgery, and to remedy the defects in particular examinations which have been pointed out by the visitors." This was carried, and an instruction to the committee "to report on the best means of supplying the few omissions in the reports of visitations of examinations," was afterwards voted.

A committee was also appointed "to prepare a scheme for the visitation of examinations next year, and especially to consider the best means of supervising the Arts Examina-

tions." The discussions on these various resolutions were most unnecessarily lengthy; and bad as that is, we are sorry to say it is not their worst fault. Some very good and able speeches were made, but much of the debate was conducted in a style which, though it may amuse, certainly will not tend to raise the Council in the respect and regard of the Profession. Sir Dominic Corrigan was the greatest offender; he refused, in the very plainest terms, to accept a positive statement made by Dr. Christison and Mr. Syme in correction of a portion of the regulations of the Edinburgh University, as printed in Churchills' *Directory;* and notwithstanding that the feeling of the Council was strongly against him, and that the President told him that "it was incumbent on him, after Dr. Christison's and Professor Syme's statements, to rise and say he of course accepted their authority in preference to that of Churchills' *Directory*," he not only declined doing so, but he more than once reiterated the offensive statement. We cannot but think that he is altogether inexcusable. We are certain that if any one of the English or Scottish members had allowed himself, in the heat of debate, to make such a declaration as Sir D. Corrigan did, he would at once have bowed to the authority of the chair, even if he had not withdrawn his words previously. Sir Dominic's meaning—that documentary evidence, if he must insist on applying that term to Churchills' *Directory*, should be met by documentary, not verbal evidence—could easily have been put in an inoffensive form; and the moment it appeared that the expressions used were personally offensive to any of his colleagues, Sir Dominic ought to have felt it his duty as a member of the Council, and his privilege as a gentleman, to withdraw them and apologise.

The indiscretion of Dr. Alexander Wood in the remarks he made on the Irish reports of visitations of examination led to not a little of what we must call unseemly recrimination, and almost squabling, between him and some of the Irish members. We noticed these reports last week, and will not now speak again of their defects, or of the impracticable behaviour of the Irish members of the Council with regard to the visitations. Ample testimony is borne by the English and Scottish members of the Council as to their value, and the admirable way in which examining bodies have accepted and acted on the suggestions made by the visitors; but all this is ignored by the Irish members. They had declared the visitations would be a humbug, and they are not to be moved from that declaration, and they either refuse to visit, or do so in what appears to us a very imperfect manner. But after the quiet and impressive way in which the defects of the Irish reports had been noticed by the President and one or two of the members of Council, to criticise them further and more in detail was unnecessary, undignified, and useless.

The immense demand made on our space by the Council reports prevents our carrying even this kind of summary of the proceedings beyond Saturday; but we are able to add that Mr. Walpole referred the Council, on the subject of the Medical Acts Amendment Bill, to the present Home Secretary, Mr. Gathorne Hardy, an interview with whom was asked and granted; and on Thursday forenoon a deputation, consisting of the President (Dr. Burrows), Dr. Paget, Dr. Andrew Wood, Dr. Christison, Dr. Apjohn, and Mr. Cæsar Hawkins, waited on the Secretary at Whitehall. Mr. Hardy listened to the statements made by the President and others with very great attention, but was unable to promise more than to give the matter his best consideration, owing to the press of work to be got through this session. He also explained that the former Bills were not strictly Government Bills, although introduced by members of the Government, certain steps not having been gone through in connexion with them. In accordance with this decision of Mr. Hardy, the power of taking any steps in the matter of the new Bill has been relegated to the Executive Committee of the Medical Council.

THE VACCINATION BILL.

A MEETING of the Parliamentary Committee of the Metropolitan Counties Branch of the British Medical Association was held at 37, Soho-square, on the 28th ult., for discussion on the registration clauses of the Vaccination Bill. Dr. Gibbon stated very fully his objections to these clauses, which, amongst other things, would, he said, inflict the greatest injustice and indignity on Medical Practitioners, who are required, under penalty, to fill up and send certificates for the compilation of the cow-pox register, without fee or reward. He reminded the Committee that last year they had unanimously decided to oppose the whole system of vaccinatory registration on the grounds of its practical inutility, its cost, its infliction of unprofitable labour on the Profession, and its probable discouragement of vaccination. He, therefore moved that the Committee endeavour to get all the Clauses 21, 22, 23, 24, 25, and 29 of the present Bill struck out.

Dr. Seaton repeated the arguments in favour of these clauses which have already appeared in his recent letter to the *Medical Times and Gazette*. Mr. Bottomley contended that vaccination ought to be treated as an imperial national matter, and no longer left in the hands of boards of guardians.

Dr. Farr said he had attended on the invitation of the Committee to state the views of the Registrar-General on the clauses under discussion. With the utmost possible desire to promote vaccination, and to co-operate with the Profession in any of their efforts for the public good, the Registrar-General felt himself bound to oppose the vaccination register and its attendant certificates, which had hitherto failed utterly, and which, even supposing it possible to make the register complete, would not produce results at all commensurate with the labour, risk (of discouraging birth registration as well as vaccination itself), and expense to be incurred. The registers will be of little or no statistical use. The whole of the information required may be got from the lists of the public vaccinators, supplemented with such additional information as could be procured periodically from private Practitioners, who would, no doubt, be willing to keep a list of their cases and supply returns for moderate fees. The success of the Act in Scotland, on which so much stress is laid, arises no doubt partly from the better education of the people, the compulsory registration of births, and the simple form of vaccination register adopted, so different from the system proposed for this country; but from the numbers returned Dr. Farr could not help concluding that the absence of any provision for the verification of success admitted of the frequent use of "vaccination" and "successful vaccination" as convertible terms. There are difficulties in the way of adopting even the Scotch system in the large town districts of England, in consequence of the birth registers passing so quickly out of the hands of the registrars into the custody of the superintendent registrars. The simplest course is undoubtedly to abolish the registration of successful cases altogether, which would save expense, and free the Profession from the incidence of vexatious penalties for not giving worthless certificates. Dr. Farr hoped it would be understood that in offering these remarks he was not in the least degree questioning the value of the services rendered by Mr. Simon and his colleagues in promoting and improving our system of vaccination.

Mr. Ernest Hart made an appeal to the Committee *ad hominem*, and thought it would be undesirable they should come between the Medical advisers of the Government and the Legislature, unless they were quite certain they were right and Mr. Simon and Dr. Seaton wrong. He thought the responsibility of the measure should be left with those who seemed confident of the necessity of registration. Dr. Gibbon's motion was ultimately lost by four votes against two, the vote of Mr. Bottomley, who had seconded the motion, having been

claimed against it on the ground that he had approved of the Scotch system.

A resolution was then carried—"That if vaccination be registered, it should be by simply entering the fact—as under the Scotch Act—in a column of the birth register." And finally it was decided that the Committee should endeavour to obtain an alteration in Clause 29, relating to penalties on Medical Practitioners for not filling up and sending vaccination certificates.

THE WEEK.

TOPICS OF THE DAY.

The mild degree of excitement caused by an election into the Council of the College of Surgeons affords a refreshing relief after the din and dust of Medical politics raised by the meeting of the Medical Council. The names of the candidates, which we give in another column, are amongst the best in the Surgical Profession in London. For ourselves, we think it only fair that the Fellows by examination should have some representation in the Council of the College; and, if this be conceded, we do not know who would represent them better than the accomplished anatomist and courteous gentleman who teaches anatomy at St. Bartholomew's. In saying this, we do not in any degree disparage the fitness or overlook the claims of other gentlemen. Messrs. Prescott Hewett, Spencer Smith, Birkett, and Erasmus Wilson are too well known to require any recommendation from us. Neither must we overlook the fact that the original "honorary" Fellows are not so by any defect, as if they shirked examination. Moreover, some of them, as Mr. Erasmus Wilson, passed a special examination for "Teachers of Anatomy," which was instituted some years ago at the College. Where the claims of rival candidates are so high, and, although different, so equally balanced, the contest cannot fail to be an interesting one. As there are three vacancies, there is no reason why all parties should not be fairly represented.

We fear that the chief business of one of our Medical contemporaries—that of issuing commissions—must be in a languishing state. There must be a great dearth of subjects of inquiry, or otherwise a journal having the smallest pretension to a scientific standing would not have thought it worth while to send a special commissioner to look after the ghost in Woburn-square, and the crowd of dirty little boys thither attracted. Of course, the effect of our contemporary's commission has been to increase the popularity of the ghost and the annoyance of the respectable inhabitants of the square. "The *Lancet* Commission investigating a Ghost" would be a good subject for Mr. Stacey Marks. The gravity of the commissioner, the awe and curiosity of the servant-maids, and the intense delight of the little boys would make a grand tableau.

The *mot* of the Parisian," that England was a country where the inhabitants have forty religions and only one soup," might be capped by the contents of a document lately drawn up for the information of the Medical Council. From this it appears that there are no less than fifty-three British degrees, fellowships, memberships, and licences to be obtained from Medical examining bodies, which may be registered under the Medical Act. Much, of course, may be said for this state of things; variety is charming, competition is healthy, and toleration is an English virtue; but certainly it would prove rather perplexing did the general public take any interest in the grades and qualifications of the Profession.

The unveiling of the statue to Lord Herbert, which took place on Saturday last, has been accompanied by an almost universal expression of praise and reverence for the memory of that patriotic, hard-working, single-minded statesman. Lord Herbert appreciated the value of Medical science. He had the opportunity of putting in practice the principles he had learned from Medical teaching; he seized that opportunity, and carried out his purpose, and the standing result is, that the mortality of the British army on many stations has been reduced 50 per cent. The work of the mere politician fades out of sight by the side of such an achievement.

The House of Commons have determined to have entirely new plans for the buildings of the University of London. We congratulate the Senate of the University on their triumph, and we hope that their efforts will be rewarded by a thoroughly beautiful as well as useful building. But we confess our predilection for Gothic; surely we have already in London enough copies of an architecture which was never intended for northern skies.

THE QUEEN.

Not many days since, a paragraph, purporting to be copied from a Devonshire newspaper, was admitted into the *Times*, to the effect that the Queen had accumulated a very large sum of money through her comparative retirement from the more festive and social duties of public life during her widowhood, and that she intended to devote the money so saved to the foundation of a Convalescent Hospital, the management of which was to be confided to the Governors of St. Bartholomew's Hospital. Any one accustomed to mix in London society must have heard the same story, in different shapes, any time during the last four years; its sting lying in the twofold accusation that the Queen inexcusably neglects her social duties, and that she has saved a large sum of money by so doing. As for the alleged saving, people who may be supposed to be competent judges declare the thing impossible; and as for the alleged neglect, it is the opinion of at least some persons about the Queen that she takes as large a share in public life as her health enables her to do. Reports—studiously offensive and disparaging ones, such as those we have referred to—are generally originated amongst, and circulated by, a portion of the aristocracy that is by no means the most dissinguished for its conduct in private or public life. On the part of the Medical Profession, we can say that we are too well content with the state of political security which England enjoys, to join in throwing about such firebrands as these insinuations are meant to be. We want a Sovereign—herself a permanent institution—not a Yankee President elected amid periodical hubbub, and cast aside like a squeezed orange. But if we have a Sovereign, we must put up with the conditions from which no humanity is exempt; we must recollect that a highly organised nervous system, constantly working under anxiety, and once submitted to the shock of the bitterest grief, may render certain public functions impossible which would be matter of the merest routine to one younger, happier, and less exhausted. It is quite true that a convalescent institution in connexion with St. Bartholomew's is about to be built; and it is said that the Queen will contribute handsomely and will devote to it the proceeds of a publication which she is about to issue. This is the grain of truth in the above story.

CASE OF ASIATIC CHOLERA.

We regret to hear that a patient under the care of Dr. Ramskill, suffering from Asiatic cholera, is now (Thursday afternoon) in the London Hospital. The man, 45 years of age, attended as an out-patient on Tuesday last for diarrhœa, from which he had suffered two or three days. He was blue, shrivelled-looking, and his pulse could scarcely be felt. After admission he was better, but subsequently he had more severe symptoms—viz., pulselessness, rice-water motions, low temperature (in the axilla, 94°), and vox cholerica. When Mr. George Mackenzie, the Resident Medical Officer, drew our attention to the case, the patient's pulse had returned, and he was altogether better. Still the issue of the disease is doubtful, for we know that when the more characteristic

symptoms of cholera have passed off the patient not unfrequently dies in reaction. We trust that by the help of Mr. George Mackenzie, who has supplied us with the above and with other facts relating to the case, we shall be able to give a more full account of it next week.

DR. RICHARDSON'S LECTURES.

Dr. Richardson gave the third of his course of experimental and practical lectures on Tuesday, June 4. His audience was numerous and good, comprising Sir T. Watson, Bart., and several English and foreign Physicians of distinction. The demonstration of the effect on cold on the spine of the frog in stopping the action of strychnine, and of the impossibility of applying cold effectively to the human spinal cord, was very perfect. The lectures will be resumed in October. We shall lay this third lecture before our readers immediately.

THE LOCK HOSPITAL.

On Saturday last the new wards of the Female Lock Hospital were opened by his Royal Highness the Duke of Cambridge, the President of the Charity. The number of beds will thus be greatly increased, but not nearly as much as is really wanted. The great benefits which have accrued from the working of the Contagious Diseases Act at Woolwich and elsewhere are most encouraging; but, to carry out fully the provisions of this Act, large Hospital accommodation is requisite, and a considerable portion of the new building will, therefore, be devoted to the Government patients. Further, as there are no venereal wards in many of our workhouse Hospitals, a considerable proportion of the beds at the Lock are usually filled with paupers, thus still further diminishing the space available for casual patients. The amount of good done by the charity might accordingly be very largely increased, but funds are necessary for such a purpose, and we think that as the nature of the charity precludes many of the endeavours used in behalf of others, our readers might do well to direct the attention of charitably disposed persons to the subject. We do not think that the attention of the governors should be too strictly limited to Westbourne, for the addition of a few beds for female patients to the Dean-street establishment is calculated to do much good. There are many cases which come under treatment there not of such a serious nature as to demand admission into the Westbourne establishment, crowded as it is with cases of the worst description, but yet likely to be benefited or completely relieved by a day or two's stay in Hospital. For such, the few beds we have spoken of would be a very great boon. The out-patient department also requires remodelling; the number of patients, especially males, is almost too great for one man to see, and the rate at which the visit must be hurried over is conducive to the good of neither Surgeon nor patient. In fact, we think it is a matter for consideration whether it would not be beneficial to increase that portion of the staff. The whole subject is one of much importance to the country; and until Government fairly takes the matter into its own hands, an institution which does so much good should not be lost sight of in any way.

SCOTTISH UNIVERSITY REPRESENTATION.

There seems little doubt but that Dr. Lyon Playfair will come definitely forward as a candidate, and that he will receive the support of the great bulk of the Medical and scientific graduates of Edinburgh and St. Andrews. Dr. Markham has declined to stand, and it is said that the Edinburgh University Medical Club will unanimously vote for Dr. Playfair. With regard to South Kensington and its politics, we believe that we may claim for Dr. Playfair a double distinction. On the one hand, his scientific knowledge and business habits gained for him the honour of the late Prince Consort's friendship and confidence a confidence testified by the fact that two of the Royal Princes were sent to receive part of their education at Edinburgh under Dr. Playfair. He assisted likewise in the formation of those admirable schools of science and art of which South Kensington is the centre. But whatever may be the truth of the popular notion that there exists a kind of mystical faction, who desire to plunder every national museum to enrich South Kensington, and to transplant every scientific institution to the same quarter, out of a sentiment of devotion to the memory of that truly illustrious Prince, we have good reason for believing that Dr. Playfair is no member of any such supposed faction, but fully exercises the right of independent judgment and criticism.

DR. MARCET'S PROCESS OF ARTIFICIAL DIGESTION.

We this week direct the attention of our readers to a pamphlet by Dr. Marcet which, like everything emanating from the same source, contains matter well worth general attention. Dr. Marcet first alludes to the importance of supplying nourishment in sufficient quantity to the system in cases where, from some peculiarity, the stomach is incapable of fulfilling its functions aright. Beef-tea and milk are often the only articles of diet the stomach will bear, and even the latter frequently disagrees, whilst beef-tea alone does not supply sufficient pabulum. It therefore struck Dr. Marcet that the process which naturally goes on in the stomach might be imitated artificially, and so supply the food in a partially digested condition. He, accordingly, took hydrochloric acid and some pepsine, added these along with water to a quantity of meat, allowing the whole to simmer over a water-bath at about the temperature of the body. When the meat was sufficiently broken up, it was strained and the acid neutralised by carbonate of soda, when it was ascertained that the product was of a most agreeable character, easily digestible, and containing a vast deal more nourishment than common beef-tea. The proportions he recommends are 58 grains of hydrochloric acid, sp. gr. 1·1496, in a pint (20 oz.) of water, with 15 grains of Boudault's pepsine, and 81 grains of bicarbonate of soda to a pound of meat (weighed raw), the chemicals costing about sevenpence. Where pepsine is unattainable, strips of calves' stomachs answer very well, or we do not see why the rennet prepared from it and used for curdling milk should not be employed. The food thus prepared keeps well until neutralised, but not so well afterwards. One point to be noticed is that no metallic vessel should be used in the process, lest the acid act upon it, but for full particulars we must refer our readers to Dr. Marcet's little work.(a)

FROM ABROAD.—DEATH AFTER ETHERISATION—DR. LOMBARD ON THE INFLUENCE OF TEMPERATURE ON MORTALITY—LIEBIG'S MILK.

The city of Lyons is, we believe, one of the two places in the world (Boston, U.S., being the other) which have issued their anathemata against chloroform, and declared that ether is the only orthodox and permissible agent for the induction of anæsthesia. Its absolute innocuity has been more than once declared, but a case recently brought under the notice of the Lyons Medical Society by M. Laroyenne shows that caution is requisite in making such statements. A woman, aged 48, and of weak constitution, was on May 1 brought under the influence of ether (forty grammes having been required to induce insensibility) in order that a Bonnet splint might be applied for the rectification of a vicious position of the lower extremity consequent upon old hip disease. Two or three minutes after the etherisation had ceased, the respiration became embarrassed, the lips pale, and the pulse insensible. Hanging down the head and cold aspersion of the face restored the patient, but scarcely had she been carried to her bed, a quarter of an hour after this first syncope, when another attack came on,

(a) "On a New Process for Preparing Meat for Weak Stomachs." By W. Marcet, M.D., etc. London: John Churchill and Sons.

and in spite of all the means that were tried, including artificial respiration and galvanism, she never rallied. At the autopsy the air-passages were found to contain mucosities, and the base of the left lung was hyperæmic, the pulmonary tissue itself being impregnated with the odour of ether. The pericardium contained a little serosity, and the heart was normal, having the ventricles empty, and the auricles gorged with blood. The nervous centres were healthy, exhaling a slight odour of ether. The spinal marrow was compressed by a mass of tuberculous matter, seated in the seventh and eighth dorsal vertebræ. Advanced disease of the hip-joint existed on the one side, while on the other the joint was filled with blood from a recent fracture of the neck of the femur. The ether employed was of more than 62°, and it contained no foreign substance save 3 per cent. of water.

At the discussion which followed, M. Delore observed that it was of importance to notice that, while chloroform kills by itself, in all the cases of death attributed to ether, the autopsies have always revealed organic lesions which have had much to do with the fatal termination. M. Laroyenne added that it is evident that the ether was not the sole cause of death in the present case, and that it acted by favouring the occurrence of syncope, to which the general weakness of the patient only too much disposed her. Such a syncope would not have occurred if the operation had been performed without etherisation. M. Guilleton observed that he had always found the ether used in the Hospitals very inferior to that employed in private practice. M. Icard considered that as now seven well-authenticated cases of death from ether have occurred in Lyons itself, its partisans should speak more guardedly, especially as only seven instances of death from chloroform have occurred in Paris during fourteen years. M. Gayet is of opinion that the examples of death from ether have been too carelessly examined, and that their true significance has been exaggerated. Even with these exaggerations, only seven deaths have occurred in about 8000 etherisations performed at the Hôtel-Dieu of Lyons during fifteen years. M. Desgranges analysed some of the cases referred to by M. Icard, with the object of showing that death was due to other circumstances than etherisation, similar deaths having been well known to Surgeons prior to the discovery of ether. At all events ether never kills with that suddenness observed in deaths from chloroform, and presents precursory signs capable of being utilised by the careful observer. Without declaring ether inoffensive, he cannot but regard it, when properly employed, as far less dangerous than chloroform. Above all things it should be administered slowly and gradually. M. Diday believes that the cases of death after etherisation hitherto met with admit of great doubt as to its being the cause of death.

The well-known statistician, Dr. Lombard, of Geneva, communicated an interesting paper at a recent meeting of the Académie des Sciences upon the influence exerted by atmospheric conditions upon mortality. He terminates with the following conclusions:—1. Cold increases the mortality of new-born infants, of very young infants, and of the aged, and that in a proportion decreasing with the age of young children, and increasing with the age of old persons. 2. Heat exerts a disastrous influence on infants aged from six to twenty-four months, who succumb in greater numbers in proportion as the country is more southern, and consequently hotter. 3. The power of resistance to atmospheric influences follows a progress increasing with age from the period of birth, attaining its maximum at between 20 and 40, and then diminishes in direct proportion with age. 4. Marsh emanations exercise a great influence on the distribution of mortality. They constantly diminish the power of resistance to atmospheric influences, so that, in marshy regions, children from one month to 10 years of age succumb in greater numbers during the hot season; and if this influence appears less considerable between the 10th and 40th years, after the latter age it manifests itself with an increased intensity, but in an inverse direction, cold now exercising its greatest ravages, and the power of resistance to its influence diminishing gradually in direct proportion to age, and with so much the more intensity as the country is more marshy and its latitude more southern.

Baron Liebig, in relation to the discussions which have lately taken place in France upon the faulty diet and great mortality of young infants, called the attention of the Academy of Sciences to the value of his artificial milk as a substitute for the maternal fluid. He observes that facts collected in Germany amply prove that infantile mortality is highest in those regions in which the mother is obliged to labour towards the support of the family. Thus in the fertile plain situated between the Black Forest, the Oderwald, and the Rhine, the mortality is from 15 to 18 per cent. for the first year, while in the mountainous parts of the Black Forest, where the means of existence are difficult, it rises to 42 per cent. The same progression is met with in Bavaria. The ordinary mode of feeding children by a pap made of wheat flour and milk is one of the causes of such mortality, for the flour exhibits an acid reaction, and after incineration leaves acid phosphates, so that alkali in sufficient quantity for the formation of blood is wanting. The following is the formula which Baron Liebig finds best suited to produce a good artificial milk:—Boil 16 grammes of wheat flour in 160 grammes of skimmed milk until the mixture is transformed into a homogenous pap. Remove it from the fire and immediately add 16 grammes of malt (coarsely ground in a coffee mill) mixed in 32 grammes of cold water and 3 grammes of a solution of bicarbonate of potass—2 parts of bicarbonate to 11 of water. Then put the vessel in hot water, and stand it in a hot place until the pap has lost its consistency and become liquid as cream. At the end of fifteen or twenty minutes separate by means of a fine sieve the fibrous substances of the malt, and the deposition of such of these as remain in a state of suspension should be secured by letting the milk stand for a while before administering it to the infant. Artificial milk so prepared contains plastic and respiratory elements pretty nearly in the proportion of 10 to 38, as in woman's milk. When boiled it may be preserved for twenty-four hours in summer, and it is twice as concentrated as woman's milk. It is an interesting fact that when this milk has been prepared with soda in place of potash it loses much of its useful properties and disorders the child's economy. Drs. Walther and Hecker, of Munich, state that Baron Liebig's milk has been administered with great success in cases of dyspepsia and in diseases of the stomach in adults. The milk may now be had in Tichbourne-street, London.

PARLIAMENTARY.—MEDICAL OFFICERS ON THE WEST COAST OF AFRICA—THE CATTLE PLAGUE—YELLOW FEVER IN THE MAURITIUS—RATING OF CHARITIES.

On Thursday, May 30, in the House of Commons,

In reply to Mr. O'Reilly,

Sir J. Pakington said that Medical officers who had volunteered for service on the West Coast of Africa before April 1, 1867, would preserve the advantage guaranteed to them by the Medical Regulations of 1860, under which they volunteered—namely, "every year of service on the coast to count as two years for promotion and retirement." All Medical officers who volunteered to go to Africa came under the restrictions that "each year of such service shall be allowed to reckon towards promotion and retirement as two years of ordinary service, but it shall not so reckon towards increased pay or qualification for the rank of Surgeon-Major."

Sir W. Bagge asked the Vice-President of the Council whether, in consequence of the recent outbreaks of cattle plague in the metropolitan dairies, the Government would revoke the licence for the removal of foreign cattle from the ports of Harwich, London, and Southampton to the metropolitan market, and order all such cattle to be slaughtered at the place at which they are landed.

Lord R. Montagu replied that to revoke the licence would be a very extreme measure, and if suddenly resorted to would cause a great disturbance of trade. An Order in

Council was, however, passed the day before yesterday which went more than half-way to such a measure. After June 18 all imported cattle must be landed and placed in quarantine for twelve hours, so that the officers would have full opportunity of ascertaining whether the animals had the cattle plague or not. If they were found to be healthy, they would be sent to London by railway only, and immediately slaughtered there. Of course, after June 18, cattle could not be landed except at ports where there was sufficient accommodation for the quarantine and convenient slaughter-houses.

Mr. J. A. Smith asked the Under-Secretary of State for the Colonies whether the statement which has appeared in several of the papers in reference to the outbreak of yellow fever in the Mauritius is well founded; and, if so, whether the unusual rate of mortality reported had occurred; and whether any steps have been taken to draw the attention of the Government to the possible extension of the disease to India.

Mr. Adderley, who was almost inaudible, said that no dispatches had been received on the subject. The information referred to had been brought by private letter, by the French mail; and official despatches were expected every hour. He was afraid that the information was too true. He had received an extract from a private letter fully corroborating what appeared in the papers. It stated that the mortality was very great, the deaths numbering 250 a day. He believed that no fever ever appeared east of the Cape until now. Every means had been taken to mitigate the ravages of the disease. Troops had been moved, and there had been very little mortality among them.

Sir S. Northcote added that no information on the subject had been received at the India Office, but, attention having been called to the matter, he had telegraphed to the Governors of Madras, Bombay, and Bengal, directing that all necessary precautions should be taken; and he was sure that measures would be adopted for enforcing quarantine and preventing the introduction of the disease into India.

In answer to Mr. Bromley, Mr. Hardy said that the subject of the rating of charities and schools was under the consideration of the Government.

On Friday in the House of Commons, a vote of £15,000 to complete the sum necessary for the adaptation of Burlington House to the occupation of various learned societies was agreed to.

On the vote of £20,000 for the new buildings for the University of London, a resolution moved by Mr. Layard, condemning the two designs exhibited for these buildings, was carried by 52 to 46.

In the House of Lords on Tuesday the Contagious Diseases (Animals) Bill passed through Committee.

DINNER TO THE MEDICAL COUNCIL AT APOTHECARIES' HALL.

The dinner given by the Master and Wardens of the Society of Apothecaries to the General Council went off very pleasantly. Of course there was a good deal of speechifying, and abundance of civil things were said on both sides. Especially did the President of the Council, Dr. Burrows, dwell on the good work which the Society of Apothecaries had done during the fifty-two years they have possessed the legal right to examine. He said that if the body over which he presided continued to work for half a century, he only hoped that they would have as good reason to be proud of the retrospect as the Society of Apothecaries. Sir Dominic Corrigan, Dr. Paget, and Mr. Syme returned thanks for the Universities of the three kingdoms. Sir Dominic, who said he was affiliated by an honorary degree to the University of Dublin, and might consider himself one of the parents of the Queen's University in Ireland, made a graceful allusion to the motto of the Apothecaries' Society, "*Opiferque per orbem dicor*," and pronounced an eloquent eulogium on the cosmopolitan character of Medicine—a reflection of the lesson taught in that parable which, perhaps, had done more than any other parable to spread Christianity through the world, and which was recorded only by the Physician Evangelist—the parable of the good Samaritan. Dr. Paget, in the course of his speech, gave a capital sketch of Crane, the Cambridge Apothecary, who forestalled Sydenham in boldly introducing a cooling regimen in the treatment of small-pox, by which he brought the future Lord Clarendon, when Mr. Hyde, safely through an attack, and who, having enjoyed a large practice and amassed a large fortune, left a portion of it to the University of Cambridge to provide proper food, nursing, and Medical attendance for poor students in sickness. Professor Syme contrasted the present cordial meeting with the state of feud that used to exist between the Universities of Scotland and the Apothecaries' Company, and congratulated both parties on the change. Dr. Alexander Wood returned thanks for the Colleges of Physicians of the three kingdoms, and Professor Partridge, Dr. Andrew Wood, and Mr. Hargrave, for the three Colleges of Surgeons. Professor Partridge, in a humorous speech disclaiming the compliments paid his College by the Master, said that he could only offer to "blush vicariously" on their account. Mr. Hargrave referred to some early efforts of the Irish College to impose a preliminary education on all its members, and Dr. Andrew Wood expressed his sense of the gratification it would afford the body he represented to hear of the cordial feeling which this meeting symbolised. Professor Christison acknowledged the toast of "The Examining Bodies;" Dr. Parkes responded for "The Army, Navy, and Volunteers;" Dr. Quain returned thanks for "The Visitors of Examinations;" and Mr. C. Cooper for "The Visitors at the Dinner." We must not omit to add that the success of the evening was greatly due to the genial, kindly eloquence of the Master, Mr. Cooper, who presided. Altogether, it was certainly one of the most lively, pleasant, and, we may add, unanimous meetings of the General Medical Council it has been our fortune to witness, and an evening long to be remembered in the annals of Blackfriars.

MEDICAL NEWS.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 30, 1867:—

Charles William Chapman, Dalston; Philip Henry Mules, Cheddar, Somersetshire; Frederic Walter Smith, Brenchley, Kent; John Scott, 102, Lambeth-walk, S.; Geo. Henry Roqué Dabbs, Newport, Isle of Wight; Samuel Hyde Macpherson, Gayton, Lyme Regis.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Allt, Nathaniel W., L.R.C.S.I., L.K.Q.C.P.I., etc., has been appointed Acting House-Surgeon to the Royal South Hants Infirmary, Southampton, in the absence of W. Burt Shorto, Esq.

Bellamy, Edward, F.R.C.S. (Exam.), Demonstrator of Anatomy, Charing-cross Hospital, has been appointed Surgeon to the St. George's and St. James's Dispensary.

Buchanan, G., M.A., M.B., M.C., has been appointed Demonstrator of Anatomy in the University of Glasgow.

Carter, A. E., L.R.C.S.I., L.R.C.P.E., Senior Resident Surgeon of the Northern Dispensary, Liverpool, has been appointed Assistant Medical Officer to the Toxteth Workhouse, Liverpool.

Harding, T. H. G., L.D.S.R.C.S.E., has been elected Surgeon-Dentist to the Islington Dispensary.

Jackson, Hughlings, M.D., has been elected Physician to the Hospital for the Epileptic and Paralysed, in the room of Dr. Sieveking, resigned.

Mason, James, M.D., M.R.C.S. and L.M., and L.S.A., has been elected Surgeon-Accoucheur to the Sheffield Public Hospital and Dispensary, *vice* Samuel Lawton, M.R.C.S. and L.S.A., deceased.

Orton, F., M.B., has been appointed Resident Medical Officer at St. Mary's Hospital, Manchester.

Osborne, H., M.D., has been appointed Physician to the Islington Dispensary.

BIRTHS.

Barnes.—On June 1, at White Cliff Lodge, Freshwater, Isle of Wight, the wife of Dr. G. R. Barnes, of a daughter.

Barnes.—On June 4, the wife of J. W. Barnes, F.R.C.S., of Perry-hill, Sydenham, prematurely of a daughter.

Chambers.—On June 3, at 22B, Brook-street, Grosvenor-square, the wife of Dr. T. King Chambers, of a daughter.

Fegen.—On June 3, at 6, St. Jean d'Acre-terrace, Stoke, Devonport, the wife of W. B. Fegen, Staff Surgeon R.N., H.M.S. *Impregnable*, of a son.

Weaver.—On June 1, at Frodsham, Cheshire, the wife of F. P. Weaver, M.D., of a daughter.

Wilson.—On May 27, at 6, Montpellier-terrace, Cheltenham, the wife of E. T. Wilson, M.B. Oxon., of a daughter.

MARRIAGES.

Hamilton—Jeffray.—On May 29, at St. Mary's, Windermere, A. Hamilton, M.D., of Windermere, to Katherine, only daughter of the late Rev. L. W. Jeffray, M.A., Rector of Aldford, Cheshire.

HARRISON—BOXER.—On May 23, at Lancaster-gate Church, Bayswater, J. B. Harrison, M.B., to Roberta Spencer Thomson, fourth daughter of the late Admiral Boxer.

DEATHS.

CROOKE, E. G., M.D., at Park-road, Chorley, Lancashire, on May 21, aged 43.
RANKING, W. H., M.D., late of Norwich, on June 3, aged 53.
WARD, J. R., M.R.C.S.E. (formerly Battalion Surgeon, Scots Fusilier Guards), at Bicton place, Exmouth, on May 22, aged 87.

THE Princess of Wales is going on favourably; her general health is good, and the knee slowly improving.

THE EMPRESS CHARLOTTE.—It is stated in the *Gazette de France* that the Medical attendants of the Empress Charlotte have declared, as the result of their consultation, that their unhappy patient will never recover her reason, and that her life will be one of very short duration.

THE CASE OF JORDAN.—At the Marlborough-street Police-court, on Tuesday, Jordan was fined £20 *pro forma* under a summons taken out by the Royal College of Physicians, Edinburgh.

MEDICAL CHARITIES.—We have great pleasure in announcing that the late John Gott, Esq., of Armley House, Yorkshire, has bequeathed £200 to the Leeds Infirmary, and £100 to the Leeds Public Dispensary. Miss Charlotte Raine, in addition to those large sums mentioned last week as having been bequeathed by this benevolent lady, has also left £500 to the Metropolitan Free Hospital, and Joseph Cragg, Esq., has also bequeathed £500 to the Middlesex Hospital, all legacies to be paid free of legacy duty.

HUNTERIAN MANUSCRIPTS.—A very interesting addition has just been made to the library of the Royal College of Surgeons in the presentation by Mr. H. W. Rumsey, of Cheltenham, a Fellow of the College and a member of the General Medical Council, of four volumes of Hunter's lectures, five volumes of Cruikshank's, and three volumes of Cruikshank and Baillie combined, taken in short-hand by Mr. Henry Rumsey, of Chesham, the father of the donor of this interesting collection, who has also presented to the Royal College of Physicians the lectures of Dr. Fordyce.

THE MECCA PILGRIMS.—The pilgrims to Mecca have so much to do with the occasional introduction of cholera into Europe, that we are accustomed to watch their movements with some interest and no little anxiety. It is, therefore, satisfactory to learn that this year the pilgrimage has been attended with more favourable results than usual. Intelligence from Suez states that 8847 pilgrims had arrived, and that, owing to extreme attention to sanitary measures, not a single death had occurred. The pilgrims from Jerusalem are returning, a Russian steamer, the *Vladimir*, having brought no fewer than 850 to Constantinople.

CATTLE PLAGUE INQUIRY.—For the week ending June 1, one fresh outbreak has occurred in the metropolis—viz., on May 31 at Islington, where one cow was attacked and killed. No cases have been reported during the week from any other part of England. In the metropolis during the week, eleven cases of cattle plague have occurred, being a decrease of seventy-three on last week's return. Of the diseased animals, nine were killed and two died. There were ninety-five cattle slaughtered healthy to prevent the spread of the disease. The total number of cattle reported to have been attacked in Great Britain since the commencement of the plague is 278,689, and 56,797 healthy cattle have been slaughtered to prevent the spread of the disease.

ROYAL COLLEGE OF SURGEONS.—Notices have been sent to all the Fellows of the College residing within the limits of the penny post, acquainting them that a meeting will be held in the Hall of the institution on Thursday, July 4, at two o'clock, for the election of three Fellows into the Council of the College, in the room of Mr. Frederic Carpenter Skey, of Mr. Thomas Wormald, and of Mr. Francis Kiernan, who go out by rotation, but who are eligible for re-election. Mr. Skey was admitted a Member of the College in 1822, a Fellow in 1843, a Councillor in 1848, Hunterian Orator in 1850, Professor of Anatomy and Surgery in 1852, an Examiner in 1855, and President in 1863. He is Consulting Surgeon to St. Bartholomew's Hospital. Mr. Wormald was admitted a Member of the College in 1824, a Fellow in 1843, a Councillor in 1849, Hunterian Orator in 1857, an Examiner in 1858, and President in 1865. He is Consulting Surgeon to St. Bartholomew's Hospital. Mr. Kiernan was admitted a Member of the College in 1825, a Fellow in 1843, a Councillor in 1850, and an Examiner in 1862. He declined the offices held by the preceding gentlemen. These gentlemen will, it is said, offer themselves for re-election, but will meet with some opposition, as already we hear that Messrs. Holden, Hewett, Birkett, Spencer Smith, and Erasmus Wilson, are candidates. From an extract of the by-laws sent to each Fellow, it appears that those gentlemen desirous of a seat in the Council must, "within ten days from the publication of the *London Gazette* in which the day of meeting for the election shall be announced, transmit or deliver to the Secretary of the College a notice and declaration signed by himself" expressive of his intention to offer himself to the electors, together with a nomination signed by six Fellows that he is a proper person to be a member of the Council, and another certificate, signed by three Fellows personally known to the candidate, stating that he is in the *bonâ fide* practice of the profession of a Surgeon, and does not practise as an apothecary. It is important, therefore, that intending candidates and their friends should know that as the advertisement convening the meeting appeared in the *London Gazette* and two morning papers of the 31st ult., the ten days will expire on Monday next, after which no names can be received by the Secretary.

CIVIALE'S COLLECTION OF CALCULI.—At a late meeting of the French Academy, the veteran Civiale exhibited his collection of urinary calculi, obtained from 2700 patients, operated on at various periods since the year 1824, of which 1600 had been submitted to lithotrity. The paper accompanying the collection is of the highest interest, since it contains the generalisations of a careful observer, who has both physically and chemically examined an immense and varied series of urinary concretions. M. Civiale dealt with the various forms of calculi, and especially directed attention to the hardness, consistency, and internal molecular constitution of calculi. This method of study he considered of the utmost importance, since, without an intimate knowledge of the nature of a concretion, the lithotritist labours under many disadvantages, and may lose much time in performing an operation. After dealing with the ordinary forms of calculus, M. Civiale proceeded to the unusual varieties. Of these he says there are the following:—Conical, pyramidal, triangular, cubic, square, tetrahedral; calculi resembling a mushroom, a heart, and a brain.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

The Rev. Professor Haughton's concluding paper will be published immediately. We must appeal to the mercy of many valued contributors for the delay in the insertion of their communications, which is at present unavoidable.

W. B. D.—You would best be re-examined on these subjects; but you had better write to the Secretary.

Tympanum—Mr. Hinton, Savile-row; Mr. Harvey, Soho-square; Dr. Bishop, Sackville-street.

Collegiate Examinations.—A statement has just reached us to the effect that, at a recent examination for Membership of the College of Surgeons, a senior examiner called in question the truthfulness of a statement made by a candidate, in not very courteous terms, which so unnerved the examinee that he was unable to recover himself at the succeeding tables, and, having the character of an industrious student, one of his teachers immediately wrote, explaining this circumstance, and requested an explanation; but as the correspondence is not before us we refrain for the present commenting on the subject.

A Fellow.—Notices of the annual election were sent to all the Fellows on Friday last whose addresses are known at the College as residing in the United Kingdom. If you have not received a summons to attend, write to the Secretary.

A Fellow.—The marriage announcement was taken from the *Times*. Mr. Sass is *not* a *Fellow* of the College.

Epsom Medical College.—A correspondent draws attention to the fact that, out of the fifty-two candidates lately struggling for admission into this institution, the fathers of only *eleven* were subscribers to the College. Of the nine successful candidates, one was admitted on a *first* application, three on a second, three on a third, one on a fourth, and one on a fifth appeal. The highest number of votes polled by the successful candidates was 8010; the lowest, 5038. Of the unsuccessful candidates, the highest number was 4955; the lowest, 48.

Errata.—In Dr. Paget's speech, p. 573, *for* Dr. Sieveking and Dr. Farre, *read* Dr. De Mussy and Dr. Brown-Séquard. In Dr. Storrar's speech, p. 584, *for* "extravasation," *read* "exacerbation;" *for* "Dr. Underwood," *read* "Dr. Andrew Wood." In the notice of Sir Archibald Alison, p. 599, *for* "reverend," *read* "revered."

WIGHT *v.* FIELD.

The following subscriptions have been further received:—Amount already announced, £234 8s. 6d.; Dr. Abud, 10s. 6d.; James Bacon, Esq., £5 5s.; J. H. Bryant, Esq., £1 1s.; J. H. Briggs, Esq., £5; Dr. H. Bennet, Mentone, £1 1s.; G. A. Calder, Esq., £3 3s.; H. Curling, Esq., Ramsgate, £1 1s.; John Forster, Esq., £3 3s.; W. Griggs, Esq., Ramsgate, 10s. 6d.; Dr. Henderson, Ramsgate, 10s. 6d.; Dr. F. Hulke, Deal, £1 1s.; T. Hunt, Esq., £1 1s.; Dr. J. H. Jackson, £1 1s.; Samuel Lane, Esq., £1 1s.; John Marshall, Esq., £1 1s.; W. G. Marshall, Esq., Colney-hatch, £1 1s.; James Purdey, Esq., £10 10s.; J. Rushforth, Esq., £1 1s.; Dr. B. Rogers, £1 1s.; J. P. Stocker, Esq., £5; Mrs. Wilkinson, £5; J. B. Walker, Esq., £1 1s.; F. E. Webb, Esq., £1 1s.

Further subscriptions will be received by the Treasurer, Dr. J. C. Langmore, 12, Sussex-gardens, W.

The list will close the end of next month.

THE ARMY MEDICAL DEPARTMENT AND THE LONDON MILITARY CLUBS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—It is, I believe, unknown generally in the Army Medical Department and the English schools that the feeling in the service against the members of the Department runs so high that a by-law exists in the Senior United Service Club excluding Medical officers from membership.

I trust that some of our M.P.'s, who may have to draw attention in the House to the Department, will not pass over this fact. Here is a club established for the senior members of the military profession, many of whom doubtless owe to the care and skill of a military Surgeon their being able at all to use this or any other club, and yet one of that club's laws is to exclude "Doctors."

It is true that the "loss" cannot be considered as on the side of the Doctors. The companionship of men, whose loftiest ideas seldom soar above the intricate philosophy of the Army List, is not desirable under any circumstances, but less so when time, custom, climate, and prejudices have impaired their intellects, which were never very strong. Yet, Sir, the fact incontestably shows the estimation in which the military Æsculapius is held by his gruel-brained brother Mars.

I am informed that a similar feeling is creeping into the "Junior," and that a certain set of persons frequent the ballot for the purpose of blackballing the M.D.'s. I am, &c. M.R.C.S.E.

June 3.

COMMUNICATIONS have been received from—

Messrs. BLACKMAN and VENNALL; HUMANITAS; Mr. WALROND; Dr. FLACK; Dr. HJALTELIN; Mr. R. C. TODD; Mr. MIDDLETON; Dr. PAGET; Dr. POWER; Mr. BALSDON; Dr. PECKEY; Mr. STEWART; Dr. EDWIN LEE; Mr. BELLAMY; Dr. CLAPHAM; Dr. HANGERTON; TYMPANUM; Dr. GIBBON; Dr. MARTYN; W. B. D.; Dr. MASON; Dr. HUGHLINGS JACKSON; Mr. J. CHATTO.

BOOKS RECEIVED—

Ransome's Molecular Action—Madden on the Spas of Germany, France, and Italy—Medical Mirror, No. 42—Photographs of Eminent Medical Men, vol. ii., No. 3—Journal of the Scottish Meteorological Society. No. 14—Hunter on Body and Mind—Brooke's Natural Philosophy, 6th Edition—Oppert on Hospitals, etc.—Bennett on Medical Education—Swayne's Obstetric Aphorisms, 4th Edition—Report of the Edinburgh Asylum.

NEWSPAPERS RECEIVED—

Medical Investigator—Laboratory—Gazette Hebdomadaire—Delhi Gazette—Sheffield Daily Telegraph—South Hants Gazette—Medical Press and Circular—Sheffield and Rotherham Independent.

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 1, 1867.

BIRTHS.

Births of Boys, 1176; Girls, 1061; Total, 2237.
Average of 10 corresponding weeks, 1857-66, 1892·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	642	608	1250
Average of the ten years 1857-66	587·3	550·8	1138·1
Average corrected to increased population..	..	..	1252
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,388	1	3	2	1	5	4	1	..
North ..	618,210	1	4	5	3	15	16	4	..
Central	378,058	2	4	2	3	5	4	4	..
East ..	571,158	11	2	5	1	7	9	2	..
South ..	773,175	3	4	4	..	15	8	4	..
Total ..	2,803,989	18	17	18	8	47	41	15	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·742 in.
Mean temperature	59·0
Highest point of thermometer	77·5
Lowest point of thermometer	46·5
Mean dew-point temperature	52·2
General direction of wind	S.W.
Whole amount of rain in the week	0·69

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, June 1, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending June 1.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending June 1.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	2237	1421	1250	77·5	46·5	59·0	0·69	70
Bristol (City) . .	165572	35·3	127	74	‡75	73·6	45·9	57·0	0·39	39
Birmingham (Boro')	343948	43·9	238	167	123	72·3	43·4	57·7	0·71	72
Liverpool (Borough)	492439	96·4	414	285	280	73·3	45·0	58·8	0·49	49
Manchester (City) .	362823	80·9	258	205	‡198	73·8	43·0	57·4	1·10	111
Salford (Borough) .	115013	22·2	72	58	66	70·5	41·5	55·0	0·90	91
Sheffield (Borough).	225199	9·9	219	119	104	75·4	41·9	56·2	0·90	91
Leeds (Borough) .	232428	10·8	282	118	126	74·0	48·3	58·4	0·37	37
Hull (Borough) .	106740	30·0	77	49	41	..	..	..	..	..
Nwcstl-on-Tyne, do.	124960	23·4	88	66	70	68·0	40·0	54·8	0·73	74
Edinburgh (City) .	176081	39·8	135	85	113	68·7	40·0	53·7	1·20	121
Glasgow (City) .	440979	87·1	394	257	240	68·8	38·5	53 1	1·00	101
Dublin (City and some suburbs) .	319210	32·8	186	†157	193	69·4	40·7	55·5	0·27	27
Total of 13 large Towns . . .	6187764	34·8	4727	3061	2879	77·5	38·5	56·4	0·73	74
					Week ending May 25.	Week ending May 25.				
Vienna (City) . .	(1863) 560000	..	..	..	361	..	..	§ 52·5	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·742 in. The barometrical reading increased from 29·44 in. on Monday, May 27, to 29·97 in. on Friday, May 31.

The general direction of the wind was S.W.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 45·7°.

APPOINTMENTS FOR THE WEEK.

June 8. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Prof. Huxley, "On Ethnology."

10. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

ROYAL COLLEGE OF SURGEONS, 4 p.m. Prof. Hancock, "On the Anatomy and Surgery of the Foot."

11. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ETHNOLOGICAL SOCIETY OF LONDON, 8 p.m. Frederick Boyle, Esq., "On the Free Indian Tribes of Central America." J. Crawfurd, Esq., "On the History and Migration of Cultivated Plants in reference to Ethnology: Spicerias" Col. Phayre, "On the Tenure and Distribution of Landed Property in Burma."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY (Ballot, 8 p.m.), 8½ p.m. Mr. Erasmus Wilson, "On a Change of Structure of the Hair produced by Syphilis." Mr. James Lane and Mr. G. G. Gascoyen's "Report on Syphilisation."

12. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 2 p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.

ROYAL COLLEGE OF SURGEONS, 4 p.m. Prof. Hancock, "On the Anatomy and Surgery of the Foot."

13. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

14. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 p.m. Dr. Anstie, "On the Prognosis and Treatment of certain Acute Diseases, with special reference to the indications afforded by the Graphic Study of the Arterial Pulse."

ROYAL COLLEGE OF SURGEONS, 4 p.m. Prof. Hancock, "On the Anatomy and Surgery of the Foot."

DR. VICTOR BAUD'S ORGANIC MEDICINES.

DR. V. BAUD, Graduate and Member of the Medical College of Paris, Chief Physician Extraordinary for Epidemics in Paris, late M.D. of the Civil Hospitals of Algiers, has just introduced in England his ORGANIC MEDICINES. They consist of three Preparations :—

THE BAUDEINE, an efficient and prompt Remedy for Cholera, Yellow Fever, Diarrhœa, Dysentery, and excessive action of the Bowels. (A Gold Medal was awarded by the French Government to Dr. V. Baud for this valuable Preparation.) Price—small, 1s. 1½d. ; medium, 4s. 6d. ; large size, 11s. per bottle.

The Treatment for Cholera, Yellow Fever, Dysentery, and Diarrhœa in all their stages accompanies each bottle, and bears the signature of Dr. V. Baud.

THE DIASTATIZED IRON, for Strengthening the System. Price 2s. 9d. per Bottle.

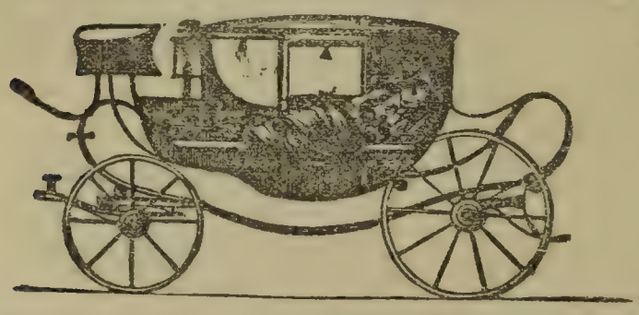
THE DIASTATIZED IODINE, for Purifying the Blood. Price 2s. 9d. per Bottle.

*** The above Preparations are in the form of SWEETMEATS, pleasant to the taste, and particularly adapted for Infants, and Mothers nursing.

By the combination of the Iron or Iodine with Cress-seeds in a state of germination, they are united with organic life, which thus renders them digestible. The irritative and stubborn mineral has become the nucleus of an organic substance capable of being absorbed by the blood without injury to the stomach.

Agent for England and British Possessions, **Ch. LANGE, 6, Monkwell-street, City.**—May be obtained of all Chemists.

West-end Agent, London—**L. SCHOUVER, 21, Princes-street, Hanover-square.**



READINGS' INVALID COT CARRIAGES,

THE GREATEST LUXURY AND COMFORT EVER INTRODUCED FOR REMOVING INVALIDS, BEING FITTED UP WITH THE

PATENT NOISELESS WHEELS.

These Carriages may be engaged, on Moderate Terms, for any journey, on application to

H. & J. READING,

COACHBUILDERS, 14, RIDING-HOUSE-STREET, CAVENDISH-SQUARE.

Also a good assortment of New and Second-hand Broughams and other Carriages for Sale or Hire.

ST. PAUL'S WATERPROOF ESTABLISHMENT.

WATER AND AIR BEDS, CUSHIONS, AND PILLOWS,

Hot-Water Bottles, Inflating Bed-Pans, Urinals, Waterproof Sheeting, Injection-Bottles, Elastic Stockings, &c.

Air and Water Beds, Cushions, &c., made specially to order.—*Water-Beds and Cushions Lent on Hire.*

G. R. WOOLGAR AND CO., 7, LUDGATE-HILL, LONDON.

International Exhibition, 1862.—The only Prize Medal FOR

"WATER CUSHIONS & BEDS"

WAS AWARDED TO

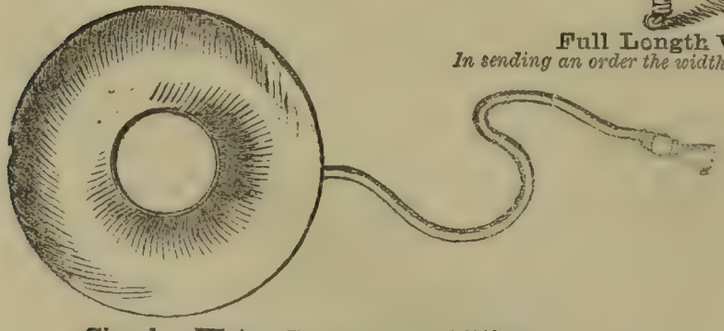
W. HOOPER, 7, Pall Mall East, and 55, Grosvenor-street, London.

USED BY THE ROYAL FAMILY AND ALL CLASSES OF INVALIDS.

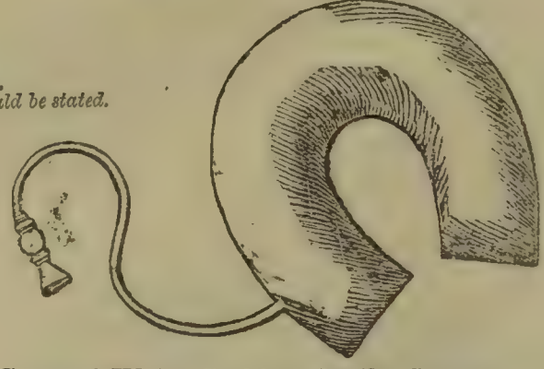
ALSO IN H.M. ARMY AND NAVY, AND THE INDIAN PRESIDENCIES.

Full Length Water Mattress.

In sending an order the width of the Bedstead should be stated.



Circular Water Cushion, for Sitting on.



Crescent Water Cushion, for the Sacrum.

ELASTIC BAGS, for applying dry cold or dry heat, maintaining their elasticity under all temperatures, from Zero to 212° Fahr.

WATERPROOF SHEETS, INDIA-RUBBER URINALS, ENEMAS, &c

GENERAL MEDICAL COUNCIL.

MEETING HELD AT THE ROYAL COLLEGE OF PHYSICIANS, PALL MALL EAST.

FOURTH DAY.—SATURDAY, JUNE 1.—*Continued.*

PRESENT: Dr. Burrows, President, in the chair; Dr. Bennett, Mr. Hawkins, Mr. Cooper, Dr. Acland, Dr. Paget, Dr. Embleton, Dr. Storrar, Dr. Alexander Wood, Dr. Andrew Wood, Dr. Fleming, Mr. Syme, Dr. Thomson, Dr. A. Smith, Mr. Hargrave, Dr. Leet, Dr. Apjohn, Sir J. D. Corrigan, Bart., Dr. Sharpey, Dr. Parkes, Dr. Quain, Mr. Rumsey, Dr. Christison, Dr. Stokes, and Dr. Francis Hawkins, Registrar.

THE FUNCTIONS OF THE EXECUTIVE COMMITTEE.

Continuation of the debate on the second recommendation of the report of the Executive Committee—viz., "That the Committee in that capacity should consider and prepare reports upon any subjects that may suggest themselves to the Committee, or may be suggested to them by the Branch Councils, as requiring the attention of the General Council."

Dr. ALEXANDER WOOD opposed the regulation, on the ground that it would sweep away the present arrangement of committees. Hitherto, the chairman of a special committee had been the gentleman who had brought the subject the committee had to investigate before the Council, and who took special interest in it. If this regulation were adopted, there would be five or six members of the Executive Committee directing their attention to all the multifarious subjects that come before the Council, and that individual responsibility which the chairman of a special committee had hitherto felt in dealing with the subjects which they had on hand would be lost.

Dr. STORRAR: I have some difficulty in regard to this matter. I cannot exactly approve of the resolution, and yet I desire that something of the sort should be adopted. I think the Executive Committee can do no better work in this Council than take up questions and prepare reports upon them which in their judgment may be serviceable to the General Council. But there is an expression here which I should be very glad to see omitted. The Executive Committee is appointed by the General Council. It is the Executive Committee of the General Council, and I think it would be an unwise step to require that Executive Committee to entertain all the questions transmitted to them by the Branch Councils. I think it is far better to leave the Executive Committee to its own judgment. I would therefore suggest to Dr. Andrew Wood whether these words, "or may be suggested to them by the Branch Councils," are necessary in his opinion. If necessary, I will move an amendment that these words be omitted, and I beg to do so.

Dr. PAGET: I beg to second the amendment. Although I am a member of the Executive Committee myself, I think the objections of Dr. Storrar are substantial and good. But, with reference to Dr. Alexander Wood's observation, I think he goes too far when he anticipates that a measure like this will altogether supersede the ordinary work of committees at the time of the annual meeting of the General Council. It may somewhat lessen their labours, and in that I think it will be of good service to us.

Dr. FLEMING: Last year I submitted certain resolutions with a view to expediting the business of the Council. Those resolutions were to the effect that a Business Committee should be appointed at the close of the session, to take the supervision of anything that might occur during the recess, and continue in office till the close of the next session, so that, instead of appointing the Business Committee at the beginning of the session, it would be appointed at the close, and what business was likely to crop up during the interval would be prepared for the Council before the session took place. The Council did not seem to think fit to approve of those resolutions which I brought forward, and they were withdrawn. At the same time there was a strong feeling expressed that something should be done in the direction I have pointed out to facilitate and expedite the business; and you proposed to me, if I remember right, that the Executive Committee might, to a very considerable extent, do what I suggested should be done by the Business Committee to be appointed for the purpose. With that view I gave up the motion, and adopted the idea of which this report is the result. With regard to Dr. Alexander Wood's objection that it deprives the members of the Council of the opportunity of bringing forward motions to appoint special committees, I must say I do not see any danger of that. Any member of this Council, notwithstanding this recommendation, is quite competent to move for a committee upon any subject in which he takes an interest, and that committee will, as a matter of course, be appointed with the proposer as chairman. But, at the same time, there are various subjects which may crop up during the recess, which it would naturally become the duty of one of the officers of the Executive Committee to consider and prepare for this Council. Then, again, any report of the Council which the Executive Committee take up and prepare, they are bound to circulate at least one fortnight before the meeting of the Council, according to the next resolution, so that every member will have abundance of time to prepare his objections. Dr. Storrar has objected to the words "or may be suggested to them by the Branch Councils." Now, I do not see that his reasons are at all sufficient for striking out those words, for the clause is only permissive.

Dr. ANDREW WOOD: As I have taken a considerable part in the drawing up of this report, I think I am entitled to say a word upon it. If I understood my friend, Dr. Alexander Wood, one great obstacle in the way of our progress as a Medical Council has been that we meet here ten days every year, and that during the whole of the rest of the year, whatever circumstances most important to the Profession and to the Council may occur, there is no opportunity of taking any action upon them, and that it is a necessity, in order to do something, that the whole Council should be summoned, which is inconvenient and expensive. Now, I may mention that this Executive Committee was enlarged for this reason, that it might include members of the Branch Councils of Scotland and Ireland, and that thereby those Branch Councils might be put in communication with the representative body of the Medical Council, and so might give effect to their suggestions, and prepare the business in such a way as to be the means of shortening our session very considerably; and I think that the number of our special committees affords a very strong corroboration of the importance of having such an Executive Committee. I find there are three committees to meet on Monday. Well, many of the gentlemen who compose those committees belong to each of them. On Tuesday there are four committees to meet, and I have no hesitation in saying that some of the subjects embraced by those committees might have been so prepared during the session by the Executive Committee in the course of their meetings, that they could, at all events, have put the Council in possession of a large amount of information. And you may depend upon it the Executive Committee are not so impressed with the desire of arrogating to themselves the whole power of the Council, that they will take upon them to dictate, or even to try to persuade you to adopt their own opinions on the matters upon which they report. But they will be able to give you such information as may save us a vast amount of trouble and enable us at an early period of the session to take up matters which, in past years, have been very perfunctorily performed late in the session or not performed at all. As to the little joke which my friend Dr. Alexander Wood made about the want of capacity of the Committee, I say, if they want capacity, whose fault is it? It is the fault of the Medical Council, who thought us the best men they could elect to do it.

Dr. ALEXANDER WOOD: What I said about capacity was, that Dr. Andrew Wood was going to take the capacity out of that motion. (Laughter.)

Dr. AQUILLA SMITH: I beg to remind the Council that there is no such body existing at this moment as the Executive Committee. Dr. Fleming has very accurately represented to the Council what occurred last year, and particularly as to his suggestions to have a Business Committee. There was a very general understanding in the Council at that time that it was desirable to have some such machinery as he suggested, and any one who will take the trouble of comparing the report of the Executive Committee with the suggestions of Dr. Fleming last year at page 69, vol. iv. of our Minutes, will see that almost every particular of the report of the Committee has been based upon those suggestions, and has gone to carry out his intentions. But I think you will see the great object of the resolution is to provide what Dr. Andrew Wood has stated—namely, the means of having any matter which may crop up between one meeting and another brought into a state to be submitted to the Council. As I understand this recommendation, it does not give any power to the Executive Committee—it merely imposes upon them a certain amount of business. I hope a calm consideration will be given to this, because I believe there has been no proposition for a long

time brought before us more calculated to promote the business of the Council and to effect a saving of time, which we all know is so important.

Mr HARGRAVE: I think that to erase those words as proposed by Dr. Storrar would be to take all power from the Branch Councils, and to throw the whole thing on the Executive Committee. I think they ought to stand, so as to give the Branch Councils the power of making their suggestions.

The PRESIDENT: Does it not appear to you that, the Executive Committee as it was appointed last year having representatives from Ireland and from Scotland, if there are any subjects the Branch Councils may wish to bring before the Executive Committee, they could do so, even if those words are omitted? I think the omission proposed by Dr. Storrar will not impair its efficiency as much as we have imagined.

Mr. HARGRAVE: What I mean is, that I think it is giving too much power to the Executive Committee. At the same time I think the resolution need not be lost for another year on account of their ambitious projects, because if they cherish any such, we will very soon set them right at this Board. (Laughter.)

Mr. RUMSEY: So far from wishing to control the action of the Executive Committee during the recess, I think it would be desirable if we were a little further to extend it. There are many important subjects which require calm deliberation and longer investigation than can possibly be devoted to them at this council-table, and I think it should be a body possessing the confidence of the Council (and we have a right to presume that the Executive Committee has that confidence, or it would not be elected) to whom might fairly be submitted the consideration of certain matters which it is really quite impossible to go into with anything like satisfaction during our short annual session. I should therefore have been better pleased if instead of, or before, the words "consider and prepare reports upon any subjects that may suggest themselves to the Committee or may be suggested to them by the Branch Councils as requiring the attention of the General Council," there had been some such expression as this, "should investigate and report upon any subjects which may be remitted to them by the General Council." (Dr. ANDREW WOOD: That is there already.) Then I trust this will not be implied as limiting the Committee by the words contained in the resolution.

Dr. SHARPEY: I apprehend, sir, the change in the constitution of the Executive Committee, by which those gentlemen from Ireland and Scotland were embodied among its members, was obviously for the purpose of having a more useful and efficient committee for the purpose of expediting the business of the General Council, to consider matters which might occur beforehand, and put them into shape for our deliberations here. Now, it does not at all follow that because a matter of business has been prepared by this body, that it should not go before any other committee which the General Council may think fit to refer it to when it comes before us. I quite approve of this report, but with Dr. Paget I think it will be rather better to leave the matter entirely in the discretion of the Executive Committee than to bind them to take up any question which may be suggested by the Branch Councils, because really the form of this resolution binds them to do so when it says, "may prepare reports on any subject which may be suggested by the Branch Council." I think sufficient reason has been shown for omitting those words from the resolution, and I believe your own admission has shown the wisdom of the omission of those words, because, as you say, it is quite competent for the Irish and Scotch members, if they think fit, to bring any subject which their respective branches may deem proper before the Executive Committee.

Dr. ACLAND: When Dr. Storrar arose I was about to suggest something in the form of what has been mentioned by several members; but now I have only one word of alteration to propose, and then I think it will carry out both the wishes which have been expressed, and that one word is "may" instead of "should."

Dr. STORRAR: "May" is compulsory.

Dr. ACLAND: That was the suggestion I was about to make, and I will give my reasons. If all reports to the Branch Council be removed entirely, then I have done. But I do think there are two things which it would be desirable perhaps to avoid, both for the sake of the Branch Council, and for the sake of the Executive Committee. It seems to me not desirable to deprive either of those bodies of their independence, and that was my reason for venturing to say a word about the substitution of "should" for "may." I think it possible we should permit the Branch Council to send in suggestions, but, at the same time, I doubt if it is very desirable to compel the Executive Committee to take up any subject which may be named.

Dr. ANDREW WOOD: I do not object to that at all.

Dr. ACLAND: Otherwise you may put work upon them which it is really impossible for any body of gentlemen (as I know, having had the honour of being on the Executive Committee several times) to perform. When a subject is given to them to attend to, they feel bound in honour to take it in hand very seriously indeed; and in this way they may be forced to call a meeting, which might be very inconvenient. The amendment I would suggest then would be, to leave it in the widest manner possible—viz., to give power to the Council to make what suggestions they please, and to the Branch Councils. My amendment will be in these words, "that the Committee may prepare a report," and so on, leaving out the words "by the Branch Councils."

Mr. SYME: I have to suggest that this sentence should be substituted, "That the Committee, if they think fit, should consider any subjects that may be suggested to them"—that is, either by themselves or from any other source.

Dr. ANDREW WOOD: "During the recess."

Mr. SYME: I have no objection at all to that.

Dr. ALEXANDER WOOD: I would withdraw my opposition altogether then if it was framed in this way—that they shall have full power to consider any subject submitted by the Branch Council.

Sir J. D. CORRIGAN: I rise to support Dr. Sharpey, and for these reasons—1st, I think the amendment is better than the original resolution; and next, the Executive Committee have not reflected that the labour thrown on them may perhaps be much greater than I would be inclined to undertake. (Laughter.)

The PRESIDENT then put the last amendment—"That the Executive Committee should consider and prepare reports upon any subjects that may suggest themselves to them as requiring the attention of the General Council;" and it was carried by a majority of 10 to 7.

THE REMAINING RECOMMENDATIONS OF THE EXECUTIVE COMMITTEE.

Dr. ANDREW WOOD then proposed the next recommendation (No. 3)—"That those reports should be inserted in a programme of business to be circulated among the members of the General Council at least one fortnight before its meeting."

Dr. PARKES seconded the recommendation.

Dr. STORRAR: I heartily agree with the spirit of this, but I think it may be worded better. As it reads at this moment, it limits the circulation of the reports until they are inserted in the programme of business. I beg to move, as an amendment, "That such reports should be prepared and circulated among the members of the General Council not later than one fortnight before its meeting."

Sir J. D. CORRIGAN proposed to substitute the words "one month" for "one fortnight."

Mr. SYME: I think it will be desirable to put in those very obnoxious words "as far as possible." (Loud laughter.)

Dr. ANDREW WOOD: Sir Dominic Corrigan, I am sure, will second that. (A laugh.)

After considerable discussion, the words "at least one fortnight" were agreed to, and the motion, as amended, was carried unanimously.

Recommendation No. 4 was withdrawn.

Recommendation No. 5, as amended, was on the motion of Dr. ANDREW WOOD, seconded by Dr. STORRAR, passed in the following form:—"That the Branch Councils be requested to transmit to the Executive Committee the reports of the visitations of examinations at least one month before the meeting of the General Council, in order that they may be circulated confidentially among the members."

The 6th recommendation, "That the Executive Committee meet the day before the Annual Committee meeting of the General Council in order to prepare and arrange the business for the consideration of the Council," having been moved by Dr. ANDREW WOOD, and seconded by Mr. CÆSAR HAWKINS,

Sir J. D. CORRIGAN said: I rise to know if Dr. Wood and his Scotch friends have forgotten all observance of the Sabbath, because, as this recommendation now stands, we are told that if our meeting is on Monday, they will be required to meet on Sunday. (Laughter.)

Dr. ANDREW WOOD: I think "the day before" should stand, because it saves a very large amount of expense to the

Council. The Executive Committee are obliged to come up, at any rate, to the General Council; and if you make them come up a fortnight or a week before, they will return home and come back again; whereas if you make it the day before, the one journey will suffice.

The PRESIDENT was about to put the amendment unaltered for adoption, when

Sir J. D. CORRIGAN again rose, and protested against the adoption of such a resolution, on the ground that it would expose the Council to the ridicule of the world. He proposed to insert the words, "unless that day fall on a Sunday."

Dr. ANDREW WOOD: We Scotch representatives have no objection to the resolution as it stands, and we are generally considered to keep the Sabbath.

Sir J. D. CORRIGAN: Not at all; indoors you may. (Laughter)

Ultimately the resolution was amended by striking out the word "day," and carried unanimously.

The REGISTRAR then read the recommendations of the Executive Committee as amended, and

Sir J. D. CORRIGAN moved, and Dr. STORRAR seconded, "That the whole of the report be adopted."

The amended report was then put as a whole, and carried unanimously.

Dr. AQUILLA SMITH moved, "That the recommendations now adopted be incorporated with the standing orders," which was also unanimously agreed to.

REGISTRATION OF THE STUDENT'S PLACE OF MEDICAL STUDY.

The PRESIDENT: We now go on to the consideration of the matters delegated to the Branch Councils. It is moved by Dr. A. Smith, and seconded by Dr. Alexander Wood, "That it be delegated to the Branch Councils to report to the Medical Council at their next meeting, as to whether the column headed 'Place of Medical Study,' in the form of Register of Medical students now adopted, should in future define more clearly the manner in which it is to be filled up; and if it is the opinion of the Branch Council that it should do so, that they be requested to suggest what appears to them the best means of carrying out their views."

The REGISTRAR read the several reports of the Branch Councils, made in accordance with the resolution. These were all to the effect that it was not necessary to make any such alteration.

Dr. PAGET called attention to the fact that with regard to the column mentioned in the report of the Committee as headed "Place of Medical Study," it is headed "Place of Study." It would be more advisable to amend that in order to prevent any mistake. There was a matter in connection with this subject to which he wished to draw the attention of the Council. He found that the entries in that column were sometimes filled up "Cambridge," or "Edinburgh," instead of "University of Cambridge" or "University of Edinburgh." There were some entries with regard to Scotch students which he could not understand, and would be glad to be informed upon them. There were as many as twenty-one for Edinburgh and seventeen for Glasgow, merely specifying the City.

After some discussion, Dr. PAGET gave notice of a motion, to be seconded by Mr. COOPER,—"That the application of a Medical student for registration be accompanied by a certificate of his place of Medical study."

INACCURACY IN THE TABLE OF CANDIDATES EXAMINED AT THE NAVAL BOARD IN 1864.

The PRESIDENT: There is a notice of motion by Dr. Embleton—"To consider an erroneous entry (part of No. 16) in the 'Table showing the qualifications according to Schedule A of the different candidates who were examined for Medical commissions in the Royal Navy in 1864, with the result of the examinations."

Dr. EMBLETON: When the table mentioned in this notice of motion, published in vol. iii. p. 160 of the Minutes, was laid before the Council, it appeared that, according to entry No. 16, a Bachelor of Medicine of the University of Durham had been rejected for the third time—"Anatomy and Surgery bad." There is another individual, under the head of the College of Surgeons, who seems to have been in the same predicament; and I recollect the ironical cheers which accompanied the announcement, as well as some others, both above and below it. It occurred to me that there was an error, as far as the University of Durham was considered; and when I went home I investigated the matter, and got the letters and documents, which I sent to Dr. Bryson, of the Navy Medical Department, with a statement that an error existed in the entry. I received this morning a letter from him, the reading of which may set the matter at rest; and I thought it was only fair that this matter having been read out publicly before the Council, the contradiction of it should be made equally open for the vindication of the honour of the University which I represent. The letter is dated—

"Admiralty, Somerset-house, May 31, 1867.

"Dear Dr. Embleton,—I have already forwarded a letter to the Secretary of the General Council of Medical Registration, a copy of which was at the same time sent to you, explaining the circumstances under which the entry No. 16 in the table you refer to was returned as a Bachelor of Medicine of the University of Durham. That letter will doubtless be laid before the Council, and cannot fail to satisfy them that the entry was obtained by misrepresentation."

The REGISTRAR: The letter has never come to hand.

The PRESIDENT: However, Dr. Embleton has read us a letter from Dr. Bryson to himself, and Dr. Bryson, it seems, is perfectly satisfied that the credentials of this man were false.

Dr. EMBLETON: I hope that will be entered on the Minutes.

The PRESIDENT: It is only a corroboration of what I said last year, that these reports could not be depended upon. I beg to move that it be so entered.

Dr. STORRAR: I must say I sympathise most heartily with Dr. Embleton's desire that this blot on the escutcheon of the University of Durham should be removed, but I think there is an objection to introducing upon our Minutes a private letter from Dr. Bryson to Dr. Embleton. I think as Dr. Bryson alludes to a public document, a public letter having been transmitted to the Admiralty Medical Department, it would be far better that that letter should be inserted in the Minutes than a private communication from Dr. Bryson.

Dr. EMBLETON: I will postpone the matter till Tuesday to see if the letter arrives.

COLONIAL MEDICAL DEGREES.

The PRESIDENT: There are now several communications to be addressed to the Council from various Universities.

The REGISTRAR: It is Dr. Paget's motion that these letters be read.

Dr. PAGET: I merely selected certain of these letters—nearly all of them because they appeared to be of that kind that ought to be, after they are read before the Council, referred to the Committee, of which I happen to be the Chairman. Of course I do not object to their being read first. I take the first on the list, which is dated "University of Melbourne:"—

(The letter, which was read, was signed "Redmond Barry, Chancellor of the University." It gave an account of the University of Melbourne as a place of Medical study, and of the curricula for its Medical degrees, and it requested that students engaged in prosecuting their studies, or who proceed to Medical degrees in the University, should enjoy like privileges to those which have been extended by the University of Melbourne to the Members of the Universities and Medical and Surgical Colleges of the United Kingdom.)

Dr. ANDREW WOOD: I think this is a very important communication indeed, because it shows us that in our colonies there are rising up institutions which are rendering themselves very deserving of having their case taken into consideration by this Council. I think if we had any doubt of the necessity of getting some means of registering foreign and colonial degrees, that doubt would be removed by the letter which has just been read from Melbourne. I have seen their *Calendar*, and I can vouch that their education is very complete. I think it is a great encouragement to us to go on with an attempt to get recognised foreign and colonial degrees; and, as a mark of respect to the University of Melbourne, I say that letter should go on our Minutes. It will show our colonial friends that we receive their communications with all the respect that is due to them, and in giving an answer to them—which we shall be obliged to give at present in the negative—we can only say that we have no legal powers at present to recognise their degrees and diplomas as qualifying for registration, but that we have been endeavouring to obtain the introduction into Parliament of a Bill containing a clause which would give us that power. I therefore would beg leave to move that this letter be received and entered on the Minutes, and then I suppose it will be necessary to move a resolution with regard to the answer to be given to it.

The PRESIDENT: The answer has been given already.

Dr. ANDREW WOOD: May I ask what answer?

The PRESIDENT: An acknowledgment of it.

Dr. ANDREW WOOD: I mean the answer to the prayer of the petition.

Sir J. D. Corrigan: I have great pleasure in seconding Dr. Andrew Wood's resolution that the letter be inserted in the Minutes.

Dr. Andrew Wood: We had better read the others which are in the same category, before we go on to consider them.

Dr. Fleming thought the Minutes should not be encumbered by putting in these matters *in extenso*. He moved, as an amendment, that all the letters be taken as read, and then the Council could go on to consider what they would insert.

Dr. Andrew Wood was willing to withdraw his motion if it were clearly understood that they should be all read before giving any deliverance upon them as a body.

The President: I should be sorry to lose the opportunity of stating to the Council that as this communication was addressed to me as your President, I, of course, took great pains in reading it through, and also in examining the *Calendar;* and I may say, as far as I can judge, their course of study and all their arrangements are as complete as you really can imagine them to be at any school of Medicine; also their specimens of examination papers are extremely good; and, in fact, everything connected with the prosecution of Medical study seems to be arranged with the greatest thought, care, and consideration. One cannot help saying that if they really do act up to anything like what is expressed in that *Calendar*, it must be a very good place of Medical study.

Dr. Risdon Bennett spoke in confirmation of what had been stated by the President.

Some discussion ensued as to whether several letters of a similar nature which had been received from colonial Universities should be read and entered on the minutes, or referred to a committee.

The British Medical Association and the Medical Acts Amendment Bill.

Sir J. D. Corrigan moved, Dr. Paget seconded, and it was agreed—

That the following letter, addressed by the President of the British Medical Association to the President of the Medical Council, and the accompanying resolutions, be received and entered on the Minutes:—

"40, Brook-street, May 31, 1867.

"My Dear Sir,—As President of the Council of the British Medical Association, it is my duty to transmit to you a copy of resolutions passed at the Committee of Council of the Association on the 28th instant.

"The object of the Committee of the Association in passing the first and second resolutions is to support the General Medical Council in their efforts to amend the Medical Acts, and in their endeavours to improve Medical education.

"With regard to the third resolution, I have simply to recommend it to the attention of the Medical Council in framing the proposed Amended Act. I believe that the opinion expressed in this resolution is widely entertained in the Profession.

"As soon as the Medical Amendment Act is before Parliament, it will be my duty, in accordance with the second resolution, to prepare a petition from the Committee of Council of the British Medical Association in support of it.

"I have the honour to be, my dear sir, faithfully yours,

"(Signed) Francis Sibson, M.D.

"President of the Council of the British Medical Association.

"To Dr. Burrows, F.R.S., President of the General Medical Council."

British Medical Association.

13, Newhall-street, Birmingham, May 28, 1867.

Meeting of the Committee of Council.

Proposed by Dr. E. Waters, President of the Association, and seconded by Dr. Falconer, Treasurer of the Association:—"That this Committee considers that it is of the greatest importance that the British Medical Association should support the Medical Council in its endeavour to amend the Medical Act, and to improve Medical education; and this Committee trusts that the various branches of the Association will take the subject of the Medical Acts Amendment Bill, about to be proposed by the Medical Council, into their consideration, and give it their support, by means of petitions to the Legislature and representations to Her Majesty's Government."

Proposed by Dr. A. T. H. Waters, and seconded by Mr. Clayton:—"That a petition be forwarded to both Houses of Parliament from this Committee, and a representation be made to Government, in support of the Medical Acts Amendment Bill, when prepared by the Medical Council; to be signed by the President of the Council on behalf of this Committee."

"Proposed by Mr. Husband, and seconded by Dr. Simpson:—"That in any alteration of the Medical Act, the constitution of the Medical Council ought to be reconsidered, so that the great body of the Profession should be fairly represented."

T. Watkin Williams, General Secretary.

Sir J. D. Corrigan moved, Dr. Paget seconded, and it was carried unanimously, that the letter and resolutions enclosed be received and inserted on the Minutes.

Adjourned to Monday at two o'clock.

Fifth Day.—Monday, June 3.

Present: As before.

The minutes of the preceding meeting having been read and confirmed,

The New Pharmacopœia.

The Registrar read the final report of the Pharmacopœia Committee.

Report.

The Pharmacopœia Committee, in completing the duty assigned to them (see Minutes of the General Medical Council, April 29 and April 30, 1864, vol. iii. pp. 35, 42), have to report that, in accordance with the resolution of the Council, May 26, 1866, the Pharmacopœia was submitted to each member of the Council on February 1, 1867; that the final revision of the Pharmacopœia was completed at the end of March during the present year, and that the revised copy was forthwith placed in the hands of the Executive Committee, by whom the work has since been issued to the public.

The Committee beg to report that in the progress of the work they have endeavoured to limit the expenditure on its production, so far as was consistent with its completeness, its accuracy, and perfection. The amount of this expenditure has been £676 14s., composed of the following items:—

Editors	£550	0	0
Pharmaceutical investigations	100	0	0
Expenses of attendance of Member of Committee from Ireland	25	4	0
Postages, Messengers, Parcels, French Codex, etc. ..	1	10	0
Total	£676	14	0

The Committee, reminding the Council that the sum of £300 was placed at their disposal in 1865 (see Minutes, vol. iv. p. 285), have now to ask that the treasurers be authorised to pay the further sum of £376 14s.

Having thus brought their labours to a close, the Committee have the satisfaction of testifying to the very valuable services rendered by Professor Redwood in the preparation of the work, to his zeal and his ability, not less than to the readiness with which he gave attention to the suggestions and recommendations of the Committee. They have also to acknowledge the valuable assistance rendered by Mr. Warrington, so far as the state of his health enabled him to co-operate with the Committee; acknowledgments are further gladly offered by the Committee for the assistance afforded them in the revision of the work, not only by members of the Council, but also by the several eminent scientific gentlemen to whom the work was submitted before its publication.

The Committee feel that it will not be thought inconsistent with their duty to indicate the plan which seems to them the most desirable for watching over the progress of pharmacy, and for making such additions and corrections as would facilitate hereafter the preparation of the next edition of the British Pharmacopœia.

They would therefore suggest that a committee, constituted like the present, should be appointed for the purpose just indicated, and that the sum of £50 be placed annually at their disposal to enable them to obtain such assistance as they may think necessary

May 31, 1867. R. Christison, Chairman.

Dr. Quain, in moving the adoption of this report, called the attention of the Council to the service rendered by that Committee to the whole Profession. He said: "I will isolate myself from them for a moment, and it is for the following reason that I took the duty upon myself originally of moving in this matter. What I had to do was voluntarily done; and you, sir, in your opening address, have been so good as to bear more than sufficient testimony to any services that I may have rendered. But I enlisted the services of this Committee; they did not seek the duty, and, to a certain extent, it was thrust upon them. Now, as that was done by myself, I really feel it is my duty (and a most grateful duty it is, I assure you) to tell the Council how earnestly, ceaselessly, and beneficially that Committee has laboured. To Dr. Apjohn, I may say particularly, the Council is especially indebted. (Hear, hear.) He took great labour in his own particular branch of science, and a large amount of the success, accuracy, and completeness of the Pharmacopœia is due to what Dr. Apjohn did. With regard to Dr. Christison, he gave us his best experience and judgment, and by his valuable aid very much encouraged and helped us through many difficulties. To those who know Dr. Sharpey's qualities I need only say he gave them all to us; his judgment, his wisdom, his patience, were indeed most marked on the many occasions on which we met. (Applause.) Of yourself, sir, I have only to say you never were absent. The Council know how great was the assistance which your presence afforded. Our work is now done, and we place it in the hands of the Council with the greatest satisfaction. With regard to the first part of the report, we have done with it, and if you think it is well done, I am sure you will furnish the Committee with the balance for which we ask you to pay the expenses. (Laughter and applause.) With regard to the suggestion of the Committee, whatever may be the length of the period at which another Pharmacopœia will become necessary, it seems most desirable that a responsible committee should watch over what is being done in pharmacy, and keep an annual record of it. I think in that way, without any great labour, we may secure a work that shall be still more perfect than the present.

Dr. Storrar, in seconding the motion, expressed in warm terms his admiration for the manner in which the Committee had performed their duties, and in the course of his eulogium on the new Pharmacopœia said he did not think there was any book of a similar character in the world which could

equal it, and he believed that the experience of the next few years would bear out what he said. He hoped that the education of young men coming into the Medical Profession would be directed in accordance with it, and that the Pharmacopœia would be generally adopted by all Practitioners in the kingdom. He did not call into question certain advantages which might result from the adoption of different Pharmacopœias in different institutions in this country, but at the same time he had a very strong impression that the constant confusion of Pharmacopœias has a tendency really to embarrass the whole system of dispensing. He hoped that not only all Practitioners of the country, but also all persons engaged in Medical education, would insist on training young men to have an intelligent knowledge of the national Pharmacopœia, and of course this would be a reason always for urging upon the Council the necessity of keeping the Pharmacopœia on a level with the knowledge of the day.

Dr. Aquilla Smith called attention to an omission in the first paragraph, which he thought ought to be supplied. It says that a revised copy was placed in the hands of the Executive Committee, by whom the work has since been issued to the public. Now I think it right to state clearly that it was placed in the hands of the Council a month before, in accordance with the resolution passed last year. That may be an unimportant omission, but I think it is wise that it should be supplied. I entirely agree with the suggestion made by the Committee that there should be a standing Pharmacopœia Committee in the interval between this time and the publication of a new edition, no matter how remote that may be. That, I know, is the practice in America. They produce a new edition every year, and I know there is a standing committee in existence with a view to watching the progress of pharmacy, and I believe very valuable results are thereby achieved.

Dr. Quain expressed his willingness to insert a clause to the effect that it was submitted to the Council in accordance with the resolution of May last.

Dr. Parkes proposed a vote of thanks to Dr. Quain for the extraordinary care and trouble which he had taken in the preparation of this work.

Dr. Sharpey gladly supported the proposition, and said he knew, if it had not been for Dr. Quain's untiring energy and vigilance in pushing forward the work, the Council would probably be still without a Pharmacopœia. He added that his suggestions, which have been remarkable for their sagacity and forethought, have all turned out most happily. (Applause.)

Mr. Rumsey, as a provincial member of the Council, bore testimony to Dr. Quain's great kindness and readiness to receive any suggestions from whatever quarter they might come. He called attention to the extraordinary smallness of the charge for postages, messengers, parcels, including a copy of the French Codex, and said he was under an impression that Dr. Quain must have forgotten to charge for a great many expenses which he had incurred.

The motion "That the report of the Pharmacopœia Committee be adopted," with the insertion in the first paragraph of these words, "was submitted to each member of the Council in accordance with the resolution of the General Council, May, 1866," was then put by the President and carried unanimously.

A discussion took place as to whether the copies of the Pharmacopœia hereafter issued should have the edges uncut or cut and burnished. Ultimately it was arranged that a certain number should be issued ready cut and burnished, and that it should be left to the Executive Committee to deal with the remainder according to the requirements of the trade.

Dr. Andrew Wood: Mr. President, as a corollary to this report, I wish to ask whether I may be now allowed to move a thing which I feel we ought not to omit, and that is, that we should vote a surplus sum to these members of the Committee. (Hear, hear.) Having been a member of the Executive Committee, it has fallen to my lot to see the very large amount of trouble and skill that has been devoted to the preparation of the Pharmacopœia by those distinguished individuals who did us the honour to act upon the Committee; and I feel quite satisfied that we have no right to command those services when we have the means of repaying them—(hear, hear)—without giving them adequate remuneration. I say so in despite of what we have heard sometimes said out of doors as to our paying so much for the Pharmacopœia in the way of pecuniary recompense. We have been advised, for example, that if we had committed it to the hands of one or two editors, Professor Redwood or Mr. Warrington, the Council would have done it a great deal cheaper. Well, I admit that; but at the same time you must recollect that it is one of the peculiar functions of this Council, by the Medical Act, to prepare a Pharmacopœia for which the Council is responsible; and the Council, having undertaken that responsibility, had also to undertake the responsibility of selecting from their own number the men who, in their opinion, appeared, both by their acquirements and peculiar devotion to the subject in question, to be best qualified to undertake that task. Therefore I do say that it would be a piece of the grossest injustice if these gentlemen were left unremunerated, and that it is our duty to see that that shall not be the case. (Applause.) With regard to the sum, I would say that I think we should not vote to these gentlemen—I believe they are five in number—less than £500. I may also mention that in the Executive Committee this matter was talked over, and that we thought the case was such a plain case of justice to these gentlemen that, in making out our calculation as to what should be the price charged for the Pharmacopœia, we allowed a certain sum, in case it should please the Medical Council to grant it. Therefore, if gentlemen will agree with me, as I hope they will unanimously, in voting this money, they will agree in voting money which will be earned by the sale of this work. And, just to show the popularity of this edition of the Pharmacopœia, I think I am right in saying that considerably upwards of 6000 copies have been sold. The Registrar will correct me if I am wrong.

The Registrar: Considerably upwards.

Dr. Andrew Wood: And that is the result of a very few weeks' sale. Without, therefore, saying a single word more upon this matter, I beg leave to move—"That a sum of £500 be voted to the Pharmacopœia Committee to remunerate their services in its preparation."

Dr. Aquilla Smith: I have great pleasure in seconding that. It was my intention to have moved it.

The Registrar: I am enabled to inform the Council that 7000 copies have been sold. (Applause.)

Dr. Risdon Bennett: May I ask upon what number the edition is calculated to pay?

Dr. Andrew Wood: 20,000. That will repay not only the whole of the expenses of the Pharmacopœia, including this £500, but will also pay a sum of £600 which was due upon the last edition.

The motion was then put and carried *nem. con.*

Petitions from Colonial Universities.

The President: The next matter of business will be to proceed with the petitions of the various Colonial Universities, besides that from Melbourne, which was read at the last meeting.

The Registrar then read communications from the following bodies:—From the University of Calcutta, praying for the registration of its degrees; from the University of Sydney, praying for the recognition of its examinations and curricula of studies; from the McGill University, Montreal, praying for the recognition of its matriculation examination; from the Registrar of the Medical Council of Upper Canada, praying for the registration of Upper Canadian diplomas; from the President of the Medical Council of Upper Canada relative to the recognition of certain Colonial diplomas.

Dr. Alexander Wood moved—"That the Registrar be instructed to write to the University of Melbourne, the University of Calcutta, the University of Sydney, and the President of the Medical Council of Upper Canada, to the effect that the Council has no power to recognise licences, however sufficient their examination may be, but that steps have been taken to remedy this by an amended Act of Parliament."

Dr. Risdon Bennett: Sydney does not pray the same thing as the others.

Mr. Cæsar Hawkins: It includes more—it includes the curricula of studies and examinations; examinations may apply to examinations in arts and other things.

Dr. Risdon Bennett: They do not ask for degrees.

Mr. Cæsar Hawkins: They may or may not mean that. I think it will be far better to stop at the first sentence of Dr. Alexander Wood's motion, and not to say that we have taken any step, because we did not originate any steps at all. I think we should not pledge ourselves to what may hereafter happen, or in fact to anything, because, in fact, we know nothing yet officially about it. Under these circumstances I think we had better be silent upon that.

Sir J. D. Corrigan proposed, as an amendment, that the words of the resolution should run thus—"Resolved, that a letter be addressed to the Universities of Melbourne,

Calcutta, and Sydney, and the Registrar of the Medical Council of Upper Canada, informing them that at present it is not legally in the power of the General Medical Council to recognise colonial degrees, but that an amended Medical Act Bill is now engaging the attention of the General Medical Council, and the recognition of the colonial degrees referred to shall receive full attention previously to the introduction of the Bill." My object in putting it in that way is that by so doing we shall simply say it is not in our power at present. I do not like to bind ourselves so far as to say that we have already taken steps. Members of the Council may recollect that we made a similar mistake once before, and I think that should be a warning to us. I allude to the case of recognising the degrees of the Universities of Belgium. On that occasion we did this curious thing, that we recognised and entitled to be put on the Register of the United Kingdom degrees which the Belgian Government itself would not allow to be put on its register, for they would not allow the possession of those degrees to entitle a man to practise in that country.

Mr. Cæsar Hawkins seconded the resolution, which was put to the meeting, and unanimously adopted.

The President: There is another communication which has not yet been read, from the McGill University, Montreal, praying for the recognition of its matriculation examination.

Dr. Andrew Wood moved to refer it to the Committee on Preliminary Examinations.

Mr. Cæsar Hawkins thought that the application should not be taken into consideration at present, but that it should be reserved for the Executive Committee. It was sent to them last year, and there were Universities of a similar kind which came under the same category, such as Toronto and King's College, Kingston.

Compulsory Examination in Greek.

Dr. Parkes then read a communication from Dr. George Buchanan, Examiner in Arts to the Society of Apothecaries, relative to a compulsory examination in Greek.

After some discussion, Dr. Andrew Wood moved:

That the Registrar be directed to inform Dr. G. Buchanan that the Medical Council has recommended that, after 1869, the following subjects shall be compulsory, viz:—1. English Language, including Grammar and Composition. 2. Arithmetic, including Vulgar and Decimal Fractions; Algebra, including Simple Equations. 3. Geometry: First Two Books of Euclid. 4. Latin, including Translation and Grammar. 5. Greek. And one of the following subjects, at the option of the candidate:—1. French. 2. German. 3. Natural Philosophy, including Mechanics, Hydrostatics and Pneumatics.

Dr. Parkes seconded the motion, and thought it would be well to give a distinct answer in this case, which would be sufficient explanation, applying to all similar inquiries.

Dr. Acland: I rather doubt whether the motion of Dr. Wood is quite correctly worded. I do not know whether the Council claims to itself the power of compelling an examination on any subject or not. If not, well and good. I should not think of dividing the Council upon it; but otherwise, you will observe it is said that certain things shall be "compulsory." Now, what I understand the law of the case to be is that we recommend that these things shall be so.

Dr. Andrew Wood: Then we can put in "The Medical Council have recommended."

The motion, as amended by the permission of the Council, was then put, and carried unanimously.

The Registrar then read a communication from Dr. Hepworth relative to the Medical Acts Amendment Bill.

Dr. Storrar moved that the Registrar be instructed to acknowledge the receipt of this letter, and to inform Dr. Hepworth that it had been read to the Council.

Dr. Sharpey seconded the motion, which was carried *nem. con.*

The Memorial from the Cork Medical Association.(a)

A communication was also read by the Registrar from the Cork Medical Protection Association relative to the same subject and to that of Medical education.

The President asked whether the Council would wish to go into the subject, or defer it until they took up the subject of Medical education.

Dr. Aquilla Smith moved that it be referred.

Dr. Alexander Wood: This is a very important communication, and I think we had better send it to the Committee on Preliminary Education. In the first place, the memorialists suggest that this Council, in framing the Medical Acts Amendment Bill, should secure power to make such course of education as they may think desirable compulsory, instead of merely recommending it. The second suggestion is, that we should enforce a Degree in Arts upon every student before he commences the Profession. That is the chief gist of the thing, and I think that could be very well recommended to the consideration of the Committee which is now sitting upon preliminary education.

Dr. Andrew Wood: I do not think we ought to refer it to any committee—a question which was discussed and decided in this Council two years ago. The question mooted in this communication is simply one of applying for additional powers to the clauses contained in the Medical Act to enable us to enforce our regulations upon the different bodies. Two years ago I myself made two or three motions with a view of obtaining such powers; but the Council decided otherwise. I would just say that, however anxious I may be still to persevere in the attempt to get additional powers, what I have observed in the last two years has convinced me that moral suasion has very much more power than I ever thought. I think that during the last two years a very large amount of progress has been made by the mere force of moral suasion, and so far as I have seen from the experience of this session, that power is still making itself felt. I feel quite satisfied that if we go on steadily as we have been doing with the visitation of examinations, we may effect a good deal. I really would not be inclined myself to argue that we should have the powers which I should otherwise have thought were necessary. I do, therefore, say that it is no disrespect to this Cork Medical Protection Association if we simply tell them that the evil has been recognised by the Medical Council, but that in drawing up the amended Bill we thought it was much better, instead of applying for compulsory powers which we might have difficulty in obtaining, to go on using those moral powers which we possess, and which we have found within the last two or three years have been doing a great deal of good.

Dr. Alexander Wood moved the following resolution—"That the part of the memorial of the Cork Medical Association which relates to preliminary education be referred to the Committee now sitting on the subject, and that the Cork Medical Association be informed that the part of their memorial which suggests the introduction of clauses giving the Council compulsory powers to enforce their educational recommendations will receive the full attention of the Council."

Mr. Hargrave seconded the motion.

Sir J. D. Corrigan objected to the resolution.

After some discussion the motion was put, and carried unanimously.

Unqualified Practitioners in Midwifery.

The next communication from Dr. James Mason was read by the Registrar. It referred to the assumption of the titles "Obstetrician" and "Accoucheur" by unqualified Practitioners, and prayed some action of the Council upon the matter.

Dr. Storrar: I propose that this be dealt with in the same way as the others—viz., a reply, informing this gentleman that the letter has been received, and will be considered.

The motion was seconded by Dr. Acland.

Mr. Rumsey: I did not rise when Dr. Hepworth's communication was under consideration, because I thought probably there might not be another of the same kind, and that the very grave subject which is involved in that letter would be, no doubt, handled by the Council at some future day. But when I find another letter on the same subject, I think it right to express my full conviction that at no distant day this Council will be compelled to take action on the great question of Obstetric Medicine—(applause)—that is, they will have to say whether they will insist upon qualification by all those who practise midwifery—"persons," to use Mr. Stuart Mill's phrase, rather than "men"—(a laugh)—they will have to take up the question. We may for a time ignore it, but if we are a Council of Medical Registration and Education whose duty it is to see that no one assumes titles of competency without possessing that competency, we shall have some day to determine on the question of what qualifications possessed by Practitioners in midwifery shall give the right to register.

Professor Syme: How can we possibly anticipate all this?

Mr. Rumsey: I should have been glad if, in inserting these letters, the Council had reserved to itself the power of considering the question of qualification and midwifery, and registration in midwifery also, at any future time, which is just the same ground that has been taken on another matter. I think we have that power, and ought to exercise it with regard to every one who professes to practise in midwifery.

Dr. Alexander Wood: Sir, we have been told that "coming events cast their shadows before" them; but I

(a) See *Medical Times and Gazette*, June 1, 1867, p. 597.

really do hope that this Council is not going to vote with these shadows to-day.

Dr. Cooper: I say they are not "shadows," but very stern realities. I can inform you that there is a very great danger in this matter, and that hundreds of women's lives are endangered annually.

Sir J. D. Corrigan: I do suggest that we confine ourselves to the question before us. The question is what answer shall be given to one Dr. Mason; and I would suggest that we should not take into consideration any question of Medical or Obstetrical Surgery. (Hear, hear.)

Dr. Acland: I have not the slightest conception that by adding that the Council is to be debarred from entering into this question. It has been under the consideration of the College of Surgeons for some time, and, with all respect to those who have commented upon it, I think it a question of very great importance.

Mr. Rumsey: One word in explanation. I should not have thought it necessary to speak, but that one gentleman who proposed to take action on this matter, stated that it was a question whether this thing should go under the table or be laid on it. Now I rather think we should not treat a matter of such importance with anything like contempt.

The President put the resolution to the meeting, and it was unanimously adopted.

The Qualification of Master in Surgery and Poor-law Appointments.

The Registrar then read a petition from Dr. Gibson relative to the qualification of Master in Surgery.

Sir J. D. Corrigan said it was a question on which the Council were not competent to give an opinion.

Dr. Acland would suggest the same answer as to the previous communication. (Hear, hear.)

Dr. Aquilla Smith said, in reference to the communication just read, the Poor-law Board in Ireland were determined to regulate the qualifications, and required all the candidates to possess double qualifications.

Dr. Alexander Wood: I think the less we discuss this matter the better. If it is a subject of discussion at this Board, it will require a very much larger consideration than we have had yet upon it; but I think, the question having been argued at great length by the first lawyers at the bar before her Majesty's Privy Council, and having been decided in favour of the University of Edinburgh, it is a very unnecessary and injurious course of proceeding to discuss it at this table. If it is necessary to have a discussion on the subject, let us have it; but I warn you it will take four days. (Laughter.) I certainly have no wish whatever to enter upon a discussion in which we got into some difficulty three or four years ago, and upon which now harmony has happily been completely restored for a considerable period. I therefore think we should decide upon something which will relieve us from discussing a question which, properly speaking, we have no business with whatever.

The President: We have got a letter from Dr. Gibson relative to the qualifications for the appointment of Poor-law officer.

Sir J. D. Corrigan: The answer I would suggest is simply this—"The question referred to in Dr. Gibson's letter is purely a legal one, involving the interpretation of the Poor-law and Medical Acts, and the General Medical Council therefore decline to give any opinion upon it."

The motion was seconded by Dr. Apjohn.

Dr. Parkes: Surely we are rather pledged to give an interpretation concerning the Medical Act if anybody asks us how the Medical Act is to be interpreted. I presume we are bound to give an answer. (Cries of "No, no.") What I understand the state of the law to be is this. The Poor-law Guardians require that every gentleman who becomes a candidate for their appointment must hold two qualifications—a Medical and a Surgical qualification. A man must produce two diplomas, one in Surgery and one in Medicine. Now, as Professor Syme very properly says, in the year when this gentleman took his degree, which was, I think, in 1828, there was no such thing as a Mastership in Surgery, and the idea in the person's mind was that a Medical degree was only a qualification for Medicine. At least we held so in the College of Surgeons, and we had a great deal of antagonism and fighting about it; but the University of Edinburgh and other Universities want to put this——

The President: I hope you will not go into this question, because you are just reopening a matter which it was agreed should be set at rest.

Sir J. D. Corrigan's resolution was then put to the meeting and carried unanimously.

The Case of Richard Organ.

The Registrar: The next is a petition from Richard Organ to be allowed to present himself for examination to one of the examining bodies. It is accompanied by several bulky petitions and documents, one of which is entitled "A History of my Life." (Laughter.)

Dr. Storrar moved, "That the Council, having considered the application of Mr. Richard Organ, see no cause to alter their decision of May 19, 1866."

Sir J. D. Corrigan seconded the motion.

Dr. Aquilla Smith begged leave to move that the petition from Richard Organ be not received by the Council.

Mr. Hargrave thought that Organ might not be as worthy of condemnation as he was six years ago, and concluded by moving "That Richard Organ having confessed his fault and irregular conduct, and having repeatedly thrown himself on the leniency and clemency of the Council, he be permitted to present himself before one of the licensing bodies for examination."

This was seconded by Mr. Rumsey.

Dr. Acland not holding the doctrine "that a man having once been condemned is for ever afterwards to be placed in a condition in which he could not possibly repair his fault," recommended that the documents and the whole matter should be referred to a committee to report on.

Dr. Andrew Wood thought that the Council ought not either to assoilzie Mr. Organ or to confirm his condemnation without hearing him by an examination of his documents.

Dr. Alexander Wood went over the case of Mr. Organ, recapitulating his endeavour to obtain the diploma of the College of Physicians of Edinburgh by getting a man to personate him at the examination; his bringing an action against the Medical Council in the Court of Queen's Bench to compel them to restore his name to the Register; his obtaining a registered partner to carry on his practice; his previously having stood at the bar of a criminal court charged with perjury, and his acquittal on that occasion by a technical defect in the proceedings; the petition against his registration by the Medical men of his neighbourhood; and his attempt to browbeat the Council by his solicitor. He said that no amount of respectability afterwards, no amount of good conduct, could have the effect of shaking the decision that the Council came to deliberately and calmly on evidence; and he contended that it was the duty of the Council simply to dismiss the appeal, and not to enter into any consideration of the case.

Mr. Syme said there was no doubt that Organ had succeeded in outwitting the College of Physicians of Edinburgh.

Dr. Andrew Wood: Professor Syme is quite wrong. I beg his pardon—he never outwitted the College of Physicians.

Mr. Syme: It is also true he put us to enormous expense and trouble; but I submit we should dismiss all that from our minds on the present occasion. We may have to consider in what his position is so bad that it precludes the possibility, by any amount of penitence and good conduct on his part, of his punishment being relaxed. Now, I wish the Council to make a distinction between Mr. Organ and his counsel, for I think the impression on our minds with regard to his defence is rather due to the counsel than himself; because a more offensive specimen of the legal profession I never had the misfortune to meet. (Laughter.) Therefore, I require the distinction to be made, and I am sure the Council will recognise it. Last year I was in his favour, and I was struck at the remark of Dr. Wood with regard to the crime of perjury, because the man really was not found guilty.

Dr. Alexander Wood: True; but he did not come well out of it.

Mr. Syme: He was not tried, and I think we ought not to take it into consideration. With regard to the personation no doubt it is a very wrong thing, but I believe it is one of those things which are not looked upon by many persons as so very deadly a sin. They think that a kind of cleverness by which they outwit the examiners. (Laughter.) Far from defending it, I think it is a most unpardonable act. But it is not so criminal an act, that if you have these testimonials coming from such a large number of respectable people, you may not take the case into your favourable consideration. I think it shows that he is no ordinary man, and I am not quite sure that all of us could produce such a list of testimonials. (Loud laughter.) Therefore I hope the amendment will be put and negatived, and that something will be submitted to us which will enable us to reconsider our verdict.

Mr. Rumsey: I seconded the amendment because it was the only method brought before me of trying to arrest the passage of the motion. But I do not think, on full consideration of that amendment, that it is best qualified to obtain my object; and if it should be negatived, I do trust another amendment will be brought forward by some one—I should suggest Dr. Acland's view—to which I can agree—namely, that these documents be referred to some committee to be inquired into and reported upon to the General Council. I am extremely glad there is an opportunity of that kind, for I think it would be a most remarkable measure to say that this man was never on any future occasion whatever to be absolved from his early error—an error committed at the commencement of his life. I hope that a *locus pœnitentiæ* will in this way be afforded to him—yes, and by this Council which he has so grievously offended. (Applause.) I hope all feeling of personal offence will be done away with entirely—not the crime itself, but I mean any aggravated conduct he may have been guilty of towards the Council. (Applause.)

Sir J. D. Corrigan: As seconder of the original resolution, I feel myself bound to make a few observations. An appeal to mercy is hard to resist, but mercy to the criminal sometimes involves cruelty to those who should be more considered. (Applause.) Now, in the present case I think it is a fact which has never been contradicted before us, that Organ obtained a man to personate him in order to undergo an examination, Organ himself, of course, well knowing that he did not possess that knowledge and information that fitted him to take charge of human life. I shall not go into any portion of Organ's life which occurred prior to his being put on the Register. I shall confine myself simply to that crime of Organ's, which I consider to be an exceedingly great crime; but it is doubly a crime when he does it in order to represent himself to the public as a man fit to be trusted with the care of their health and lives. How does the army deal with a case of this kind? Instances have come before us where persons have been personated in the army examinations. I will not mention names; but what has been the result? As soon as ever they have been discovered their names have been struck off the Army List, and they have never been allowed to return. Then, is a man who so improperly obtains the appointment of an officer in the army to be punished in that way—and very properly—and is a man who commits a similar offence in a profession having the care of human life and limb to get off scot free? I think not. If this were to go on, we never could strike a man's name off the Register, or it would be useless for us to do so; for I never knew a worse crime than Organ committed with regard to the public, and I do not think we can appeal to public opinion if we forgive such a crime as that. (Applause.) We are asked to go into the history of this man's life as set forth in these documents, without being able to ascertain whether or not they are authentic. His case came before the Council in 1859, year after year it occupied us, and at length sentence having been pronounced while all the circumstances were fresh in our recollection, in reply to an application of his on April 15, 1865, requesting us to give him liberty to present himself to one of the examining bodies (you will find it stated at page 66, vol. iv. of the Minutes), we find this answer is given after seven or eight years' consideration—"That on a review of the case of Richard Organ, the Council decline acceding to his petition." Sir, I must say that I adhere altogether to that resolution which Dr. Storrar has proposed. With regard to the petition in his favour, signed by a very great number of intelligent tradesmen, it is only necessary to say this, that we have against that petition a petition signed—by whom? By no less than 26 members of our own Profession. That you will find at page 98 of vol. iv., and there is also another. Now, I will ask you, to which petition do you attach greater weight—to a petition signed by persons in other professions than that to which the man himself belongs whose case is before us? We know what value there is to be attached to such a thing. We know it is only necessary to get one or two signatures to a petition, and then you can add hundreds more if you will, and we know that facilities for signing petitions prevail not only among tradesmen, but among the highest nobility of the land. I think we should all recollect the experience of the last six months, and that petition which was presented to Lord Derby signed by noblemen and men of the highest rank and culture—I mean the case of the poet Young. (A laugh.) Lord Derby gave a pension to him for poetry. It is not necessary to go further into that. I only allude to it to show that petitions are worth nothing at all. There is one matter which, to my mind, is perfectly fatal to Mr. Hargrave's amendment—viz., that it is not a legal one. It is—"That he be permitted to present himself at one of the Medical licensing bodies for examination." Now that is a matter, as regards this Council, altogether *ultra vires*. We cannot deal with it. We have no power either to permit him to present himself at an examination or to prevent him from so doing. We have not the power to direct a licensing body to examine him. The amendment does not refer to the point at issue. The point to be dealt with is simply this—that if Mr. Organ be examined and get a diploma from any licensing body, the question then will come before us whether we shall restore his name to the Register or not.

Dr. Christison: As having discharged from that chair the duty which you perform at the present time, on an occasion when Mr. Organ was before us, and having been chosen for that purpose in the unavoidable absence of Sir Benjamin Brodie, and, perhaps, because it was supposed that I should be the sternest judge on the occasion—(a laugh)—I wish to state that I have not altered in the slightest degree the sentiment I felt then as to the exceedingly improper conduct of Mr. Organ, both in respect of the offence committed and with respect to his appearance before this Council; but at the same time a long period has elapsed since then, and it must always be a question with us whether we are to come to a decision which, according to the motion made to us, would bear the construction that we are never, under any circumstances, to allow the restoration of a gentleman's name which has once been cut out of our Register. I mean upon the showing of the motion, and upon what has been said hitherto on the subject, that that is the inevitable conclusion. (Applause.) I first thought that in this matter we could not proceed without hearing the whole of the documents sent by Mr. Organ, or, which would be certainly better, without referring them to a committee for consideration. But I think that Sir J. D. Corrigan has hit upon the truth with regard to our power in the matter, and that to the effect that a very fit method by which we can meet the question is this—viz., by simply stating to Mr. Organ that until one of the licensing bodies gives him a qualification, it is out of our power to place him upon the Register. Without giving him any advice at all, I do think we might write to him that he should go before the body that he before deceived; and if that body, upon full consideration, decide that they will take him under examination, then will come the time for us to consider whether we shall register him.

Dr. Thomson: I beg to call attention to a circumstance that I think has been overlooked by Sir D. Corrigan—namely, that it requires the permission of the Council for any licensing body to admit to examination any person whose name has once been removed. The rule is quite specific on that subject. You will find it at page 321, vol. iv. of the Minutes—"That the Council recommend that any person whose name has been once removed from the Register cannot be readmitted for qualification without the sanction of the General Council." So that the suggestion that has been made does not apply.

Dr. Christison: I then recommend that we should say that we cannot replace him until the body to whom he applies asks permission of the Council, because I do think the initiating body should be the body against whom, in the first instance, the offence was committed.

Dr. Aquilla Smith: I hope sincerely that Mr. Hargrave's amendment will be rejected by the Council, and for the reasons stated by Sir D. Corrigan.

The original motion and amendment were then read by the President, and, upon being put to the meeting, the amendment was negatived.

Upon putting the original motion to the meeting,

Dr. Thomson said: I beg to propose another amendment. I agree with those who think we should not shut the door against repentance, or declare at present, without a proper knowledge of all the circumstances, that we will, on no account whatever, admit the reinstatement of one whose name has been once removed from the Registry. My view, therefore, is merely to give the Council an opportunity of knowing the contents of these documents, and, as I think, an opportunity of deciding more clearly upon this question than it would otherwise do. I must therefore move that the application of Richard Organ, together with the accompanying documents, be referred to a committee to report to the Council thereon.

Dr. Acland: I have great pleasure in seconding that.

Dr. Christison: Till I knew the exact position in which

we are placed by our laws, I should certainly have gone with this amendment. But now I understand exactly how our laws are, I do not think we should obey them if we were to agree to this Committee being appointed. I do not think we are entitled to enter into any investigation of the matter at all, and that the party who should make the investigation is that licensing body which he may persuade to take him up for examination. With regard to registration on his foreign degree, for which he asks, if it had been obtained from the greatest foreign University that exists, I should still say that we cannot consent to do what he asks us until he has satisfied the examining body that he deceived, and until that body takes his case into their consideration and passes him. That is what I point at in an amendment I wish to propose—namely, that we intimate to him that we cannot replace him on the Register until one of the licensing bodies shall apply for and obtain permission of this board to admit him to examination. I must say I think that is necessary, according to the laws we have laid down for our own regulation, and it is such a course that Mr. Organ cannot ask us, with any show of reason, to depart from.

Professor Syme: From what I can gather, it appears that Mr. Organ has made his application in terms not strictly in accordance with our regulations; but really if you consider that but a few minutes ago there was not a single man in this room who knew what was properly in accordance with our regulations—(hear, hear)—and it was only by referring to our laws we were able to assure ourselves upon that point, I do think it would be rather hard to punish this gentleman—or this unfortunate man—(a laugh)—I do not know which we ought to call him—because he has couched his address in language not quite in accordance with our rules. There may be many testimonies against him; but his own testimony has been altogether ignored, and I submit, in kindness and in justice, that we ought to adopt some course which would enable us to ascertain what the rights of this matter are, and I would appeal to you to-day to send him an answer advising him to appear before an Examining Board.

Dr. Aquilla Smith: The Examining Board must apply to the Council for permission.

Professor Syme: I ask you to say by your answer that you have no objection to his applying to Examining Boards.

Dr. Andrew Wood: I think the amendment of Dr. Thomson is exactly what Professor Syme wishes, because no doubt the only legal way in which Mr. Organ can be registered is by going before a licensing body with the consent of this Council. Now, what we want to discover at present is, is Mr. Organ a person to whom we should give that consent? How can we decide on that unless we know all the facts of the case? I think it is very possible that Mr. Organ in this document, which I have not seen—I do not know what is in it, or what testimonies in his favour are there—but if it comes before the Committee, and that Committee gives us the gist of his communications, and they should show that he is a reformed character, then we shall be in a position to say whether we shall give our consent to his going before an examining body or not.

Mr. Rumsey: There seems to be a general disposition round this Board to extend clemency if that be possible; and it seems that the forms in which the clemency should be extended are different in the minds of Dr. Christison and Professor Syme. It appears to me that the difference of their views on that subject brings the case into a nutshell. Dr. Christison says the first application for a remission of the sentence (if that is not the right word, you know what I mean) must proceed from a licensing body. Professor Syme I understand to say, the first step after proper inquiry is for this Council to withdraw its prohibition. (Hear, hear.) I must say that seems to be the most legal as well as the most advisable course to pursue—that we having issued it should be the body to withdraw it.

Dr. Paget said he preferred the amendment proposed by Dr. Thomson to any other that had been suggested. He said there were a great many persons whose feelings have to be considered besides Mr. Organ—all those persons whose names are on the Register at this present time, and particularly those whose names begin with "O."

Dr. Alexander Wood: Oh, oh! (Laughter.)

Dr. Paget: I know there is a friend of mine whose name would stand close to his; and I think, until his character is more clear, it would not be pleasant to be placed so close to him on the Register.

Dr. Thomson's amendment to refer the matter to a committee was then put to the Council and carried by a majority of 17 to 3.

Mr. Cæsar Hawkins, at the request of the President, took the chair for the remainder of the day.

Registration of the Place of Study.

Dr. Paget proposed—"That the application of a Medical student for registration be accompanied by a certificate of his place of Medical study." That would be merely substituting the word certificate for the word statement. The sole object that I have in view in this proposal is to make the student's register a little more exact, so that there may be less difficulty—or no difficulty—in identifying the individual who has registered himself as a student. It will have, no doubt, the contingent advantage of giving the Council, if at any time they require it, more complete information as to the way in which students commence their Medical studies.

Sir J. D. Corrigan inquired who was to give the certificate.

Dr. Paget: There would be the proper person in every case to give a certificate, whether the student commenced his studies at a Medical school or merely in the house of any Medical man to whom he is apprenticed. The certificate being received by the Registrar, would be copied by him, and could be referred to at any future time. The Registrar would not have to consider whether or no the certificate were a satisfactory one, unless indeed the case were of so very exceptional a kind that he should think it proper to bring it before the Branch Council. But in every case the Registrar would do just what he does at the present time, with the simple exception that the application of the student would be accompanied by some sort of certificate which would be kept at the office. If the student should have commenced his studies in the house of a Surgeon, then the Surgeon could give him a certificate. As it is, at the present time, you actually cannot identify individuals. You may be altogether at a loss to identify the student that has registered himself. My only object is to give more precision to this matter; and no doubt, contingently with that, a little more information.

A Member of the Council: You might have a photograph. (Laughter.)

Mr. Cooper seconded the motion.

Dr. Andrew Wood thought this a piece of most unnecessary legislation. It was the duty of the Registrar, when the student applied to him for registration, to ask him at what school he studied. It seemed to be throwing a troublesome duty on young men just beginning their career, and he believed unnecessary legislation never acted well. Therefore he recommended that next year instructions should be given to the Registrar that in every case where a Medical student applies for registration he shall not be content with putting the name of the town, but shall take the name of the place of study.

Professor Syme said he did not see how such an enactment could have any effect. Manchester had been quoted, and from all that had been said it appeared that the certificate could be got from anybody—the student's landlady—(laughter)—or whoever it might be in whose house he lived.

Dr. Alexander Wood said that the Council ought to simplify the registration as much as possible. The present form had been carefully considered by the Business Committee, and he therefore must oppose the motion to alter it in the way suggested by Dr. Paget.

Mr. Hargrave said that in Ireland the Registrars always did put down the place of study.

Dr. Embleton: I am sure Dr. Paget is anxious to make the registry as perfect as possible; but it seems to me the present form is quite sufficient for our purpose. I do not know that any fault has at present been found with it, or that any occasion has arisen in which it has been found wanting. The form of registration is at present sent down from the Branch Registrars to the educating bodies, where they can be had by the students. I think the advantage in granting these registration certificates is very small, and that the present form of application is quite enough. If we find instances in which it is not sufficient, then would be the time to make an alteration; but at present I think it is all we require.

Dr. Paget: I fear I have been misunderstood by Dr. Alexander Wood and Dr. Embleton. It is not my proposal to make any alteration in the form of application for registration. I think that is a perfectly good one, but surely this form of application should be accompanied by a certificate of the place of Medical study, instead of a statement.

Dr. Embleton: I think this form is really a certificate, and that therefore any further certificate is unnecessary. It is a certificate signed by the student himself.

Sir J. D. Corrigan: I believe I was the member of the Council who told Dr. Paget that the discussion of this question would occupy a much longer time than he expected, and would be attended by more difficulties than he expected—small as it seemed. Now, there is this fact before us to which I would direct his attention—namely, that after considerable experience of the form of our Register, we were obliged last year to consider the difficulties attending it, and the possibility of omitting altogether the production of a certificate. We omitted that part especially, and now Dr. Paget proposes we should go back to the old form. I do not see any necessity for going back to that, and I do not see, after the absolute impossibility of it has become apparent on the recommendation of the Committee last year, we had better allow another year to pass over our heads before making any fresh alteration. The certificate of the place of study must be obtained from somebody or other; the resolution does not provide what authority shall furnish that certificate; the resolution as it is proposed by Dr. Paget is simply "that the application for registration shall be accompanied by a certificate." From whom? From the boy's father or mother, or from the parish minister, or from the parish priest, or from his friend or his brother? It leaves that an open question, so that he is in perfect ignorance as to whom he is to obtain the certificate from. And this, I think, alone is fatal to restoring those words. It has been suggested that the certificate can be obtained from the Professor of the school to which the young man is attached, or where he is learning his Profession. Now that proposal opens a very wide question, which has never yet been determined, and that is, what is a place of study? Some say it is a school, where all the branches of Medicine and Surgery are taught. Other chartered bodies say that the place of study may not be a school at all—for instance, the College of Surgeons and the Apothecaries' Society of London—and I quite agree with them, although there is a difference of opinion upon it. They permit a young man to commence his studies in the house of any Medical man of whom they approve (and I think they are right), though he be not a Professor or attached to any school. With regard to the Apothecaries' Hall of Dublin it is the same, and they are bound by Act of Parliament to say that his studies commence from the time he is bound to a Practitioner, and that Practitioner may reside in any town in England, Scotland, Ireland, the colonies, or on the Continent. But Dr. Paget has reminded me of a very curious difficulty connected with this matter, and which occurred in one of the Queen's Colleges. I would ask Dr. Andrew Wood's particular attention to this, because I would not have him deficient in any weapons which he would like to use against me, and I want to show him that I go as far in inflicting penalties on my own Colleges as on others. (Laughter.) A young man came to us the other day to be registered. He had passed the Preliminary Examination at Galway College, but when he asked for a certificate of having passed that Preliminary Examination, and of his place of study, under the idea that that was still necessary, the Galway Professors, with a cleverness for which that part of Ireland is remarkable—(laughter)—refused to give him any certificate whatever. Their position was this:—"We have in this way the power of preventing you from going away from Galway, for you cannot go on with your studies—you cannot register until you get a certificate, and a certificate we will not give you; so that you must stay at our school." (Loud laughter.) But, as it would not do to say they refused it altogether, they passed the resolution which they had the face to send to us as the Branch Council. They send a cool letter to us, stating that they did not refuse a certificate, but that they would at the following Easter (this having occurred last November) send a certificate, which course, translated into plain English, is this:—"We will not give you a certificate, therefore you must remain with us, because you cannot register until Easter, and your registry at Easter would be illegal, and would not be regarded by the General Council. Therefore we keep you in Galway, whether you like it or not." Now, considering all these difficulties, and that Dr. Paget's resolution provides no source whatever from which the certificate is to come, nor any obligation on the part of the person from whom the student is to get it, I would ask him to consider the little time that has passed since we arranged our present plan, and to allow it to remain in operation for at least another twelve months.

Dr. Paget briefly replied, and the motion was put and negatived by a large majority.

Adjourned until Tuesday at two o'clock.

Sixth Day.—Tuesday, June 4.

Present: As before.

The Medical Amendment Act—Mr. Walpole's Letter.

The President said he had received the following communication from Mr. Walpole from Balmoral; he read:—

Balmoral, June 1, 1867.

My dear Sir,—I have just received your communication from the Medical Council respecting the amendment of the Medical Act. As I am no longer the Home Secretary, and, in point of fact, am not likely to be in London for some days, I have thought it best to send your communication on at once to Mr. Gathorne Hardy. Yours ever, very faithfully,

S. H. Walpole.

The President said he had sent that letter to the Committee on the Medical Acts Amendment Bill, and he trusted that other members of the Council who had heard through the Committee that such a communication had been received would consider the course to be pursued in reference to this communication.

Dr. Paget said the Medical Acts Amendment Committee had met this morning, and before Dr. Burrows' communication was received they had considered the advice they should give the General Council in reference to the amendment of Clause 11 proposed by Mr. Walpole. It occurred to them that if any member of the Government in the place of Mr. Walpole invited the Council to a conference, almost the first question that would be asked would be this:—"Well, gentlemen, as you object altogether to Mr. Walpole's amendment of the clause relating to the admission of foreign and colonial degrees, what do you propose to substitute for it?" The Medical Acts Amendment Committee thought their time would be well spent in considering that matter, with a view to laying before the Council a new amended clause for their consideration, so that if the Council come to a conclusion as to what the clause ought to be, the deputation might be prepared at any interview with the Government to give an answer. On the receipt of Dr. Burrows' communication addressed to him as Chairman of the Committee, he communicated with the Chairman of the Business Committee, and he thought that the matter was of sufficient urgency to make it desirable to have the matter brought before the Council this day; accordingly Dr. Paget had sent the notes of the clause they had drawn to be printed. The amended clause would give to the Medical Council more freedom for considering and determining the proposed regulations with regard to these things than would have been left by Mr. Walpole's clause, or any other clause that should have been considered.

Dr. Quain: I think we are hardly in a position at this moment to discuss this clause.

At the suggestion of the President, Sir J. D. Corrigan moved "That this letter which we have just heard from Mr. Walpole be received and entered on the Minutes."

Seconded by Dr. Andrew Wood and carried unanimously.

Dr. Acland: By way of anticipation I was going to suggest whether the natural corollary from that would not be to lose no time in making an appointment with Mr. Gathorne Hardy.

Dr. Quain: I was rising to say that we have made an application to Mr. Walpole, and he sends us a distinct answer that he has sent our application to Mr. Hardy. The simple course now is to determine whether we shall take any further steps in the matter, and second to whom we shall go.

Dr. Acland: I consider it only a formal suggestion. If Dr. Paget would move it, perhaps it would be better, or I would simply move that the President be requested to make the earliest possible appointment with Mr. Hardy, requesting him to receive a deputation from the Council. That will give us time to discuss the matter.

Dr. Quain: I beg to second that.

Mr. Rumsey: I rise, before this motion is put, to ask whether the answer that Mr. Walpole has returned, in the opinion of this Council, pledges us to continue our communications with the Home Office.

The President: I think not; his words are merely, "In consequence of having ceased to be Home Secretary," and also because he is likely to be absent from London for some time, he has sent our communication to Mr. Hardy.

Mr. Rumsey: I ask the question because, with the greatest possible respect for the opinions of yourself and former Presidents of this Council who have thought it a right course to take to seek interviews with Home Secretaries on these matters, I humbly conceive that a mistake has been made from the first in not going to that authority with which the Legislature has placed us in direct communication—namely, the Privy Council. There is not a word in the Medical Act

with regard to the Secretary of State, except as to the performance of one great duty, which he never performed—namely, providing us a place to meet in. (Laughter.) That is the only thing in the Medical Act I am aware of referring to the Secretary of State. But there are many clauses, particularly the 24th and some other important clauses, which place us in a very different relation with the Privy Council, and I think it will be acknowledged by all who know the public business of this country that the Privy Council has much more time to devote to matters of education and other matters affecting science and literature than the Home Office has. I therefore hope that, in any further steps that may be taken, we may bear in mind the fact that the legitimate normal relation of this Council with the Government is with the Privy Council and not through the Home Office.

Dr. Andrew Wood: I would ask, what have we been doing for the last two years? We have been in communication with the Home Office. We were dissatisfied with the last communication from Mr. Walpole, who was at that office; we wrote him to state our opinions, and to ask with what member of the Government we should confer. Now we are told by Mr. Rumsey at this time of day, do not go to anybody but the Privy Council. Now, I think that really is not a course which should be talked of for one moment. I think it is quite clear that this Council ought to rejoice very much indeed that they have been referred to Mr. Hardy, the Secretary of the Home Department, and ought not to lose a moment in taking advantage of the permission that has been given; but it will not do to go to Mr. G. Hardy empty-handed, because the first question he would ask is (and we know Mr. Thring has a great deal to say at the Home Office)—the first thing they would say to us is, "You say this clause will not do, you do not like Mr. Walpole's amendment; have you anything to suggest in lieu of it?" I hope we shall, 1st, secure an interview with Mr. G. Hardy at his earliest convenience; 2ndly, appoint a deputation to wait upon him; and 3rdly, before we go on to any business, take up this clause of the Medical Amendment Act Committee, and see whether it is such a clause as we can adopt.

The President: The resolution proposed by Dr. Acland, and seconded by Dr. Quain, is—"That the President be requested to ask Mr. Gathorne Hardy to appoint a time to receive a deputation from the Medical Council with respect to the Medical Amendment Act."

Mr. Rumsey: Before you put that, Mr. President, I think we either ought to leave it, if you are willing to accept that charge, in your hands, or, if you decline to undertake it singly, I think the whole Council ought to have an opportunity of attending on that occasion. (Cries of "Oh, oh," and ironical cheers.)

The President: If this motion were carried, I should consider it my duty to wait upon Mr. Hardy, and request at an early time he should receive a deputation from the Council. I do not think I should pledge the Council in any way whatever. (Applause.)

The motion was put, and carried unanimously.

The President: Having adopted that resolution, I think it will be at once wise in me to take an early opportunity to go down to the Home Office and endeavour to find Mr. Hardy for the purpose of asking him to receive the deputation. (Applause.)

After some conversation as to how the time during the President's absence should be employed, the President called upon Dr. Acland to proceed now with his motion.

Dr. Acland's Motion—The Concentration and Combination of Examinations.

The motion was as follows:—

Suggestions for Enabling Clauses in a New Medical Act.

1st. That it is desirable to obtain the following additional powers under the Medical Act with respect to examinations, viz.:—

Whereas there are now in the United Kingdom nineteen Licensing Bodies, having power to confer thirty separate licences and fifty-three different titles, and whereas it was the intention of the Medical Act to produce a uniform and sufficient standard in the examinations conducted by the said Licensing Bodies, and whereas the power of combining the examinations of the said Licensing Bodies under Clause XIX. of the Medical Act has been sparingly used; whereas the visitation of the examinations of so many bodies by different visitors is a cumbrous form of procedure, and one ill calculated to produce the uniformity sought for, and that further concentration of the examinations will tend to the accomplishment of that object:

It is desirable that the General Medical Council shall have power to combine with any of the Licensing Bodies mentioned in Schedule (A) of the Medical Act in conducting examinations, by the appointment of *assessors, visitors, or examiners*, conjointly with such bodies, in such number and with such duties as shall be agreed upon between the Council and the bodies agreeing to conduct such joint examination. That the examiners, assessors, or visitors so appointed shall not be members of the Council, and shall be paid in such manner and at such rate as the General Council, subject to the approval of the Treasury, shall decide; that the qualification so conferred may be entered in the *Medical Register*; that if the qualification so conferred shall be granted after examinations in Medicine, in Surgery, and in Midwifery, it may be accepted by any public bodies who have heretofore required a so-called "double qualification;" that nothing in this qualification shall debar the holder from obtaining the further title of Physician, Surgeon, Doctor, Master in Surgery, or Fellow of any College, or the like, on such terms as the bodies mentioned in Schedule (A) respectively may determine, nor from obtaining separate qualifications from such bodies as at present.

2nd. That in order to encourage the study of Hygiene and "State Medicine," it is desirable that the Council shall, in combination with any of the Licensing Bodies, have power to institute examinations in Hygiene and "State Medicine," and to give certificates of competency therein, and that these certificates may be entered upon the General Register as an additional qualification or title of registered persons.

3rd. That whereas it is the duty of the Medical Council to republish, *alter, and amend* the *British Pharmacopœia*, lately published (Clause 54, Medical Act), and the Council have resolved that they do not consider that they have power under the Medical Act to expend any funds in inquiring into the utility of articles introduced into the *Pharmacopœia*, but only how to prepare such articles, *it is desirable* that the Council shall have power to expend such sums as it may see fit from time to time, with the approval of the Treasury, on investigations calculated to perfect the knowledge and to test the utility of articles of reputed or probable value, whether recently discovered or otherwise, with a view to including them in or rejecting them from future editions of the *British Pharmacopœia*.

Dr. Acland: Mr. President, it may be as well, in order to save the time of the Council, that I should state at once, and in the outset, the object I have in view in proposing for the consideration of the Council a motion which I confess involves consequences so wide as that which you have just heard read. The object, then, of the motion is—I confess it at once—to elicit from the Council a full expression of opinion as to whether it is desirable to obtain an extension of power in certain specified directions, and to bring on a discussion as to the manner in which, and the purposes for which, those powers, if desirable, should be obtained. The course which I would venture to ask your permission to pursue is to discuss the constructive clause concerning the examinations first, and to take the sense of the Council upon that clause, and then to consider the other clauses at your convenience. I do not pretend to say that all the powers which the Council need are contained in these notices before you; but I do think that at the present juncture, and I would say especially at the moment you are about to seek another interview with the Government, it happens most opportunely that we are considering the subject; and I believe there is nothing of more vital importance for us, if the present Council is to command the just confidence of the country, and to be supreme in regulating the future education of British Practitioners in Medicine. The first clause before you aims at making the best possible examining boards. The second clause proposes to organise another order of experts—much needed, I venture to think, in public departments—and to provide a method for their licensing and examination. The third proposes a plan for meeting what I admit has already been considered by the Council, but I respectfully submit that it is acknowledged, as far as I know, all over the country and through the Profession generally, to be a great and admitted want at the present period of things in therapeutics. These two last I shall not at present enter upon, and I shall be as brief as possible with the first. I only wish it had devolved upon you, sir, or upon some other expert among us better entitled by age and standing to bring forward such a question as this; but I am sure, from the kindness I have received on former occasions, that, in a matter to which I have given some attention, you will kindly assist me to bring the subject fully before the Council. I should not have ventured to bring forward this if it were not that before the Council met, I knew that, at the time we were about to have the Medical Bill, there was no notice by any other member on the subject. And on full consideration I thought it would be very improper that this session of the Council should pass over without some one bringing these matters forward. It is hardly necessary that I should state why so much importance seems to be attached to a motion which at first sight may appear to some to make only a small change in our powers. But, sir, if the means be small the result nevertheless may be very great. We all know that examinations virtually regulate the course of study. It may be a misfortune that this is so; but it is a fact. Examinations may have evils attendant upon them; and they have, I believe. But it is an object, of course, with this Council, as it is with every good examining body, to diminish those evils to the uttermost. Examinations regulate, necessarily, the standard of the knowledge of the student, and of the qualifications which they profess to confer. The examinations, therefore, especially of an imperial

body such as sits round this table, should be of such a kind and of such a character as that to impugn their verdict would be impossible. The Council, therefore, ought to have at its command examining bodies which are not only perfectly competent to their work, but which shall be absolutely above all cavil and all suspicion; and I will not say but that I think language has not been unfrequently used concerning existing examining boards which, whether that language be just or unjust, is equally to be lamented in a national point of view. Upon these few and brief premises, sir, four questions appear to me to arise:—What is the best Medical examining body in an empire like Great Britain? What is the most reasonable kind of examination which can be conducted? Do our present boards fulfil those conditions? Can we make the boards which now exist the best which can be made? It would be highly unbecoming in me if I were to go into any details on subjects of this kind with persons so entirely competent, and with their minds so made up, as the members of this Council. But perhaps you will allow me to remark that for many years it has been admitted as a principle that our present arrangements are not likely to be final. Combinations of boards, as we well know, have been always contemplated. They were contemplated long before this Act existed, and they are definitely pointed out in the Act, as we all know, in Clause 19; and as the Act suggests combinations, that is quite sufficient. We here are perfectly justified, therefore, in settling the kind of combinations which may be conceived to be best adapted for our purpose; and, as I said before, the present juncture is one at which it seems to me most desirable that this question should be considered—namely, if these combinations do exist, what is the best kind of combination which for national purposes can be devised for creating those unimpeachable boards (or continuing them, if you please, if we consider them to be so now) in Medicine. Now, there has been a rumour for some time past that a combination is contemplated between two great English corporations. It would be highly improper if I were (as I do not understand that it is officially a public matter) either to assume that that is to be the case, or still more if I were to venture to prejudge the value of a combination of that kind. But I ask myself in such a contingency (and we may all, I think, very properly ask ourselves in the public interest), supposing this great and important combination should take place, would it furnish, would it possess, all the conditions which we can desire? Would it bring about all that, in the present condition of things, is possible? And we might still further ask this question—whether there are other additional elements which are valuable for further public advantage in the present existing state of the Medical corporations, and of the Universities, and of the legislative powers now existing? I ask myself, naturally, when I hear of great combinations, what combination would be the best to give us all a permanent and satisfactory basis and conclusion of the great difficulties which have occupied our minds for many years. Now, I have no hesitation at once in expressing my opinion—it may not be worth much—that, as far as England is concerned (I will say something presently concerning the two other divisions of the country), the machinery of the existing institutions appears to furnish elements for the best possible combination—that is, for the construction of the best possible examining board, supposing the Medical Council has a direct voice in the construction and operations of such an imperial board of examiners. If you will allow me to offer one or two suggestions as to the operations of such a board, I will do so very briefly. I allude, of course, to the fact known to us all—that there are a great many boards appointing their own examiners, educated in their own manner, according to their own previous traditions, with their own particular qualifications, and so forth. Now, supposing all the examiners in this country—and I take this country merely, because I am best acquainted with it—supposing we look at all the English examining bodies now existing, and supposing we imagine that they agreed to combine under the powers of Clause 19, and those different bodies there mentioned each furnished their own quota of examiners to one great examining board, one sees at once that elements for the most powerful and the best possible staff of [illegible] would be produced instantly. It is not for me to suggest whether such a thing is possible; and I am not quite certain that that is the most desirable thing that can be conceived, because it may be that one such body would not be sufficient for the working of the institutions of the country. Members will bear in mind we are speaking only with reference to pass examinations. It is not a question of fellowships, or honours, or doctorates; it is merely a question of the passing hon[illegible] into the Profession of a sufficient number of persons qualified to practise their profession. Therefore, I would venture to say that, supposing what are called the Medical Corporations in London combined, as has been suggested, and that the Universities joined them in appointing their quota of examiners, you would at once necessarily have a combined body of the best description which could be devised. That is my belief, and I say it with all my respect for Home Secretaries and Privy Councils. I do not think I should have said that seven or eight years ago; for it is one of the great advantages which I have enjoyed, and one of the great privileges conferred upon every member of this Board who has sat here for seven years, that I will be bound to say he has altered his opinion as to the working of various institutions, and as to the capacity of different bodies for particular works; and the longer this Council has existed, the more I have become satisfied that for many purposes it is the best body we could devise. I do not think I should have said so with regard to many of our difficulties and discussions, so insuperable did the former seem six or seven years ago; but that is the mature conviction at which I have arrived, or I should not dare to make the proposal which I make to-day. I venture to delay you a little longer, because it would be unjust—I will not say to the speaker, but to the very important and serious matter which we have in hand, if I were to slur over all the details in such a manner as to leave you entirely in the dark as to what is the bent of my mind on this matter. I will merely suggest one or two things which have struck me with regard to such a large combination of licensing bodies, either of Medical Corporations or of Universities; and it is this, in reference to London particularly, there are many subjects to be examined upon by such a board, and therefore there will be many examiners of different scientific and particular qualifications. You would, in this way, have the best persons appointed by their several institutions for special purposes. Now, I have a word to say as to the place of examination; and I am very grateful to you for not having interrupted me up to this point, because it seems almost a liberty that I should presume to make—not suggestions, for I do not do that—but even to contemplate the possibility of an arrangement of this kind. It has occurred to me, supposing such a combination should take place in this metropolis, that with regard to the place of examination, certain examinations could, for instance, be conducted in the best possible manner in the hall of the Apothecaries' Company, because there are certain parts of examinations especially concerned in the department to which that body devotes a great part of its powers and attention. You may have particular examinations in certain departments with very little inconvenience to that corporation, and, as I submit, of the best possible kind, which it would be exceedingly inconvenient and much more difficult to conduct in this room, where objects would have to be brought and the like. The same with regard to Surgery, and the same with regard to other examinations. There are numerous conveniences of this kind dispersed, and at no very great distance from the centre of this metropolis, where all such things could be easily arranged by the common consent on the part of these bodies. So that I think, whether I contemplate the combination of the persons who could be so appointed, or whether I contemplate the particular working of such a combined body, I can find no objections to it, and at the same time I can see infinite advantages, or, if that be too strong a phrase, the greatest possible attainable advantages, arising from it. Well, it so happens that at this particular time, while the Council are, from their experience concerning all these legislative questions, if I may so term them, seeking for new powers—while we have got on our table the very valuable, interesting, and (if I may be forgiven for saying so) highly creditable reports concerning the state of the examinations all over the country—it so happens, singularly enough, that there is just formed a combination of all the great teachers in the different schools of the metropolis, for what purpose I really do not know, but I see by the papers there is an organisation of those teachers. Now those teachers are persons engaged in all the Hospitals of the metropolis, and by that combination in relation to such a central examining board, there would be the utmost conceivable convenience with regard to that very difficult question of clinical examination. For, supposing such a central imperial examining board to exist, necessarily from its magnitude, and from the different kinds of persons who would be upon it, and from the relation which those persons would have with the Hospitals and Dispensaries of the town, they

would have that kind of connexion with the conductors of those institutions that, with very little difficulty, they would be able to place before this board the case of A. B. or C. D., which would be quite proper for clinical examination. That would be a greater convenience than can be devised in any other way, unless by some such combinations for common objects. I would therefore say, it seems to me that, if combinations are to be entered into, they had better be complete and thorough for this vast work, and that, if such a one as this could be devised, all the intellectual powers and the mutual experiences which could be brought together for such purposes in our Profession being so brought and so expended for the best, all but the technical offices of the work would be simplified to the minimum; and that such a board would be altogether above all cavil and censure, just in the same way as the Civil Service examinations are supposed to be conducted by a high and independent body whose character and conduct it would be just as idle as useless to impugn. The plan which I have ventured to suggest for your consideration is only by way of suggestion, but what I do venture to put forward is, how far combinations of this kind could be encouraged by this Council. The Council has, of course, no such power. It has no power to interfere in the matter at all; so that the simple point to which I alluded at the outset—that small lever by which I said so much might be effected—is contained in the suggestion that the Medical Council should have power under the Act to appoint a body of assessors, or visitors, or examiners (words which in my motion are printed in italics), to act conjointly with the combination to which I have alluded; and this Medical Imperial Examining Board is one which might be made entirely independent of the Council. It may constitute itself to-morrow. There is no reason why to-morrow a meeting should not be held in this hall, and why the four English Universities and the three London Corporations should not agree to combine on such terms as they think fit, and to conduct such a pass examination without the Medical Council at all. (Expressions of dissent.) I think I am not wrong in that; there seems to be a little doubt about that, as I gather, but I submit that any two or more Colleges or bodies in the United Kingdom mentioned in Schedule A may, with the sanction of the Council—("Hear, hear," from Dr. Andrew Wood)—unite or co-operate for such a purpose under the Act. No doubt it is so far with the sanction of the Council, as that the Council should permit it; and if the Council could permit two bodies to unite, of course it might refuse a combination for such a purpose. However, that is not to be supposed, and I think I need not enter into such a question. Then you may say, that being so, "Why do you move in this matter at all?" Well, now, supposing I thought such a combination probable during the short tenure of office I might have from the Council, I certainly should not move in the matter at all; but I do think that something of that kind is exceedingly desirable, and I further think that, upon the whole—although I am quite ready to change my opinion directly I shall be convinced of either the difficulties in the practical working of it, or of its being desirable that the Council should be wholly independent of such a body, or by any arguments of that kind, for I am not at all bigoted about it—I cannot help thinking that it would be a positive advantage, supposing such an imperial examining body to exist, that the Medical Council should nominate its quota of the examiners not from members of this Council, but that we should simply be one of those who enter into that imperial board by means of our examiners. Of course those gentlemen would have to be paid, as well as the others; and that is one reason why I think it exceedingly undesirable they should be members of the present Council. I think on the whole, in the construction of a large board of that kind, it would be very desirable the Council should be represented upon it, but upon that point I should not be rigid, for the reasons I have stated. Therefore I have printed the words in italics; so that, supposing we applied for powers to appoint these persons, they might be either paid visitors, or examiners, or assessors, or whatever may be their position. But I think if the Council reserved to itself—and no doubt it would reserve to itself—the power of visiting, either by its members or any other persons—if the Council retained, as it would retain under the Act, its powers of visiting even this imperial examining body, it had better drop out of the Act, by sending other persons as assessors, the remuneration of members of the Council, they going freely to see the operations of this body, not in the light, as it were, of critics, but for the sake of information and the general interest we should have in the independence and the perfection of the body with which we should be associated. Then I think it would be a waste of your time if I were to proceed to discuss in detail, after what I have said, the further particulars of this clause. I shall have, in the ordinary course of our proceedings, the power of replying to any questions you may put to me, or to any objections which may be raised. These several particulars of the latter part of the clause beginning, "The General Medical Council shall have the power, etc.," are questions of detail which may be modified, even supposing the general plan of making a move in this direction be adopted by the Council. This thing only will I venture to say, in conclusion—that such a board as I have described would not only be a most valuable examining body, but it would have a perfectly inestimable value as an educational agent. And the reason is this: I said just now what, as a general educational matter, I feel very strongly—namely, that all examinations are an evil. Examinations are an evil to a certain unavoidable extent; and any person who has had much experience of youth, either in Medical matters, or, as I have had opportunities of observing, in matters not Medical, must know perfectly well that the particular stress that is laid upon a student, even a student of the best kind, in preparing him simply for the operation of getting through a certain quantity of work, on a certain day, at a certain hour, is, *per se*, an evil, which operates upon him, either more or less, during the whole of his educational life. And I have heard persons of great experience say several years ago that the advantage of free and undeterred development of human power in the youth of this country would be materially jeopardised by the increase of examinations as a mere instrument, and that the way in which great minds used to be formerly made, or rather trained and disciplined—not the only way certainly, but one of the ways—and their qualities evoked, was just by this fact, that being set generally by their teachers on a certain course of work, at which they were to aim, they proceeded to work in the way in which they found themselves best adapted for it, with the consciousness that the constant growth of their powers and attainments was the way in which they would best succeed. Instances of that occur in the lives of our engineers especially, and even in those of members of our own Profession. However, we have passed that period altogether, and it is absolutely necessary now that these examinations should be carried on and strict rules laid down for their conduct. But of course they must be the best possible rules, carried out by the most experienced persons; and I very much doubt whether in our Profession many persons are fitted to be examiners who are not themselves constantly engaged as teachers—(applause)—and I may add that opinion is not confined to those departments of human knowledge which are specially connected with our Profession. I have only to thank the Council for their great kindness in allowing me thus simply—I cannot say fully—to state generally what I think to be worthy of their attention. The last thing which I should presume to do would be to press such a matter upon them; but I do not think that I should have acted with that regard which I have for my colleagues here, or with the general sense of duty which I entertain as belonging to all of us, if what had been much in my own mind I had not thus endeavoured to state to you. But before I sit down, I dare say you will allow me to read a passage which I suspect has been read already by every member of this Council—a passage in a pamphlet which was lately published, and, I suspect, freely circulated by Professor Bennett, of Edinburgh. It is this: "The Medical Council would vindicate its claim to public confidence by endeavouring to merge the conflicting interests of the licensing bodies and Universities into the catholic desire of elevating the education of the Profession to the same standard throughout the length and breadth of the land." Now, the Council will not, of course, suppose that by reading this passage I think the conduct of the Council has been such, or the condition of the business of the Council is such, as that they particularly need a reminder of that kind. I say, with all respect and regard for Professor Bennett, I wish to disclaim that for myself, excepting for a reason which I will state presently. He goes on—"That in a profession such as that of Medicine there should exist, not only in the same country, but in the same city, various examining boards, so managed that the candidate who is incapable of passing one can rush to another with almost the certainty of obtaining his licence, is a scandal to the community such as should be abolished, and little jealousies and sneers as to the value of this or that qualification

ought to cease. It is by a like education, a like examination, and a like qualification, that we shall learn to respect each other, diminish the petty feelings which opposing legislation and regulations have fostered, and, by union and a combined effort, not only solve these problems which agitate our science, but place the whole body of its cultivators in just relation to the Government on the one hand, and to the public on the other." There is the passage. This opinion of Professor Bennett is not singular, and it is not original; but it is just, it is very pregnant, and it is to the point. The only comment which I would venture to make on it is, that there is no place in the country where that matter is more thoroughly understood than it is in this room, and the whole course of this Council, under extraordinary difficulties, has been gradually to approach the point at which we may freely and calmly discuss, with all the certainty of success sooner or later, anything which relates, I will not say to the welfare of the Profession, but the welfare of the country; and that any small, petty, or jealous opinion—if such were now advanced at this board—would simply be put down. That is one thing which I have to say, and I think it right to say that much, because it might be supposed from this passage, freely circulated and read, that such was not the condition with regard to these matters, which I now think it is. I will not presume to suppose that what I have suggested for your consideration is the best thing that can be devised, because on that point I wait with deep anxiety for the expression of opinion by the eminent teachers (many of them my own teachers) and the high authorities who are now sitting here. But this is certain, that it is a peremptory necessity that this question should be discussed when passages such as I have now read have been published by an eminent Professor of a great University. With regard to the other two clauses which remain for consideration, I said at the outset that I thought they had better be deferred. I think so still, and also that they had better be taken separately; but in order to make the argument consecutive, I dare say you will allow me, not entering at all into the question of the next clause, to point out to you one reason why it is necessary this subject should be considered, and if I forestall what is to be said with regard to the second clause in some measure, it will only diminish the time which the Council will have to give to it when its turn comes.

The President: I am sorry to interrupt Dr. Acland at the present moment. Having heard his most valuable suggestion on this important question, I now feel myself capable at a subsequent time of conducting your discussions upon the subject. I will therefore, with your permission, go at once to the Home Office, and Professor Syme has kindly consented in the meantime to take the chair during my absence.

Dr. Acland: You will see at once there is a reason why it will be undesirable that the subject of the second clause should be entirely severed from what has been now stated. I dare say it will have struck members of the Council at once that, supposing it should be the opinion of the Council the second clause contained matter worthy of their consideration, they should endeavour to bring it to a practical effect in some way. And here, to guard myself, which naturally every one is desirous of doing, from taking in any sense a liberty with his colleagues, with whom he is on familiar and intimate terms, I think I ought to say that, before venturing to bring before you this motion concerning the subject of hygiene, or State Medicine, I thought it my duty to write (privately, it is true) to two persons of the Council who have paid great attention to it—namely, Professor Parkes and Mr. Rumsey. It is true I did not ask their leave, because that would have involved them in certain difficulties in refusing or granting it—so that they are perfectly free to oppose this matter, or to deal with it in any way they think fit. Neither did I ask them to propose it, for the same reason, because if they had declined it would have involved myself in certain difficulties—although I confess I would much rather that Professor Parkes or Mr. Rumsey had taken the matter in hand. Now, as to the proposition that a qualification in hygiene, or State Medicine, should be registered, supposing any body takes this up—I know it was under the consideration of some persons at Oxford to introduce an examination on this subject some little time ago, and since I have been in London I have learnt what I suppose I ought to have known before—namely, that the same proposition had been considered at the University of London. (A voice: Never.) Then I was not so ignorant as I supposed.

Dr. Storrar: The state of things was, a committee on the subject was appointed, but never met; the gentleman who got the committee appointed never moved that it should sit.

Dr. Acland: Then my ignorance was not so culpable. At all events, I merely heard that such a thing had been contemplated in the University of London. It was not publicly mooted at Oxford, but it was a matter of consideration by some of the most intelligent persons there whether or not it was desirable that persons should have some special education for this very special work. I do not want to enter into the merits of the case, but, as a matter of fact, what do you find in the country? That Poor-law Officers and persons of all kinds appeal to Medical men on the Register for information on some of the most difficult and abstruse questions on this subject which they really have no knowledge of; and people would consider them deficient in knowledge if they did not give an opinion. There is no doubt special education on this subject is much wanted. But supposing any of these licensing bodies, so called, should support this qualification and obtain permission to enter it upon the Register, what follows? You immediately have a dozen or more qualifications entered upon the Register, in addition to fifty-three different titles, and they would amount then to about seventy. One of the points which turned my attention to this question was, what is to be done to diminish this extraordinary and manifestly unnecessary number of licensing bodies or qualifications which appear on our Register? That was one of the things which made me pause before I brought it forward, because I said it will just be an addition to the general confusion. That is all I have to say upon Clause 2. We shall see at once the bearing which it has upon the previous argument—that, supposing it should be thought necessary or desirable to have this qualification, then we shall endeavour to harmonise the standards according to which this qualification shall be given, or we shall have so many qualifications to inspect and look into, and so many more difficulties in testing whether what we have come to is the right and proper standard, and whether it is properly enforced. I will not recapitulate what I have said, but will only thank you for your great courtesy in permitting me to state, as simply as I have been able, what has struck me upon the subject. Perhaps I shall be more in order if I formally move "That it is desirable to obtain the following additional powers under the Medical Act with respect to the examinations," which I need not read to you again.

Dr. Stokes: I beg to second that motion. I will simply say I quite agree with Dr. Acland in the opinion that this is a matter which involves questions of the deepest possible interest to the Profession and to society. Therefore I think that these are questions eminently worthy of the deliberate care of this Council; even if we do not come to any resolution on the subject, a debate on the matter, which would elicit the opinions of the representatives of the different Medical bodies of this country, could only have a good effect as eliciting opinions which would be entitled to great weight as coming from so many distinguished men. I second the resolution upon these grounds, and I believe, if this method was adopted, it would remove, or tend to remove, from my mind the objection which I most strongly hold to Council visitations—(hear, hear)—which is a system (whatever good there may be in it) that contains a great deal more of what is bad and objectionable. I will not enter into the list of my objections to it; I merely refer to the debates of last year, in which the real objections to this system were so eloquently and strongly put forward by Sir Dominic Corrigan. The simple fact, if there was no other, that we are reporting upon one another is to my mind quite conclusive in making the reports upon these visitations untrustworthy in the eyes of the public. (Hear, hear.) Then, again, it is not to be supposed that this duty can be undertaken without payment, and it ought not. Then comes another objection, that we are paying ourselves; we are appointing ourselves to duties and making use of the public money for payment. If so, that is an imputation which I, and I am sure many gentlemen at this table, would not like to sit under. With regard to this resolution of Dr. Acland, it strikes me it would put the examinations in a position free from suspicion, because it would take away the necessity for visitation, for the very term visitation implies suspicion. It would make the Council more and more the body to which the Government of the country would look for counsel, for reference, for advice. It would give to the qualification—which is a pass qualification, and which is not at all intended to interfere with any of the higher qualifications of any of the educational bodies of this country—a standard stamp of authority as coming from a body which

is sitting here by the laws of the country—(applause)—and it would greatly further the facility of the union between the examining bodies which is anticipated in the Act. I cannot agree with Dr. Acland in the observations with which he concluded his speech upon the folly of examinations—at least, as they have been hitherto conducted. I believe that a very large number of all these examinations have been no protection to the public whatsoever.

Dr. Storrar: I rise to convey my decided opposition to this motion of Dr. Acland. We are not here, sir, building up a new state of things; we are dealing with an organisation in which it has been attempted to combine the old things in such a form as to enable us to arrive at the greatest practicable amount of good under given circumstances. If the wave of revolution had passed over this country, and we had to rebuild and remodel our educational establishments anew, then I should think Dr. Acland's proposal somewhat more appropriate. I deeply regret that in the past endeavours of this Council a great deal of the most valuable time has been wasted in bringing forward transcendental notions of Medical perfection. We have seen what they all mean, and eventually we have gravitated down to more rational notions, and we have come to consider that we are the servants of the public appointed under Act of Parliament to carry out definite functions. It is true the public ask of us a larger amount of perfection for those gentlemen who are on the Register than it was in the power of this Council to give. That has led some members to endeavour to negotiate with the Government for the introduction of a Medical Amendment Bill. We see the difficulty there is, notwithstanding our exceedingly moderate pretensions two years ago; and when you came to the determination that we were to limit our ambition to the scope of the few clauses which are familiar to you, we also determined to set ourselves to work to test the instrument we had in our hands, and to endeavour to make the best of it. We arrived at this conclusion, that it was time enough for us to proceed to a more advanced stage of legislation when the instrument which the Legislature had put into our hands already broke in our hands. I allude to our visitation of examinations; and I venture to say that the advantages which that instrument has produced during the last two or three years prove that its exercise has been fraught with great success, and that it has found the various bodies respond to our suggestions with an amount of unanimity which I hardly looked for. Now, what would be the result of this Medical Council embarking on this wide sea which is opened up before us? What do we propose to do? We propose, for instance, to take away certain functions from the Medical Corporation, to divide them with the Universities.

Dr. Acland: No.

Dr. Storrar: It is to club certain Universities with them for the purpose of establishing a general authority. It is, then, to mix up the General Council with that organisation, and the result would inevitably be to set all the Medical bodies, and probably all the Universities in this kingdom, at daggers drawn with this Council.

Dr. Acland: No.

Dr. Storrar: That is a matter of opinion. Dr. Acland has expressed himself very confidently in his speech. I suppose I may be allowed to express my opinion as confidently in my speech. I can only say it is honestly entertained. I confess I do deeply lament that upon this sixth day of our meeting, when we have been devoting ourselves in the morning, and at the meeting of this Council, really to carry out, as far as we possibly can, the provisions of the Act already in our hands—that we should have this wide subject thrown down upon the table, and find ourselves really with no result and the prospect of arriving at no goal that we have in view. I therefore must say I do object to this proposal of Dr. Acland's. I am not disposed to engage in a struggle with Dr. Stokes, although I entirely differ with him in many of the views he expressed; but he made use of one expression I must refer to. He says, with regard to examination, to appoint ourselves and pay ourselves is a ground of imputation. Now, sir, I do not see how this can be a ground of imputation: it is work assigned to us. Are we not paid for coming here? How many gentlemen, I may ask, would come here if they were not paid? Did we not yesterday acknowledge with deep gratitude the anxious care and ability that had been devoted to the preparation of the Pharmacopœia by voting a sum of money to the Committee? Did Dr. Stokes hold up his hand against that? I think not. I think it is a most reasonable thing that whoever undertakes this visitation should be remunerated.

Dr. Alexander Wood expressed his surprise at the remarks made by Dr. Storrar. He was gratified at hearing from Dr. Acland and Dr. Stokes the views on Medical reform which were familiar to him years ago, and were embodied in the Bill of Sir James Graham. He was surprised to hear any one express himself satisfied with the Medical Amendments Act. He thought that when the Bill was launched such views as those of Dr. Acland would probably find supporters, and it was only right that these views should be discussed by the Council. He thought that no modern Bill which had been introduced into Parliament had equalled in efficiency that of Sir James Graham; and had it not been for accident that Bill would have become law. He thought that the gulf of separation between the different bodies whose representatives sat round the council-table was being bridged over, and he looked upon this discussion as of great value. He believed that when the letter from Mr. Walpole was received, the Medical Bill was taken to a great extent out of the hands of the Council, and that it would now be discussed by Medical politicians throughout the kingdom. The result would be that the Council would have to sit down *ab initio* to consider what a Medical Bill should be. He hoped that out of the chaos something resembling that first and most perfect Bill which was prepared by Sir James Graham, when Home Secretary, would be evolved.

Mr. Hargrave, among other objections to the motion, stated that the charter would not allow the Council to join with any other body for such a purpose.

Dr. Parkes: I certainly cannot agree with my friend Dr. Storrar that this motion of Dr. Acland would be like a revolutionary wave passing over all our institutions—(a laugh)—for it seems to be by no means a revolution, but rather a reconstruction of the material in our hands. It is a bold measure—in fact, it is impossible to disguise from ourselves the extreme boldness of the course which Dr. Acland has taken. At the same time, if a bold, I believe it to be a statesmanlike course; and I think, if this Council will consider what they are about to discuss, they will see that no proposal whatever has ever been brought before them which can compete with it in importance. (Hear, hear.) It is, in fact, the sweeping away, in a certain sense, of your system, and engrafting a new system upon it, which Dr. Acland has called, and called, I think, justly, an imperial system. It is blotting out these peculiar differences, and making one grand examining board which shall deal with the whole thing, and do away with all our difficulties of the licences being registered throughout the different countries, and will do away with all our difficulties as to examinations, and enable us to carry out the object for which the Medical Act was in the first instance framed; for, no doubt, it has hitherto failed in that object—viz., of insuring in every part of the kingdom an order of efficient Medical Practitioners. The difficulty seems to me to be not in principle—for I really think we shall all agree in the principle—but in the practice. The question is—Can it be done? Can we harmonise these various institutions? Is it practicable to do so? We must have regard to the vested interests. This country never has neglected vested interests, and never will. I think Dr. Acland has been wrong in entering into details. I think he should have been contented with the first paragraph of his proposition, and have left the rest to a committee to see how the powers which the Council intend to assume shall be carried out; and I may say now at once that I will support him if he will move for a committee to consider this subject, and report to us how this great object of his can best be carried out with due respect to all existing interests.

Dr. Acland: I may state that I shall at once accede to the proposal to ask for a committee as the best possible course that can be pursued.

Dr. Aquilla Smith: I consider this proposition one of great importance, and it seems to me to be in harmony with the views I hold myself. But if Dr. Acland had been a little more explicit I could go further with him. His proposal seems to point to a single board for the kingdom, but as the resolution is worded I am afraid it would not go so far as that. The words are, "That the General Medical Council shall have power to combine with any of the licensing bodies," and then subsequently the words imply that those bodies would have the power of defeating the thing unless they agreed with the Council—"conjointly with such bodies, in such number and with such duties as shall be agreed upon between the Council and the bodies agreeing to conduct such joint examination." Now, I think that is not sufficiently clear. First, it asks to give power to the Council, but it does not follow

all the licensing bodies would be included in this plan, and that, I think, is a striking want of clearness. I believe we are agreed as to the principle of the thing—namely, the object of establishing a general board. But I think the words are not sufficiently explicit. I think there should be power to compel all the bodies to combine.

Dr. Acland: Well, you must settle that with Dr. Storrar.

Dr. Storrar: No, you are the presiding genius.

Dr. Aquilla Smith: I am only speaking with regard to the general principle. There is some possibility of promoting a Medical Bill without any unnecessary delay. We have a Medical Acts Amendment Committee sitting at this moment. But with regard to the Bill as it stands now, we have put half a dozen patches upon it, and the additional patch proposed to be added would do so little that, for my part, I would rather the Bill should never come before Parliament than to go in its present state.

The President, having returned, said: Allow me to communicate to the Council the result of my mission. I proceeded to the Home Office, and finding Mr. G. Hardy there, I thought it better to wait until the matter on which he was engaged had terminated. I may state that I did not see Mr. Hardy at all; but I saw his private secretary, Mr. Percival, who had received our letter to Mr. Walpole, and had made himself entirely master of its contents. Of course he inquired the object of my mission, and what the Council required. He said he would go in when he had ascertained that our business was so urgent. Mr. Hardy's first reply was that he should be exceedingly obliged to the Council if they could spare him the necessity of receiving a deputation, as he was engaged so much for the next few days, and had arranged on Friday to leave for Oxford. I told him if he would kindly find some half-hour when he could receive us, we felt our business was most pressing; and he then sent back word that if the thing was so urgent he would be happy to receive a deputation on Thursday at half-past 12 o'clock.

Dr. Acland: I think we ought to thank the President for the very successful issue to which he has brought his mission.

Dr. Risdon Bennett thanked Dr. Acland for bringing the matter before the Council. He thought the time exceedingly opportune, for he had a deep impression of the imperfections of the present Act, in consequence of which the difficulties surrounding the Council were almost insurmountable. He thought that by this time it would be very generally admitted, notwithstanding the opinions heard out of doors, that the Council had well and honestly attempted to carry out the purposes for which it was instituted—(hear)—and he thought the public would be prepared to give them greater powers than they had hitherto possessed in view of their past conduct, and having confidence that any further powers would be exercised with the same caution and discrimination with which the more imperfect powers they had already possessed had been exercised. "I do not, therefore, anticipate so much difficulty as some may suppose in seeking to obtain an Act that will very considerably enlarge our jurisdiction. For this reason I am one of those who should not be at all sorry to find the present Amendment Act fail altogether, and if we should not succeed now or even next session it would not be a matter of very great regret to me, because I am persuaded that, sooner or later, we shall have an amended Medical Act; and that the longer that is deferred, the more perfect will that amended Act in all probability be, because it will allow us to introduce such subjects as this, and perhaps some others, into the Bill, instead of having it as it now stands, simply modifying one or two very clear imperfections. The question is so varied that it is impossible to suppose anything like a complete view of the question can be given to us in a single paragraph, such as this submitted to us by Dr. Acland; but, on the other hand, I think it is better he should have thrown out a number of things in the form of details for the sake of illustrating a little more fully than otherwise he could have done his own views, if it were only for the sake of showing us some of the difficulties which beset the subject, and telling us what we have to encounter. I think, therefore, a bare resolution would have been less desirable than that he has submitted to us, but I do not intend to go into the details of this matter. I shall content myself by merely stating my opinion that the subject is one of very great importance, that it is incumbent on us to take it into consideration, and that the time is opportune for mooting it and taking some initiatory steps with relation to it. I feel very strongly that it would be exceedingly difficult, if not impossible, to carry out the present plan of visitation very much longer. ("Hear, hear," and applause.) I am sure the plan is attended with very great objections. It is essentially a very invidious thing—(hear, hear)—it is essentially a thing that the different licensing bodies may naturally feel repugnant to have continued. They have very readily and graciously acceded to it hitherto; they have shown great willingness to allow our visitors to come and see the way they have performed their duties, feeling sure that those duties were conscientiously and, in the main, well performed; but if you go on from year to year, and begin to go more into details, and to make your visitations less and less a matter of courtesy on the part of those who receive you there, your difficulties will increase—(hear, hear)—and I think the difficulty of obtaining examiners to carry on those duties will also increase. I think, therefore, any general scheme of this sort, brought before us for our consideration, comes most opportunely at the present juncture.

Mr. Syme said the proposal at first seemed to be somewhat out of the ordinary course, but when it was examined he thought it was not so. With regard to the University of Edinburgh, it conducted its examinations by means of its Medical Faculty; but in addition to those examiners there were assessors from the Royal College of Surgeons and the College of Physicians, who had equal power to examine and decide on the qualifications of candidates. It was the same with regard to the other Universities of Scotland, in Glasgow and Aberdeen. That showed that there was no impossibility in such an arrangement, and he was very happy to be able to perceive this as an encouragement, showing that some great system of that kind could be carried into effect, which would be much better than the present plan of examinations. At the same time, he thought it necessary to state that there were difficulties in the way. (Hear, hear.) In the present system of examinations there were two advantages. First of all, there was the emolument—(laughter)—and also the idea that it encourages the attendance of students. A teacher regarded the power of examination as giving him a hold over students, and as being an inducement to make students attend to their studies. He believed that there could be no doubt that that was the fact, and that while many men would not care a straw for the money, they would cling to the last to the privilege of examination.

Dr. Paget: In reference to what Mr. Syme has said, may I ask whether the assessors admitted in the Medical examinations of the Universities of Edinburgh from the College of Surgeons and Physicians are or are not graduates of the University of Edinburgh?

Mr. Syme: No.

Dr. Andrew Wood: Mr. President, I recollect last year there was a proposition which came upon me like a thunderbolt from Sir J. D. Corrigan, that we should apply for a Royal Commission to settle the whole powers of the Medical Profession. ("Hear, hear," and laughter.) I was startled with that; I never heard it coming—(laughter)—and I at first, under the influence of such a powerful sledgehammer from Sir J. D. Corrigan, was afraid that we must have come under it. But in the hour of need a champion came to our assistance, and I need hardly say that that champion was Dr. Acland. But now, sir, I have to turn to the other side of the table to meet another thunderbolt—from whom? From Dr. Acland himself. This appears at first sight to be a very simple motion, and very easy to carry out; but it is neither more nor less, so far as my humble talents can make it out, than a regular reconstitution of the whole of that which led us to a thirty years' war some time ago. (Laughter.) I recollect Dr. Acland stating that Sir J. D. Corrigan was greatly mistaken if he thought that all these existing interests could be swept away with ease. He said we must accommodate ourselves to the state of matters as they were, and not endeavour to legislate for things as they might be or ought to be. Now, I think Dr. Acland has rather forgotten his own advice, because he knows, or ought to know, perfectly well that the institution of a new qualification (for Mr. Hargrave was perfectly right in what he said upon that) by this proposed resolution of his, is meant not only to compete with all the other qualifications, but, if possible, to put an end to them. (Hear, hear.) That is the question. If you are prepared for that, well and good—if not, then look into what you are about to do. Now I will first deal with the preamble, because unless Dr. Acland can prove his preamble it is not necessary to go into the details of his Bill—for it is a new Bill, a new Medical Act. He says, "Whereas there are now in the United Kingdom 19 licensing bodies having power to confer 30 separate licences, and 53 different titles." Now this is a melancholy fact—I admit it;

but still I must take things as I find them, and I know that I cannot sweep these bodies away even if I wished, and I have no wish to sweep away these "time-honoured" bodies, which have done good service in the past, and which are, I believe, at this moment that they are assailed by Dr. Acland, preparing to do better than they have done in the past. Then he goes on to say, "and whereas it was the intention of the Medical Act to produce a uniform and sufficient standard in the examinations conducted by the said licensing bodies; and whereas the power of combining the examinations of the said licensing bodies under Clause 19 of the Medical Act has been sparingly used." That is another fact which I deplore, but if the bodies have not united as they ought to have done, I take no blame for that, for I have never ceased to urge it at this Board at the very earliest period. In Scotland we did make use of the powers of the Act, and we have never regretted it; and although it has been sparingly used as yet, are there not signs that its use is going to be less sparing—are there not signs at the very head-quarters of Medical qualifications? If in the course of the next year, as we have every reason to expect, there shall be made such an arrangement by the College of Surgeons of England, which licences a very large proportion of all those who are licensed for the Medical Profession—if there be such an arrangement made between them and the College of Physicians and any other Medical body (for I do not know the details of what they propose), then I say they will do a vast deal more in a much quicker way to concentrate the examinations and to produce uniformity in them than the entering into ten, twenty, or thirty years' conflict on this great Bill of Dr. Acland's would ever produce. I think the introduction of this motion at the present time (I mean it not offensively) is out of place, because it may tend in some degree to interfere with the carrying out that great object which I do trust, before we meet again in session here, will be accomplished. Then he goes on to say: "Whereas the visitation of the examinations of so many bodies by different visitors is a cumbrous form of procedure, and one ill calculated to produce the uniformity sought for, and that further concentration of the examinations will tend to the accomplishment of that object." Now, I do not mean to say that the present visitation is the acme of perfection, but I do mean to say this, and I am in a condition to say it, because for the last three or four days I have been doing nothing else than reading over with the greatest care, along with those associated with me in the Committee, the reports of these visitors—and what do I find there? Do I find that those reports are producing no effect? Do I find that the bodies are showing the least tendency to kick against visitation, or to receive with discourtesy the visits of our visitors? Not at all. Every report I come to says that they were graciously received, and I know I can speak for my own body; and not only have we no jealousy of being visited by the visitors, but Professor Syme and Professor Christison can tell you that we again and again invited them to come, but it was not very convenient for them; and we invite them still. I do not believe there is a single body at this table—no, not the body that Dr. Bennett represents, who mooted this question—who will not welcome the visitation which we send from this Council; and not only so, but be thankful to them for any hints which may tend to make the examinations more perfect. Already the thing is bearing fruit. If I turn to the College of Surgeons, England (and whatever we have said in former years against it, I say that that body is a model of loyalty to the Medical Council), I find the visitors of last year suggested some alterations to them, and the College of Surgeons seems to have made no delay in listening to the suggestions, and still less delay in adopting them at once. They have introduced an enlarged amount of physiological examination into their curriculum, and they have also introduced what I consider one of the most important things accomplished in our days—practical Surgical examinations—into their course of examinations. I have no hesitation in saying that I believe the example of the College of Surgeons to London in so doing will have the effect of making every other qualifying Surgical body do the same thing; and shall I be told that these are cumbrous, useless visitations, and that we are doing nothing—making no progress—producing no effect upon these bodies, who are all wrangling one with another, and trying to benefit themselves in a selfish way, therefore we must have a complete *bouleversement*—a revolution, for it is nothing less to abolish the very bodies that are attempting to improve themselves, by the introduction of this new qualification which is to be put in Schedule A of the Medical Act? I say, therefore, no case has been made out, at all events at present. Let us at least try our present system for a few years. What charge have you to bring against the licensing bodies? Do you tell me they are recalcitrant? Do you tell me they are disinclined to go on improving themselves? I see no symptoms of it; and all I can say is this, we hope in a few days to bring up a report on these visitation reports, and whilst we are ready to give all praise to the visitors for what they have done, we hope to be able to make the suggestions of those visitors still more valuable for the further improvement of our examinations; and I ask you if it will strengthen our interest with the Government that when we propose our Medical Bill to be brought into Parliament they turn to us and say, "Oh, you are coming here with a Medical Bill, but I see you are abusing your present Medical Act. You are saying it is a miserable Bill, and all that sort of thing, and you are doing no good, for the bodies are all quarrelling, and all sorts of mischief are going on; we will not have anything to do with this Bill; go away and quarrel among yourselves, and do not quarrel before us at the Home Office." I can only say this, that if you adopt this resolution you will do the utmost in your power to prevent the passing of the Medical Bill, which I think is loudly called for and much required.

Sir J. D. Corrigan: I should not like to vote against this resolution without explaining, as briefly as possible, my reasons for so doing. You will remember that, during our discussion, Dr. Alexander Wood was received with cheers when he said that the Act of 1858 was a wretched Bill; and I think Dr. Risdon Bennett, if I do not misquote him, said he looked upon the amended Act about to be introduced as not sufficient, and that by a little delay we should perhaps get an Act acceptable by the Profession and the country. Now, this expression of opinion from several sides of the table, and necessarily, also, from Dr. Acland and Dr. Stokes, has placed us in a very awkward position with regard to Mr. Gathorne Hardy, because, if we go before him on Thursday, we are placed in this ridiculous predicament, which has been so well described, of our not being agreed. If a deputation is appointed, it must consist of persons who entertain different views; and it will be exceedingly awkward to find that those gentlemen necessarily contradict one another. I would suggest whether it would not be advisable to write at once to Mr. Hardy, and to say that, considering the great labour thrown upon him at this late period of the session, the Council have determined not to trouble him with a deputation. I really cannot see anything but mischief coming from our present position. Now, coming to the question before us, it raises a very important issue. I quite coincide with Dr. Acland, with Dr. Stokes, Dr. Alexander Wood, and Dr. Bennett, in their expression that we labour under great evils at the present time. But the admission that evils do exist is a totally different thing from adopting a particular measure for the remedying of those evils. I have read the resolution which Dr. Acland has laid before you, and in my opinion it doubles at once the number of licensing bodies in the kingdom. The nineteen bodies at present existing will be increased to thirty-eight, and the thirty separate licences will be increased to sixty. The resolution states that it is desirable that the Medical Council should have power to combine with any of the licensing bodies. Then, of course, it would have power to combine with them all. Now, suppose it combines, in the first instance, with the College of Surgeons of Ireland, and then with the College of Physicians, then with Apothecaries' Hall, with Trinity College and the University, then we shall have no less than ten boards. (No, no.) Yes, we shall; for if you look at the last few lines of the resolution, it says "that nothing in this qualification shall debar the holder from obtaining separate qualifications as at present." Now, those powers remaining, have we not added nineteen licensing bodies to the nineteen previously existing? But suppose some of the bodies do not agree, then we have got double the number of those that do agree. Then the whole measure, in my mind, is useless, because, if any of the bodies stand out, the whole measure falls to the ground. This is a very serious matter, for it sweeps away all the licensing bodies at once, because it says that the qualification so conferred may be entered in the Medical Register, and accepted by public bodies. This is an interference, as Dr. Andrew Wood has put it, with vested rights, and involves a very serious consideration.

Mr. Cooper: I think the licensing bodies are very much indebted to this Council for their kindness in having those bodies visited to see that their examinations are fairly and

honestly conducted, so as to produce a useful Practitioner in Medicine and Surgery. I think this supervision of the examinations is valuable, and I do hope that, whatever step is taken by this Council for the ensuing year, these visitations will be continued, whatever conclusion we may come to with regard to this motion, because I believe we are doing a great deal of good. (Applause.)

Dr. Christison: I think it is due to Dr. Acland that I should not give my vote against this motion without stating the grounds for the decision I have come to. I do not think in the present shape the object of his motion is practicable, because, it appears to me, it requires us to begin with a *tabula rasa*, and I do think it would cost us a great deal of trouble to shave our tablet sufficiently for this purpose. In the next place, I do not entirely agree with Dr. Acland and some other members of the Council who have committed themselves to a matter which will come before us more legitimately on a subsequent occasion—namely, that the visitors of the examining bodies should never be members of this Council. I hope to be able to show you, sir, by-and-by that this would be a mistake. I do not say we ought not to have some gentlemen who are not members of the Council, but I do not think it would be advisable to commit ourselves to the proposition that none of our visitors should be members of this Council. (Applause.) Now these are my reasons, with others which are less important, for desiring that no movement should be taken in this matter at present. I can bear my testimony, so far as my experience has gone, to the advantage of these visitations, and to the marked improvement which they are effecting in the examinations. I beg the Council to understand this, that not even the members of our Council who have not been engaged in these investigations, and still less the public, can know the many advantages which result from them and the many ways in which they work, because a great many improvements have been accomplished through private conversations which never appear in our reports—(hear, hear)—private conversations among ourselves, one body instructing the other, and in this way I know signal services have been rendered, of which I could give an illustration in my own department. (Applause)

Dr. Thomson, whilst allowing much truth in Dr. Acland's proposition, thought that the Council ought not to be directly concerned in the duty of examination or the granting of licences. He said he was much struck with the view expressed by other speakers of the necessity of greater combination of examinations, because, as a teacher, he had observed in a pretty long course of experience that education has been conducted in later years under great difficulties on account of the great multiplication of examinations. He was thoroughly convinced that there was no greater evil under which Medical students who wish to obtain a satisfactory knowledge of their Profession can labour than that of multiplication of examinations. (Applause.) It must be apparent to most teachers that within the last twenty years a great change has taken place. Many students, in place of endeavouring to obtain a faithful and real knowledge of the Profession which would be most immediately useful to them in practice afterwards, have latterly been preparing for specific examinations. Now nothing, it is clear, can be more detrimental to the real progress of knowledge in the student's mind, or less useful afterwards in the Profession, than such a course of study. But he thought that Dr. Acland's proposal scarcely met the case, excepting so far as it tends towards the increase of that combination of bodies which would lead to the granting of a general qualification by a much smaller number of licensing bodies. (Applause.)

Dr. Sharpey: On the same grounds that other gentlemen have expressed themselves, I have to make a very few remarks upon these proposals. First, let me say that we must dispose of this proposal now before us, in some practical way or other, because it is to obtain, as I presume, the means whereby a young man entering the Profession may at once clear the way by obtaining a qualification in every department by passing through the examinations of his own body. No doubt that would be a great object if it were attainable—(hear, hear)—and certainly, if we had the power to establish such examining bodies throughout the kingdom, it would be a great advantage. Then, if it was once established by Parliament, any one who could pass this common examination, which would be understood to entitle a man to practise his profession in all its departments, could, by seeking a further qualification, obtain any degree of fellowship he thought right. (Applause.) We are all agreed upon that. (Hear, hear.) But, sir, the question is this—if we cannot obtain that in the practical way we wish, may we not (without going to the Legislature for these powers) hope that something very much akin to this may be done? In Scotland it is obtained already—I do not know how it may be in Ireland—just by the consolidation of the examining bodies as to the granting of licences. By their union they really obtain the object in view. It is quite plain we never could carry out this measure in the way Dr. Acland proposes without asking the sanction of the Legislature, and, as has been very justly remarked, to attempt this at the present moment would certainly entirely prostrate our endeavours to pass the amended Bill as agreed upon. That is quite certain, because this is a much wider change than anything we propose, and would require very much longer consideration. We could scarcely enter upon it without the consent and approbation of the different Medical corporations; for it is quite clear that Government never would introduce a measure into Parliament that was likely to be opposed by bodies of influence. Upon that ground, to my mind, we cannot entertain this as a practical measure. I would suggest to Dr. Acland that, instead of pressing the Council to give an opinion upon this, he should refer it to the Executive Committee, to be considered by them during the recess, and reported on next session.

Dr. Embleton thought that the wisest way of dealing with Dr. Acland's proposal would be that which Dr. Sharpey had pointed out—namely, that it should be referred to a committee to report upon it next year.

Dr. Risdon Bennett: I was going to say, sir, that those who have supported Dr. Acland's views are quite willing to adopt the suggestion that a committee should be appointed. I will move this as an amendment—Dr. Sharpey is quite willing to second it—"That a committee be appointed to whom the subject of Dr. Acland's proposal may be referred, with a view of ascertaining how far it is practicable to obtain their objects, and to report thereon at or before the next session."

Dr. Andrew Wood: I shall object to that.

The President: Well, it is an amendment. Whether you accept it or not, I must put it to the vote.

Mr. Cæsar Hawkins: After the numerous speeches that have been made at this Council, I should not presume to add anything, but that I think there seems to be a great deal of difference of opinion as to the meaning of Dr. Acland's proposal. This proposal is simply that we should adopt the whole of this clause, embracing a vast variety of subjects, every one of which, it seems to me, ought to be considered separately; and I think there are a great number of details to which some of us may object, even though we adopt the principle. But independently of this, it is impossible to take the motion as a whole, for there is a great difference of opinion as to the meaning of that motion. With regard to this combination of the various licensing bodies among themselves, it has been effected in part, and is going to be effected to a greater extent; and we all feel the more it can be adopted the better in diminishing the number of examinations which Medical students have to pass through, and also with reference to our supervision, and for the good of the whole body of the Profession. But this motion comes to a great deal more than this; it says that the General Medical Council are to have the power to combine—observe the expression—"to combine with any of the licensing bodies mentioned in Schedule (A) of the Medical Act, in conducting examinations." And how? By the appointment of assessors, visitors, or examiners conjointly with such bodies in such numbers and with such duties as shall be agreed upon between the Council and the bodies agreeing to conduct such joint examination." Now, we have the power under our Act of Parliament of appointing visitors or assessors—one or both. And "that the examiners or visisors so appointed shall not be members of the Council," but shall be appointed by the Council—therefore totally altering the constitution of the examining boards of every one of the licensing bodies with which we should combine. There are two views to be taken of this. We may assist the existing bodies in combining most usefully, as I think—(hear, hear)—and we may appoint examiners. Then, again, there is a third point in this law—namely, that we have in the middle of it the singular noun "qualification." Whether that applies to a great number or one I do not quite see—whether it is to be taken up as a *Staats examen*—a single one superseding all the others. I say superseding them, because that will undoubtedly be the fact. Look, for instance, at the two bodies which have been alluded to as combining. What is the use of their doing so if there

is to be a new Board with a *Staats examen?* The consequence would be, that all the Practitioners in the three kingdoms would go to the *Staats examen*, and not to the other existing bodies. Nobody will go to them except those whose privileges are preserved. And how many will that be? the Fellows of the Colleges, and nobody else. Ninety-nine hundredths will go to the *Staats examen*. On these grounds I cannot possibly vote for this clause as a whole.

The PRESIDENT: There is an amendment in my hands, proposed by Dr. RISDON BENNETT and seconded by Dr. SHARPEY, "That a committee be appointed to consider the propositions of Dr. Acland, and to report thereon to the Council at or before next session."

Dr. ACLAND: I think the best possible reply I can make is to offer my thanks to the Council for having so calmly and so seriously considered this motion, and especially after the suggestion which was made that it was eminently revolutionary, that it would return us to chaos, and that it was very confusing from its complexity and the like. Now, I do not think it revolutionary or chaotic; on the contrary, I feel very stable and comfortable under the circumstances; nor do I think it complicated. Without referring to individual speakers, allow me to say one or two words upon certain objections broached by them, which I do think, in our own interest and in the public interest, it is right I should notice. One is the idea that this resolution is so revolutionary; and also, on the other side—a charge which I adopt myself—that it is no novelty. I was surprised when it was suggested that it was a novelty, because I was ashamed almost of reading Clause 19, which suggests the principle, and the only question is whether, in carrying out that principle, it would be desirable or not for the Council to add to the number of bodies examiners of its own. I say distinctly, with regard to every detail of this proposition, that I should be willing in committee, where clause after clause and sentence after sentence would be considered, to modify any one of the proposals I made for your consideration, and that among the number. And I especially pointed out that I had printed the words "visitors, examiners, or assessors," in italics, in order to show the very various modes in which this matter for the common purpose might be manipulated. I venture to say for the common purpose, because I think I am right when I say that I am not aware of any one person who has suggested that this kind of combination put forward in the Act is anything else than a great and crying want, and the only question is in what way we can expedite its attainment. The Council has no power to expedite it except by taking some new action, and therefore I am told we are to wait for combinations. But I venture to point out, with our great experience now on the subject, a question which we should seriously consider is how we can the best obtain combination. I would say no more about that. One other point I have to notice, which we really ought to disabuse ourselves, and, as we are speaking in public, disabuse the public mind also of—namely, the facetious supposition of Sir Dominic Corrigan that a sort of chaos would be produced.

Sir J. D. CORRIGAN: I never said the word chaos.

Dr. ACLAND: I do not mean to say you used the word chaos, but only to say that the chaotic description you gave made me think at once of the Gorgon's head—I mean where you multiplied 19 into 2 and 30 into 2; I confess I began to feel quite uncomfortable. But the whole thing is merely an effort of the imagination. It is perfectly true, no doubt, that the words of the motion will carry that interpretation—that is to say, if you can conceive that the College of Physicians, the Universities, the College of Surgeons, and the Apothecaries' Company, are going to have a sort of dance with the Council, and to see how complicated a combination they can make. I quite agree they can do it. But, as was said, we are dealing with particular bodies, and nobody supposes they are going to do anything of the kind. As Dr. Embleton has said, the effect will be quite the contrary—it would tend to a diminution and not to an increase of complexity; but there is complexity in the matter, and the complexity necessarily introduced into the motion is one which I should have been ashamed of if I for a moment hesitated in introducing on account of the obvious objection. Of course it was not to be tolerated that I, representing a body which only gives four or five doctorates in the course of a year—though I hope that number will be increased—but still a body which has, I am sorry to say, very little influence, even with regard to the general education of the mass of the Medical Profession—that I should ask the House of Commons for a clause to sweep away the powers of the licensing bodies. I am sure it was by an inadvertence that anybody supposed I could have thought of such a thing. The point to be considered was how the combination could be entered into, leaving existing bodies entirely unfettered. There may be better proposals found, but there cannot be a better object found. That has been admitted by us all. My proposal is strictly of a voluntary character. You will observe it is permissive on the part of the Council; it is permissive on the part of the licensing bodies—that is to say, the Council may do it if it please, or leave it undone; the bodies may join with the Council if they please, or they may not so join; and, finally, the whole matter is an enabling clause. It is simply an expression of opinion that it is desirable. You see I am bold enough to stand up bravely in the defence of the matter; but I only do that in reply, in order that the Council may be convinced that, at all events, I did not trouble them with a very serious matter except after due deliberation, and also to conclude that I am not prejudiced about it, and that if the matter were to go on (of course it cannot go on now) the only practical course would be to take each proposition in detail. I will not say clause by clause, but sentence by sentence. In the present feeling of the Council, that is impossible; and therefore I hope, in conclusion, that it may be your pleasure to refer the matter to a committee for that kind of detailed consideration which alone can be given by a small number of persons dealing with the thing in that manner.

The PRESIDENT then, having read the motion, put the amendment moved by Mr. Rumsey, and seconded by Dr. Leet, for the appointment of a committee, which was carried by a majority of 11 to 10.

Upon the amendment being put as a substantive motion,

Dr. ANDREW WOOD said: Sir, I shall move, as an amendment, "That it is inexpedient to name a committee at this time, as the Council have determined to send a deputation to Mr. Hardy regarding the Bill for the amendment of the Medical Act."

Dr. APJOHN seconded the amendment.

Dr. ANDREW WOOD: Mr. President, I would not have spoken if I had had an opportunity of speaking on this question, which I had not. I spoke against a resolution of Dr. Acland's, and I feel quite satisfied that if that resolution had been put to the Council, it would have been lost by a large majority; but the Council, I think, have done an equally unwise thing in naming a committee at this time, because they are giving a sort of tacit sanction—they are giving, as it were, an opinion that this motion is worthy of being considered by a committee. Now, I do say that, looking into the motion, which I did not touch in my former speech, because I only dealt with the preamble, the effect of it is to add to the qualification; it must be so. Then the question is, what are you doing? You are going to join in a sort of country dance with all the licensing bodies. You are saying, "Here we are; will you come up and dance with us?" Then up come the assessors, examiners, and visitors; up comes the College of Surgeons, up comes the College of Physicians, and say, "We want to dance with you;" up comes the Apothecaries' Hall, and joins in the confusion. For, I ask, do you think the bodies will sit quietly by and see one after the other receiving this *testamur*—for it will actually be a *testamur?* It will be an impracticable thing.

Dr. ACLAND: I may tell Dr. Andrew Wood that it is not intended to combine the visitors or assessors of the Medical Council with the Boards.

Dr. ANDREW WOOD: I do not believe some of the gentlemen who have voted for the Committee have read this motion. This is it—"That the examiners, assessors, or visitors so appointed shall not be members of the Council, and shall be paid in such manner and at such a rate as the General Council, subject to the approval of the Treasury, shall decide." You are going to make them members of the Council, and then you are going to cut out the best men you can possibly have for that qualification. "That the qualification so conferred may be entered in the *Medical Register*." What is that? It may be one qualification, or nineteen, or twenty, or thirty.

Dr. ALEXANDER WOOD: I must remind my friend that the amendment is now before us.

The PRESIDENT: I understand Dr. Andrew Wood is speaking to show cause why the Committee shall not be appointed.

Dr. ANDREW WOOD: I am showing you that if you entertain a motion of this kind it is a perfect mockery to go to Mr. Hardy with a Bill of this kind, because you are offering a Bill with one hand and offering a committee with the other—a matter which will make that Bill a perfectly worthless piece of parchment.

After some further discussion,

Dr. QUAIN said: I think this is a bold and decided step on the part of Dr. Acland to obtain a single qualification, and by the guidance of this Council, but it seems to me to be a very roundabout way of getting it. If you please to appoint a committee to consider by what means a sound qualification shall be obtained, qualifying in Medicine and Surgery, under the immediate supervision of this Council, for that I shall vote; but certainly I shall not vote for a committee to which this preamble shall be referred, for it is not true. It asserts with regard to the visitation and examination, "Whereas the visitation of the examinations of so many bodies by different visitors is a cumbrous form of procedure, and one ill calculated to produce the uniformity sought for, and that further concentration of the examinations will tend to the accomplishment of that object." Now, we are about to discuss to-morrow what the character of the visitations of examinations has been, and the carrying of the resolution now before us——

Dr. ALEXANDER WOOD: The preamble is rejected.

Dr. QUAIN: The resolution is to be referred to a committee—that is, assuming that it is adopted.

The PRESIDENT: I do not see that that will follow. It is merely to direct a committee to inquire into it.

Dr. ACLAND: At present the sole matter before the Council upon my motion is that beginning "It is desirable in the opinion of the Council." I have not spoken on the previous part, beginning with "whereas."

Professor SYME: I put the question to the Council whether there was any motion before them, and upon that Dr. Acland read the second clause as a motion.

Dr. QUAIN: If Dr. Acland, as he has done, withdraws his preamble, he withdraws the grounds for his motion, because he begins by saying "whereas," and then "it is desirable." I apprehend, if the preamble is withdrawn, the grounds for the motion fail.

Dr. RISDON BENNETT: It was never withdrawn, because it never was proposed.

Dr. ACLAND: I stated at the commencement of my observations to the Council, that, with their permission, I would propose, first of all, that clause which begins "It is desirable that the General Medical Council shall have power." I have spoken of nothing else, and if the Council desire to go into the preamble, I am ready to go into it to-morrow or at any time, or if it is the desire of the Council that it should be withdrawn, I will leave it to them.

Dr. QUAIN: If Dr. Acland withdraws his preamble, the ground for his clauses fails altogether. Therefore all I will say with regard to it is that, if the Council is to be an examining board, the sooner it pronounces its position the better. This is making us an examining board—it throws upon us the entire responsibility. If that is our function, then let us approach it boldly, and appoint a committee to know how to accomplish it, but I say this is a roundabout way of doing it. If a committee be appointed for the purpose, I will vote for it, but I really cannot vote for a committee which will take up the subject in the form proposed by Dr. Acland.

The PRESIDENT: I now put the amendment in the form of a substantive motion—"That a committee be appointed."

The motion was negatived by a majority of one, the numbers voting being eleven and twelve.

Adjourned until 2 o'clock on Wednesday.

DEATH OF M. PELOUZE.—The French Academy of Sciences has just lost one of its most eminent members, the distinguished chemist Pelouze, who died at the age of 60 of disease of the heart, aggravated by the sudden death a few weeks since of his wife, to whom he was passionately attached. Commencing his career as a pupil and assistant of Gay-Lussac, he became a *collaborateur* of Liebig, their joint labours leading, among other things, to the discovery of the ether which constitutes the *bouquet* of wines. He became remarkable also for his works on the manufacture of beetroot sugar, now so important an article in France. Admitted to the French Academy in 1837, from being the assayer of the French Mint he was promoted to its directorship, and founded there a much-frequented laboratory. His *Traité de Chimie*, written with M. Fremy, his pupil, has become a classical work. He was also a much-valued member of the Paris Municipal Council, such bodies in France being anxious to enrol among their number men of high position in science.

ORIGINAL COMMUNICATIONS.

RARE OPERATION OF

CYSTOTOMY FOR SEVERE AND LONG-CONTINUED SUFFERING FROM IRRITABLE BLADDER.

By JAMES McCRAITH, F.R.C.S.,
Surgeon B. S. Hospital, Smyrna.

THE following case of the above operation—one so seldom had recourse to—will probably merit a place in your columns. The only case I can find, in my restricted Medical library, is one operated on by Sir W. Fergusson in July, 1855. It was perfectly analogous to the present one, and is reported in Braithwaite for January, 1856. Some similar case must have taken place in Paris most likely, some account of which is to be found, I believe, in Bouchardat, anno 1803. The work is not to be found in Smyrna, but was referred to by Dr. Charles Phillips, of Paris, as will appear in the sequel. The case at present in question is the following:—

Mr. A., aged 52, about four years since began to suffer from frequent micturition; obliged to empty the bladder every half-hour, and sometimes more frequently. Obliged to be up continually at night also from the same cause. No actual pain, unless when an effort was made to retain the urine, and then it was rather a general uneasiness than any actual localised pain. This affection was considered as hæmorrhoidal—as, in fact, a sympathetic affection of the bladder from the irritation of piles supposed to exist in the rectum, though the patient never had any actual symptoms or proof of the existence of piles. He had leeches applied to the perineum on various occasions, hip baths, poultices over the hypogastrium, purgatives, etc., etc—in fact, a soothing and slightly antiphlogistic treatment seems to have been practised. I had under treatment lately a perfectly similar case, which only yielded to solution of balsam of copaiba in liquor potassæ. The symptoms, however, in Mr. A.'s case went on for six months, and then pain began to be felt. The urine, during the first period of six months, the patient reports as being clear. The frequency of micturition continued, and pain began to be felt at the neck of the bladder, with spasm and straining. The urine then began to deposit mucus, and later it began to deposit in the glass, when left for some time, a white sediment. These symptoms went on from bad to worse, with occasional remissions, till his suffering becoming extreme, and finding no relief from the treatment pursued here in Smyrna, the patient went to Paris last year to see what could be done for him there. He was suffering from the worst and most painful symptoms of calculus, severe and constant spasm at neck of the bladder, urine containing much mucus, and white deposits on standing; straining and micturition almost constant. His Medical attendant in Paris was Dr. C. Phillips; Ricord and Civiale were consulted. He was sounded more than forty times, whilst in Paris, for three months, either with the object of searching for stone, or of making injections into the bladder. He was not at all benefited by the treatment in Paris—not more than in Smyrna. Dr. Phillips was of opinion that a tumour existed in the bladder, which was rendered probable from blood being often contained in the urine, with other deposits. He consulted me some time after coming from Paris. His symptoms were almost constant straining from spasm at neck of the bladder. Rubbing the glans and entire penis violently between the palms of his hands gives him some relief. In the spasm the muscles of the thighs and abdomen are in violent action. Spends entire days on the night-stool, "howling" with pain. The glans penis and orifice of urethra in a state of ulceration from rubbing against the rim of the vase on which he sits straining. The prostate natural, and not sensitive to touch. The passage of a sound extremely painful, and leaving great subsequent irritation. The urine loaded with mucus, blood corpuscles, and pus globules; several large so-called organic globules. When first passed, the urine is of a natural degree of acidity, depositing phosphates quickly. A case of more painful suffering can hardly be imagined than Mr. A. presented at this time. Morphia suppositories gave him some transient relief. All other Medical means which I could suggest had been already put in practice with no effect. I merely saw him once in consultation; but on thinking

over his case, I came to the conclusion that the operation of cystotomy was the only remaining hope of relief for Mr. A. I therefore recommended it as a *dernier ressort*. Mr. A., since his departure from Paris, has kept up a correspondence with Dr. Phillips, keeping him *au courant* as to the progress of his disease, and receiving advice from him almost simultaneously with my recommendation of an operation. Dr. Phillips had written, recommending exactly the same proceeding; I was led to it by remembering a case reported as performed by Sir W. Fergusson, which I found in Braithwaite, vol. for January, 1856, page 291. But the Surgeons in attendance on Mr. A. declined the proceeding, and then the patient put himself in my hands. Dr. Phillips quoted some case reported in Bouchardat, which, it appears, was published in 1803; but, as the work is not to be found in Smyrna, I cannot give you any particulars thereof. The urine is evidently secreted in a healthy state, but remaining a few minutes in the bladder changes it. Mr. A. has a tolerably good appetite and digestion, and his general state is wonderfully good, considering his long and terrible suffering. Dr. Phillips's later diagnosis was "neuralgia of neck of the bladder," and his advice was "cystotomy in the median line," so as to divide the plexus of nerves at the neck of the bladder. His first idea was that a tumour existed.

All preparations being made, on January 24 I performed the median operation, assisted by Drs. Wood, Fabrizzi, and Chasseaud. Dr. Chasseaud, who took charge of the patient for after-treatment, administered chloroform. Before the patient was got well under its influence, there was a good deal of general spasm. I divided the superficial parts from the root of the scrotum to the anus, and then, on the grooved sound, divided the posterior part of the membranous portion of the urethra and the neck of the bladder, including a few lines (two perhaps) between the lateral lobes of the prostate. I could pass two fingers; my fingers are slender. I examined minutely, as far as possible, the interior of the bladder—its capacity was small, and it contracted so as to allow of almost a complete exploration by the finger—without finding anything abnormal, neither stone nor tumour. At the anterior part, behind the pubis, I could distinguish a small circular depression; but upon examining this with a silver catheter, it proved to be quite a superficial depression, as it were a deep pock-mark. I then begged of Dr. Wood to examine and assure himself that the neck of the bladder was divided to the requisite extent, and to see if anything more remained to be done. He was satisfied with what had been done. He conceived that the prostate was divided to a small extent (some lines), but I rather think that the lobes being well marked I divided between them to the extent of two or three lines. The patient bore the operation well; very little reaction. The relief was great. On the eighth day the urine began to come through urethra, and some pains began to be felt. I broke up with the finger the soft adhesions, opening the wound quite into the bladder. After this the wound remained open, the urine flowing freely through, but depositing a white coating of phosphates on its surface and anteriorly in the urethra, from whence Dr. Chasseaud removed a considerable mass.

The patient took small doses of mineral acid internally, and a wash was ordered, as local application, containing a few drops of the same acid to the ounce. The patient went on after this progressing, feeling a pain occasionally, which lasted only a few minutes, and recurred only three or four times in the twenty-four hours. This pain was nothing in intensity to what he suffered before the operation, when, as stated, it lasted for hours of intense suffering.

On February 24, exactly a month after the date of operation, I found the patient with the deeper part of the wound healed; all the urine comes through the urethra; the external or superficial wound is still open. He is infinitely better in comparison to his condition before the operation; still, there is spasm with pain occasionally; it seems more in the urethra now than formerly. The capacity of the bladder is very limited; he is obliged to make water very frequently. Dr. Chasseaud is passing sounds through the urethra, as a means of allaying irritation. He can bear the passage of a sound into the bladder now, which was formerly attended with great torture.

Dr. Chasseaud, to relieve the pain that still recurred, put Mr. A. under the influence of belladonna, pushed so as to produce constitutional effects on the patient, but without benefit. His present state, just two months after the operation, is as follows:—He reports himself as infinitely relieved; he gets about the house; his appetite good; sleeps well; he has, however, four or five attacks of spasm every twenty-four hours, which do not continue more than a few minutes. He bears the passage of a full-sized bougie without any inconvenience, and even its presence in the bladder for some time. A small superficial fistula has formed at anus, which is being treated, without cutting, by Dr. Chasseaud. The wound of operation has been completely healed some time—in fine, though not completely cured as yet, he is much pleased at the good results already achieved by the operation. The capacity of the bladder is still very limited; he must pass urine every half-hour at farthest, but he is slowly improving in this respect. The wound after operation was left without any instrument passed into the bladder, a sponge being so placed as to receive the urine as it flowed through, and latterly old linen applied dry, and constantly renewed as it got wetted, was found the most soothing application.

The result of this case, the great gain already achieved, and which I hope will progress to complete cure, not only justifies the operation had recourse to, but ought to induce every Surgeon to advise any patient so afflicted to have recourse to a similar proceeding.

Smyrna.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

TOWN'S HOSPITAL, GLASGOW.

CASE OF ABSCESS OF THE BRAIN, WITH PARTIAL CONVULSIVE MOVEMENTS.

(Communicated by Dr. ALEXANDER ROBERTSON.)

Abscesses of the brain, especially when unconnected with disease of the internal ear, are not of frequent occurrence. In many instances they have been remarkable for the trifling symptoms they have manifested during life. The following was so characterised up to a certain point, but after that serious brain mischief was clearly enough evident. It possesses also additional interest from the limited nature of the convulsive movements.

W. M., aged 53, was admitted into Hospital on April 1 of this year on account of chest ailment, from which he stated he had suffered for about two years. He made no complaint of pain or other unpleasant feeling about the head, nor was anything abnormal observed in connexion with his nervous system, though at that time no special examination of its functions was made. His description of his illness was clear and intelligent. The left side of the chest was very dull on percussion, and indications of cavities existed under the left clavicle. The cardiac sounds were regular. The urine was albuminous.

On the morning of the 6th, five days after admission, I was called to see him hurriedly on the occurrence of a sudden seizure, and waited by his bedside for about an hour, noting his symptoms carefully. The nurse said that he had become unconscious and convulsed, as I found him, about half an hour before my arrival. His condition was as follows:—Insensibility complete; sensation everywhere in abeyance; the entire right side of body convulsed, and so also the left leg; the movements were of a somewhat rhythmical character, a spasmodic contraction of the parts mentioned occurring about twice in the second, but occasionally not so often; at each twitch the right angle of the mouth was drawn up, and the right orbicularis palpebrarum more than half closed the eye. The abdominal muscles of both sides were also firm during each contraction, but it seemed to me that those of the right side were the firmer; the muscles of the right arm were much implicated, the flexors, as usual, proving the more powerful, though the extensors were distinctly involved. Both legs, as I have said, moved spasmodically, but the muscles of the right one were much firmer on contraction than those of the other. The head diverged strongly to the right side; repeatedly I placed it straight on the pillow, and even inclined it to the left, but directly afterwards it turned to the right. Every few minutes there was a comparative lull for about a minute, when the movements were slight. During these partial intermissions the right arm was found to be paralysed. The left arm was uninvolved in either condition, except when the convulsions were very severe; then, three or four times, I noticed that the muscles

of the upper arm of this side were likewise similarly affected, though much less than those of the other. The difference between the two was specially observable when the pectoral muscles bounding the axillary spaces were caught between the fingers and thumb of the two hands. Pupils were dilated, and little sensitive to light, the right responding less readily than the left; face pale; conjunctivæ clear; skin cool; pulse 120, soft, and small; no thickening of temporal or radial arteries. The treatment, being of an ordinary kind, need not be described.

Next morning at 11 o'clock I found that he was partially conscious, and was told that convulsions had ceased at 4 a.m., having lasted upwards of three hours. He looked confused and absent, and to all questions said "Ay." However, he showed some intelligence by squeezing my fingers with his left hand at my request. Both right arm and leg were now clearly palsied; he could move the hand only a little; could walk with assistance, but dragged the paralysed leg very markedly. Face was normal in appearance, except a slight droop at the right angle of the mouth. There was fair indication of sensibility on pinching the surface, right side as well as left. Pupils equal, of medium size, and sensitive.

The day following the mind had further improved, and the paralytic symptoms had almost passed away, except in the hand, which, though better, was still feeble in its grasp.

After this there was but little change; his replies to questions, and his general conduct, were correct enough, but there was clearly some dulness of intellect in addition to slight motor palsy, neither, however, being very marked; but about midday of the 13th, being a week after the attack of convulsions, I found him more confused and greatly exhausted, though the paralytic symptoms were not more severe. He died at 5 p.m. of this day.

Autopsy Fifty-six Hours after Death.—Pia mater more injected than usual. It was readily separable from the brain surface, except over the posterior part of the second left frontal convolution (Gratiolet's nomenclature), where it was adherent to the grey matter, which here was softened as compared with the neighbouring parts. This portion of the convolution was also bulging, distended-looking, and on cutting into it thick greenish-yellow purulent matter oozed out. The cavity of the abscess was found to extend forwards and deeply into the substance of the left hemisphere till it reached the roof of the lateral ventricle, through which there was a small opening. It became narrower as it approached the ventricle, the widest part being at the surface of the brain, where it was about an inch at its greatest and half an inch at its least diameter. Its wall was about a line in thickness, and was formed by indurated and brownish medullary substance, which was closely studded with minute vessels visible to the naked eye. The ventricle contained about a teaspoonful of thin brownish pus, and it was observed that the pus in the narrow part of the abscess had also this character. Altogether there was nearly an ounce of purulent matter, which was quite inodorous. The surface of the left corpus striatum was distinctly softened; the same part of the right one was also less consistent than usual, though the softening of the latter was much less marked than that of the former. No softening was observed anywhere else. Arteries of the brain were normal. There was a considerable amount of serous effusion and false membrane on the left side of the chest. The left lung was contracted, and contained many cavities, probably the results of disorganised inflammatory exudation rather than tubercle, as the right lung and other organs were free from that deposit. The heart was normal, except slight induration at the base of the aortic valves. The kidneys were decidedly fatty, but the degeneration was only partial.

Remarks by Dr. Robertson.—The disposition to bilateral action, both in health and disease, is a well-known law of the economy. Some parts are, however, more independent of their fellows than others. In illustration, it was interesting to observe in this case that the muscles of the left upper extremity, though generally wholly unaffected, were involved in a slight degree when the convulsive movements were very severe in the right arm. The mutual independence of the legs was not so great as that of the arms, as both always moved consentaneously, though I was fully convinced that the muscular contractions were more decided in the right leg than in the left. Unison of action was very evident between the muscles of the two sides of the abdomen; but even here, as previously stated, the accordance was not perfect. In these differences we have probably pathological indications of what physiology would lead us to expect—the existence of a more intimate commissural union of the ganglionic cells, presiding respectively over the abdominal muscles of opposite sides, and those of the legs, than between the corresponding ganglia with which the upper extremities are connected. I am disposed to think that the bursting of the abscess into the ventricle right over the corpus striatum, and the consequent interference with the functions of this organ, was the immediate cause of the protracted convulsions and temporary palsy. The perfection of the wall of the abscess, and the freedom from softening of the parts around, indicated a slow process of formation, compatible with trifling symptoms, perhaps extending over some weeks, as has been recorded in other cases of brain abscess, and was a striking feature in one which occurred in my own experience about two years since.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0
Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.
Terms of Subscription for India, £1 15*s. per annum.*
The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6*s. per Annum.*
Post-office Orders and Drafts on Army or Navy Agents, should be made payable to Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d. | A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d. | A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, JUNE 15, 1867.

GENERAL MEDICAL COUNCIL.

On Monday, the fifth day of the session, the Council got through a good amount of what we may distinguish as necessary and formal business. The report of the Pharmacopœia Committee was presented, and, with the addition of a few words recording the fact that the Pharmacopœia had been submitted to each member of the Council on February 1, adopted. Dr. Storrar and other members expressed their high appreciation of the admirable manner in which the Committee, and especially their Chairman, Dr. Quain, had performed their duty, and the whole Council gave substantial expression to their sense of the value of the work done by voting £500 to the five members of the Pharmacopœia Committee. We have already more than once recorded our opinion of this new edition of our British Pharmacopœia, and therefore will only add here that, considering its immense superiority over the first edition, and the great amount of labour it must have entailed, its cost, £676 14s., must be thought to be very moderate. At least 7000 copies of it have already been sold. A Pharmacopœia Committee was appointed to watch over the progress of pharmacy, and £50 a year was placed at their disposal.

Communications were read from the Universities of Melbourne, Calcutta, and Montreal, and from the Medical Council of Upper Canada, praying for the recognition and registration of their Medical degrees, and answers were directed to be sent to them, stating that at present the General Medical Council cannot legally recognise colonial degrees, but "that an Amended Medical Bill is now engaging the attention of the General Medical Council, and that the recognition of the colonial degrees and licences referred to shall receive full consideration."

A memorial from the McGill University of Montreal, praying for the recognition of its Matriculation Examination, was referred to the Committee on Preliminary Education. When

the report from this Committee was considered in Council, on Thursday, June 6, the prayer of the University was, on their recommendation, acceded to.

Letters from some gentleman about the Medical Acts Amendment Bill were read and directed to be politely acknowledged. A letter was also read from Dr. Gibson, relative to the qualification of Master in Surgery, and a reply directed to be sent, stating that his question was "purely a legal one, involving the interpretation of the Poor-law Acts and Medical Acts, and the General Medical Council therefore decline to give an opinion thereon," the Council considering that it is no part of their duty to give any opinion on the interpretation of even the Medical Act.

Communications were read from the Cork Medical Protection Association. They suggested that the Council should secure, through the Medical Acts Amendment Bill, power to make such course of education as they may think desirable compulsory, instead of merely recommending it; and, further, that every student should be required to take a degree in arts before commencing Professional study. The Council agreed that the Association should be informed that the first suggestion would "receive the full attention of the Council," and that the former should be referred to the Committee on Preliminary Education; and afterwards, on the recommendation of that Committee, further answer was sent to the effect that "the Council are going as fast as it is safe to do in the direction indicated by the Cork Medical Protection Association."

Mr. Richard Organ again petitioned to be allowed to present himself for examination at one of the examining boards. It was moved, "That the Council, having considered the application of Mr. Richard Organ, see no cause to alter their decision of May 15, 1866." But some of the Council were inclined, as Mr. Organ had been punished for eight years, to now show him some mercy, or, at any rate, to examine more minutely whether it might not now be possible to do so. Dr. Acland could not adopt the doctrine, "that a man having once been condemned is for ever afterwards to be placed in a condition in which he could not possibly repair his fault." Mr. Rumsey hoped it might be found possible to afford him a *locus pœnitentiæ*. Dr. Thomson and Mr. Syme also advocated a fuller consideration of the petition. Sir J. D. Corrigan acknowledged that "an appeal to mercy is hard to resist, but mercy to the criminal sometimes involves cruelty to those who should be more considered," and in the course of his speech observed, "I never knew a worse crime than Organ committed with regard to the public, and I do not think we can place ourselves at the bar of public opinion if we forgive such a crime." Eventually, after considerable discussion, Mr. Organ's application, with the accompanying documents, was referred to a committee, which, on Wednesday the 5th, reported to the effect that they recommend "that the Council should decline to entertain Mr. Organ's application, unless at the request of a licensing body which desires to admit him to examination." The report was adopted, with the exception of all the words after the word "application." This amendment was undoubtedly a very right one; to have adopted the final clause of the Committee's report would have been a shirking of responsibility with regard to Mr. Organ—an endeavour to lay it on the examining bodies instead of the Council.

On Tuesday, June 4, the whole sitting of the Council was occupied in considering a motion of Dr. Acland's. He brought before the Council a series of "suggestions for enabling clauses in a New Medical Act." Beginning by affirming that "it is desirable to obtain the following additional powers under the Medical Act with respect to examinations," he then stated, in a preamble, that "there are now in the United Kingdom nineteen licensing bodies, having power to confer thirty separate licences and fifty-three different titles;" that it was "the intention of the Medical Act to produce a uniform and sufficient standard in the examinations conducted by the said licensing bodies;" that very little had been yet done in the way of combining examinations; that the visitation of examinations, as at present existing, is a cumbrous proceeding, and one "ill calculated to produce the uniformity sought for," and that "further concentration of the examinations will tend to the accomplishment of that object;" and he then moved his first "suggestion," for which, as well as for the debate which followed, we must refer our readers to the report of the proceedings of the Council. The gist of it was "that the Council shall have power to combine with any of the licensing bodies mentioned in Schedule (A) of the Medical Act, in conducting examinations, by the appointment of *assessors*, *visitors*, or *examiners*, conjointly with such bodies, in such number and with such duties as shall be agreed upon between the Council and the bodies agreeing to conduct such joint examination;" that the qualification conferred after such an examination might be accepted by "any public bodies who have heretofore required a so-called 'double qualification,'" but should not "debar the holder" from obtaining any other Medical title or degree, or from "obtaining separate qualifications from the licensing bodies as at present." Dr. Acland introduced his motion in a very able and temperate speech, and the debate on it was very full and lengthy. We cannot here attempt even to discuss the matter, which is one of very great importance; but we fear that, however desirable it is to lessen the number of examinations a man must pass before he can qualify for general practice, and however great might be the benefits of a combination and concentration of the licensing boards, it must be held that Dr. Acland's motion is almost hopelessly Utopian. Of course that terrible, most obstructive, and powerfully vitalised bugbear, "vested interests," appeared in opposition; but one of the most weighty objections to Dr. Acland's scheme appears to us to lie in its making the Council, in effect, an examining and licensing body. Such a change would be fatal to its position and dignity as the "General Council" of the Profession, and destructive of its present power for good. An amendment to refer the motion to a committee "to report thereon to the Council at or before their next session" was carried, and, on being put as a substantive motion, was lost by a majority of one. The discussion it received, and which it fully merited, may, however, tend perhaps to promote combinations among the existing licensing bodies. By permission of the Council Dr. Acland postponed his remaining suggestions, which were for the establishment of a new qualification or title, to be obtained by passing an examination in hygiene and State Medicine, and for endowing the Council with power to expend sums "on investigations calculated to perfect the knowledge and to test the utility of articles of reputed or probable value" in therapeutics.

On Wednesday, June 5, an "amendment of Clause 11 of the Medical Acts Amendment Bill, proposed by the Medical Acts Amendment Committee," was moved by Dr. Paget. It vests the power of granting registration of foreign or colonial diplomas or degrees entirely in the General Council. Sir Dominic Corrigan moved an amendment, making the clause apply only to foreign diplomas or degrees, and requiring the holders of such diplomas to pass an examination by one of the licensing bodies of the United Kingdom; but enacting, "in the event of the several licensing bodies refusing to examine such holder of a foreign diploma, that it shall then be lawful, if the Council see fit, to register the holder of such foreign diploma without such examination." The amendment was negatived, and the original motion carried, by very large majorities.

Communications and returns were received from the Directors-General of the Army and the Navy Medical Departments, and were ordered to be acknowledged and entered on the Minutes. The returns from the Army Medical Department included three examinations in March and August, 1866, and February, 1867; there were altogether 100 candidates, of whom 73 passed. It is remarkable that while 42 candidates presented themselves in March, 1866, of whom 18

were rejected, only 28 came forward in August of the same year, and only 30 in February this year, and that on the former occasion 4 only, and on the latter 5, were unsuccessful; the candidates being at these two examinations both much fewer in number and apparently of much higher quality. No reasons for this are alleged in the returns, but we may fairly attribute the latter change to the improvements in the examinations by the licensing bodies. During the year 1866, only "19 candidates presented themselves for examination for Medical commissions in her Majesty's Naval Service," and of these as many as eight were rejected. Of the 11 successful candidates "only 3 passed a good examination in all subjects; 1, who otherwise passed a good examination, was somewhat deficient in Latin and Botany; 4 passed moderately good examinations, and of 3 the examination passed was indifferent." We need not point out the significance of this as to the estimation in which Medical commissions in her Majesty's Navy are held. We will only further remark that one of the rejected candidates was "so ignorant of the Latin language that he declined to attempt to translate, and failed to write an ordinary prescription," and this gentleman, like all the rest, already possessed a qualification to practise! Indeed, if we read the returns correctly, he possessed a double qualification from the Royal Colleges of Physicians and of Surgeons of Edinburgh.

The Council passed a resolution requesting "the Secretary of State for India in Council to furnish lists of the examinations of the Medical candidates for the Indian service."

A long report from the Committee appointed "to consider how the Council can best deal with the whole subject of preliminary examination" was received and entered on the Minutes, and was taken into consideration on Thursday. After quoting the various recommendations agreed to by the Council in previous years, the Committee state that they "are of opinion that it would be unwise to disturb, this year, recommendations carefully considered by the Council last session, which have not yet had a sufficient trial, and some of which have not yet come into operation." The wisdom of this opinion no one will dispute; constantly fresh recommendations and meddlesomeness would be likely only to annoy and harass the examining boards. The Committee suggested, however, some improvements in the modes of testing the knowledge of students, and some of these suggestions were adopted by the Council. Thus, it was agreed that the examination in "English language, including grammar and composition," should include parsing, giving the derivation and definition of a few English words in common use, correction of ungrammatical sentences, writing to dictation, and the composition of a short thesis. The suggestion to examine in Latin "composition," as well as "translation and grammar," was negatived. And it was agreed "that, after 1868, all examinations be removed from the list of those recognised which do not, in all respects, come up to the minimum which the Council laid down in 1866."

The President informed the Council of the results of the conference which their deputation had had with the Home Secretary; and it was delegated to the Executive Committee to resume their conferences with the Government regarding the Medical Acts Amendment Bill, and "to take such steps as they may find advisable towards carrying the Bill through the Legislature, in the same way as the Medical Act itself, and as all the amendments on that Act."

The report of the Finance Committee was received and adopted. The total income for the year 1866 was £4723 6s. 9d., the total expenditure £5179 3s. 8d.; the expenditure exceeding the income by £455 16s. 11d. To this subject we shall return in a future number, and therefore now simply give the figures.

On Friday, June 7, the report from the Committee appointed to prepare a scheme for the visitation of examinations, and to consider the best means of supervising the Arts Examinations, was received. They deem it advisable to continue the present system for one year longer at least. But they think that "each Branch Council should consider how far it is necessary to visit annually the examinations of each licensing body, and whether the labour and expense of conducting these visitations might not be abridged by limiting the visitations of each year to the examinations of certain bodies only." They do not consider it desirable to have the Arts Examinations conducted by special examiners as well as by mixed boards; and they recommend that "the visitors of examinations should in future receive payment for their services." The report was adopted with a slight alteration in the last suggestion, the Council determining "that the visitors shall in future receive payment for their services, at the same rate as for attending a meeting of the Branch Council, in addition to travelling expenses." It was also determined that the expenses of visiting the examinations should "be paid from the funds of the General Council."

On the same day, the reports from the Committee on the Subjects of Professional Education was received, considered, and adopted in the following form:—

"The Committee appointed to consider and report 'what are the subjects without a knowledge of which no candidate should be allowed to obtain a qualification entitling him to be registered,' beg to submit the following list of subjects:—Anatomy, General Anatomy, Physiology, Chemistry, Materia Medica, Practical Pharmacy, Medicine, Surgery, Midwifery, Forensic Medicine. The Committee, in enumerating the subjects a knowledge of which should constitute a minimum of the acquirements possessed by every registered Medical Practitioner, desire to add the following explanatory remarks:—

"'Chemistry' should include a knowledge of the principles of chemistry, and of those details of the science which bear on the study of Medicine.

"'Medicine and Surgery' should include a knowledge of systematic and clinical Medicine and Surgery, and also of Morbid Anatomy."

The third and fourth "remarks"—viz., that "Forensic Medicine should include a knowledge of toxicology and of the principles of hygiene," and to the effect that the examinations should be practical as far as possible—were negatived, as also was a motion to include botany in the list of subjects.

The adoption of this report we regard as the most important business achieved during the session. It does not go very far, it is true, but is a good beginning, and is very important and valuable in this—that the Council recommend that no one shall be registered as qualified for practice who has not been examined in both Medicine and Surgery, who does not possess a so-called double qualification or its equivalent.

On Saturday the "Report of the Committee on Returns from the Licensing Bodies, of Professional Examinations and their Results, and on the Registration of Students for the Year 1866," was read and adopted.

The "Report of the Committee on the Visitations of Examinations" was also read, but the consideration of it was, on the motion of Dr. Andrew Wood, chairman of the Committee, postponed till next session. The licensing bodies are invited to give the Council, in the meantime, their opinions on the various suggestions contained in it. The report is very long and full, and evidently the result of great and careful labour and thought. We shall take an early opportunity of noticing it in some detail.

The remainder of the business transacted was chiefly formal, and included, of course, the customary votes of thanks to the College of Physicians, the President, Treasurers, and others. Gratuities of twenty guineas each were given to Mr. Bell and Mr. Thorpe, the clerks of the Council, in consideration of their zeal and efficiency, and "of their extra work in carrying on the registration of Medical students." These gentlemen perform their duties admirably well and with great courtesy, and their salaries are by no means extravagant, so that we

should have been glad if the finances of the Council had allowed their generosity and justice to leave the gratuities at the sums proposed by their Treasurers.

The session thus closed, and our guides, councillors, and friends having returned to refresh themselves with practical work, we shall next week finally review the results of their discussions in Pall Mall.

THE SO-CALLED "BLACK DEATH."

When men's minds are troubled with the idea that the most terrible plague ever known, whose name even now carries a vague terror with it, has reappeared in Ireland, or, at least, that some new and unheard-of disease has sprung up in that hotbed of distempers, it is right and proper that we should make inquiries as to the nature of this epidemic. Well, then, in one word, it is not the black death nor yet the plague, neither is it any new or unheard-of disease which terrified Physicians have to helplessly encounter for the first time. So many dreadful stories of the horrors associated with the terrible plague of the middle ages prevail, that the bare thought of its being amongst us has made some delicate persons seriously ill; nor, on the other hand, is their alarm likely to be diminished if told that the disease is one hitherto unknown to Medical science. We cannot help reprobating the practice followed by one at least of our contemporaries in publishing cases of the disease we speak of with the sensational heading alluded to, although we willingly enough concede that to give the disorder an exactly appropriate title is no very easy task. We have distinctly affirmed that it is not the "black death" of the middle ages, and the reasons for such an affirmation we subjoin. Of the great characteristics of the black death, in the present case we have but two—the blackening of the surface and the speedy fatal result, the latter being common to many acute diseases. Four others of still greater importance are entirely absent—the characteristic buboes and carbuncles, the peculiar inflammatory affection of the lungs, the bloody expectoration, and the intensely contagious nature of the disease. Can, therefore, any one, bearing these facts in mind, and on the authority of the one solitary symptom—the extravasation of the colouring matter of the blood — more especially when the disease now prevailing exhibits well-marked lesions of the cerebro-spinal system, with symptoms too prominent to be overlooked even by the Physicians of the middle ages, can any one, we say, be justified in pronouncing the diseases to be identical? But the view that the disease is altogether new is not less calculated than the one we have just disposed of to excite alarm in the public mind; neither is it more in accordance with the truth.

The great mistake which has been committed has been in looking at this disease by itself, as seen in Ireland, and not viewing it by the light of past epidemics in other countries. To obtain a correct notion of what it really is, we must consider the history of certain epidemic disorders observed within the last three or four years in various foreign lands. In 1864, a disease appeared in St. Petersburg which, to most of the Physicians there, was something altogether new, but before long it became manifest that it was the (to us) well-known relapsing or famine fever of a bad type. In the winter of 1864-65 it was extremely prevalent, there being much overcrowding of the lower orders in St. Petersburg, and the rye bread of the country being unusually bad. About the same time a very fatal disorder prevailed in certain parts of Germany, especially round Dantzic and near the mouth of the Vistula. Confused reports, apparently confounding these two forms of disease and exaggerating their fatality, reached this country, and two Medical men were sent to examine into the nature of the complaints, Dr. Whitley going to St. Petersburg, and Dr. Burdon Sanderson to Dantzic—yea, to such a pitch had the alarm risen in this country, that Mr. Simon judged it proper to issue a note upon the subject before the reports could be made public. Then, as now, the story went that the "black death" had reappeared, but the report of Dr. Whitley soon dispelled this notion with regard to St. Petersburg, and the still more elaborate (in fact one fit to be selected as a type for such a document) report of Dr. Sanderson soon following, the public mind was reassured.

Let us examine the characters and relations of these two forms of disease. By referring to Dr. Whitley's report, and to an essay by Drs. Herrman and Küttner (a) on the St. Petersburg epidemic, we find that the fever generally lasted from twenty-one to twenty-nine days, that each patient usually suffered two, three, or even four relapses, having between them intervals of from four to six days of comparative health, and then this tendency to relapse could not be obviated by any remedy employed. During each of these periods of exacerbation the skin became more or less jaundiced—varying in tint from light yellow to dark orange-brown—indicating some congestion of the liver (which was usually found to be increased in size); but one of the most constant symptoms observed was great enlargement of the spleen. Tumefaction of the parotid glands was commonly observed, but swellings of the lymphatics very rarely so; but these enlargements are by no means uncommon in ordinary typhus, (b) and, taken by themselves, cannot be assumed as of any great value as a diagnostic. We also read in the paper referred to, what might have been expected to follow the splenic complication, that the blood became more or less disordered; in the worst cases there was extravasation below the skin, and bleeding from the nose, sub-pleural ecchymoses were found after death, and in still more numerous instances there were effusions of blood, or at least of its colouring matter, below the dura mater and in the arachnoid. A well-marked increase of the fluid within the skull and spine was also frequently noted, death apparently resulting from the latter in some instances. Occasionally there was observed a considerable amount of pain in the region of the neck and spine, but this does not appear to have been constant; pain in the head was uniformly observed. Notwithstanding the ugly character of this disease, the mortality was not great, being only about 10·77 per cent., and the average period of stay in Hospital was thirty or forty days.

So much for Russia, and if we turn to Prussia we find that about the same time that this disease was raging in St. Petersburg, chiefly be it noted among workmen and soldiers, along the course of the lower Vistula a distinct epidemic prevailed. It had been smouldering in the country for some time, but appears to have reached its maximum intensity about the beginning of 1865. Accepting as our guides Dr. Sanderson's report, and an excellent treatise on the epidemic by Dr. Mannkopff, (c) we find that in this epidemic children were mostly attacked. As in the Russian recurrent fever, there was at the onset of the disease most obstinate vomiting, generally of a bilious fluid, great pain in the head, and hyperæsthesia of other parts of the body, a tendency to bleeding at the nose and to lung complications; there were in addition petechiæ on the skin, and sometimes painful swellings of the joints, with extraordinary pain and stiffness of the muscles at the back of the neck and universal opisthotonos. In the part of the country visited by Dr. Sanderson, malarious fevers were extremely frequent, so that enlargement of the spleen could scarcely be looked upon as a necessary concomitant of the disease; but when we learn that elsewhere, in parts where agues do not prevail, the spleen was invariably increased in size, and that even in such neighbourhoods there was a distinct tendency on

(a) "Die Febris Recurrens in St. Petersburg. Beobachtungen von Dr. F. Herrman und Dr. C. Küttner." Erlangen: Enke. 1865. ("Relapsing Fever in St. Petersburg. Observations by Drs. Herrman and Küttner.")
(b) Graves. Reprint edition, p. 146.
(c) "Ueber Meningitis Cerebro-spinalis Epidemica." Von Dr. Emil Mannkopff. Braunschweig: Vieweg und Sohn. 1866. ("On Epidemic Cerebro-spinal Meningitis." By Dr. Emil Mannkopff. Brunswick: Vieweg and Son. 1866.)

the part of the disease to become remittent, or probably, rather, recurrent, we cannot suppose that the aguish constitution was at the bottom of the whole matter. Certain peculiarities of the disease, as contrasted with the Russian epidemic, were the absence of any enlargement of the liver or jaundice of the surface, the urine was occasionally found to be albuminous, and the mortality was much greater usually exceeding 50 per cent. of all attacked. In the recurrent fever, again, the pulse was usually very quick; in the cerebro-spinal epidemic it was but little elevated above the ordinary rate. In the Russian epidemic we said that cerebral lesions occasionally appeared to be the immediate cause of death, but in the German pestilence the post-mortem appearances were of a much more distinctive character. Under the coverings of the brain and spinal cord were well-marked indications of inflammation; purulent matter, either thin and semigelatinous, or of a denser, almost brainlike consistence, and of a yellowish hue, being found in every instance, either in the sulci of the brain alone, or in other situations also. On the spinal cord it was much more constant on the posterior than on the anterior surface. The substance of the nerve-centres was not so much affected as their coverings; but hyperæmia and infiltration of serum were observed in certain situations. Curiously enough, the muscles which were so extremely rigid during life seem to have lost this rigidity after death; for, although the other muscles caused extreme stiffening of the body, those of the back and neck were usually relaxed. The abnormal condition of the blood was indicated by extravasation in such diverse situations as the membranes and substance of the brain, the stomach, bowels, and urinary bladder, and into the substance of the skin. Disturbances of sight and hearing were commonly observed during the course of the disease, another curious concomitant being herpes on the lips.

If now we turn to America, in 1864 we find that a disease prevailed known there as spotted fever, or epidemic cerebro-spinal meningitis; but we are very far from finding that unanimity in describing the characters of the disease which is so noticeable in the case of the German epidemic. Thus, for instance, we find a case described (d) of a child dying in fourteen hours, and a strong healthy woman in eight, without the slightest indication of inflammation about the meninges, but with intense mottling, or rather lividity, of the skin and extravasation of the blood into other organs, as beneath the scalp, in the intestines, kidneys, bladder, etc. On the other hand, if we turn to certain cases which appear to have the true characters of cerebro-spinal meningitis about them, recorded by Dr. Black, (e) we find that in many instances, were it not for the well-marked retraction of the head, the speedy death, and one or two other points, we should be inclined to pronounce them examples of acute rheumatism, so strongly marked was the inflammation of the joints. In these cases we do not read of any spots being observed—in fact, one Physician says that spots were frequently absent—yet we have an instance of death in *eight* hours recorded. Dr. Burns, in the same number of the above journal, mentions a number of cases unmistakably of this disease, yet with uniformly some affection of the skin, the herpes round the mouth referred to above in connexion with the Prussian epidemic being noticed—in fact, used as a diagnostic—in this as in outbreaks of the disease elsewhere. Dr. Burns remarks that the fever in his cases intermitted but irregularly, whilst it is fair to notice that the hygienic condition of the patients' dwellings was decidedly bad. The stools in this epidemic are repeatedly mentioned as being dark-coloured or black. In another part of the country we learn that both typhus, typhoid, and spotted fever simultaneously prevailed, the number of cases of typhoid being greatest, and this, too, in a very healthy community. Apart from these peculiarities, the American epidemic in its broad characteristics resembled the disease observed about the same time in Germany.

Leaving America for Ireland, we find that for some fifteen months back a disease has been prevailing, closely resembling those already referred to in many points, but with the blood dyscrasia more marked than in most of the instances hitherto mentioned. Death has also been extremely rapid on many occasions, and the percentage mortality has been very large. In a valuable paper by Dr. Gordon, recently published, (f) we find many points indicated in which the disease resembles some of the above-mentioned epidemics, but there are also distinctions. In the cases hitherto observed in Ireland, the temperature has usually been below the normal standard; in Prussia it was considerably above it, but it must be allowed that the difference may be accounted for by the greater rapidity with which the disease has sometimes proved fatal in the former instances. The herpes around the lips and on other portions of the body has also been observed, as has the tendency of the joints to inflammatory action, but other serous cavities besides the meninges do not seem to have been very frequently attacked; neither do we find any mention of splenic enlargement or of liver affection in the Irish cases. On these and other matters to be spoken of hereafter, the observations of Dr. Stokes, given elsewhere, are of the utmost value.

The conclusions to be drawn from all these facts are tolerably clear. In the first place, it is apparent that the disease is not typhus fever as ordinarily seen; and where we have the cerebro-spinal symptoms most strongly marked, as in Prussia and America, even there we find the disorder assuming some of the characters of a disease which in Russia was readily recognised as recurrent fever. True, we have known patients die in the cold stage of typhus, before reaction had time to set in, and true, also, Dr. Hudson (g) says in his valuable work on fever, that there has of late been an increased tendency to cerebro-spinal complications observed in cases of fever in Dublin; but every argument which could well be adduced in favour of the unity of the two diseases has been brought forward by Dr. Murchison. Yet we confess that we cannot coincide with his opinions. In some respects the disease approximates to the malarial fevers—viz., in the tendency to recurrence, and in the hepatic and splenic complications so often observed. In the bilious vomiting and black stools, together with the rapidly fatal result, we see many points in common with yellow fever. The way in which it originates would also appear to assimilate the disease to this group; for whereas we find bad hygienic conditions generally associated with its origin, we doubt, notwithstanding the facts adduced by Dr. Stokes, if any very good grounds can be given for believing in its contagious nature. Neither can the essence of the disease be supposed to lie in the cerebro-spinal lesions, for, as mentioned above, no traces of them may be observed, whilst in many cases other serous membranes show a great tendency to inflammation. It is evident that at the root of the whole matter there is an intense disorganisation of the blood, producing the vibices, ecchymoses, or petechiæ seen on the cutaneous, mucous, and serous surfaces, and giving rise to the inflammatory conditions observed in connexion with the nervous system. Beyond that we can say but little. We therefore think that the name selected by Dr. Stokes for its designation—viz. *malignant purpuric fever*—although not altogether unexceptionable, as having no reference to the cerebro-spinal lesions, is the best hitherto proposed; better—far better, certainly, than that decidedly erroneous term, the "black death." But we think that something more may be learnt from the inquiry we have made. We have pointed out how one form of disease insensibly merges into another usually assumed to possess distinctive characters (we speak particularly of epidemic

(d) *Amer. Jour. Med. Sciences*, July, 1864, p. 136; do., July, 1865, p. 278. See also *Med. Times and Gaz.* for 1864 and 1865.

(e) *Amer. Jour. Med. Sciences*, April, 1865, p. 345.

(f) *Dublin Quar. Jour. Med. Science*, May, 1867, p. 408.

(g) "On the Study of Fever." Dublin, 1867.

fevers), and our ideas as to the complete and exact distinctions supposed to exist between say typhus and typhoid have thereby received a rude blow. In fact, we are somewhat inclined to fall back upon Fordyce's notion, that the essence of fever is the same in all cases, and that modifying circumstances give rise to the differentiation observed. Sydenham's notion of an *epidemic constitution* is also well illustrated by following out such a line of research, and nowhere better than by an instance given by Dr. Gordon, who tells us that wherever this epidemic has prevailed a malignant form of measles has also existed; the eruption of the measles has become unusually intense, and more or less black, appearing in an unusually short period, and accompanied by an extreme tendency to collapse. One good thing noticeable is the slight tendency the disease has to propagate itself, for although the percentage mortality is very high, the number attacked has hitherto been small.

THE WEEK.

TOPICS OF THE DAY.

It is now certain that there will be seven candidates for the three vacancies in the Council of the Royal College of Surgeons, caused by the retirement of Messrs. Skey, Wormald, and Kiernan. These gentlemen offer themselves for re-election, and Messrs. Prescott Hewett, Luther Holden, Birkett, and Spencer Smith are the new and untried candidates. It would be rash to offer a prediction when claims of such high and approximately equal value have to be weighed. The retiring members, whether re-elected or not, will carry with them the unblemished and high reputations which originally procured them the coveted honour. It will, however, probably be felt by many that these gentlemen, having had an extended tenure of office, and having filled the most prominent position in the College, and holding also seats in the Court of Examiners, have conferred on the College as much lustre, and received from it as much dignity, as a professional corporation can receive from, or confer upon, its members; and that the interests of the Profession require that re-election into the governing body of the College should be a reward for exceptional services rather than a rule. It was expected, last week, that besides the new candidates who have come forward, Mr. Erasmus Wilson would have appealed for support to the numerous friends he has amongst the Fellows. This he has declined to do; but we hope that his candidature is only postponed until another opportunity. All the four new candidates are Metropolitan Hospital Surgeons, and there will, therefore, be no rivalry this year between the provincial and metropolitan interests. We think this a matter for regret, and it is to be hoped that on the next occasion the country will find a candidate of sufficient weight to dispute on equal grounds the claims of the town. We need say little of the relative deserts of the new candidates. Mr. Prescott Hewett, Surgeon to St. George's Hospital, has a strong claim on the College as one of its most successful Professors of Anatomy and Surgery. Mr. Luther Holden, the Surgeon to St. Bartholomew's, is the author of one of the most popular class books on anatomy of the present day; he has the merit of being one of the earliest teachers who endeavoured to infuse into the dry details of human anatomy something of the spirit and interest of transcendental science; and he is besides a Fellow by examination, and would well represent the younger and advancing part of the constituency. Mr. Birkett is Surgeon to Guy's Hospital, and the author of a classical work "On Diseases of the Breast;" and Mr. Spencer Smith is Surgeon to St. Mary's, and has lately done good service to the State as Secretary to the Commission on Contagious Diseases. We congratulate the Fellows on having such candidates to choose from, and we congratulate the candidates on their opponents. In such a contest, to be defeated is only the next best thing to winning.

The International Society for the Succour of the Wounded in Battle, which was originated at Geneva in 1862, has a special department in the great Parisian Exhibition this year, where different nations exhibit their field hospitals, ambulances, and contrivances and appliances for Surgical practice on the battle-field. It seems that America bears away the palm, whilst England does not exhibit. According to the *Times* correspondent, some ambulance carts from Woolwich and medicine panniers, the lids of which may form an operating-table, are to be found in a shed where we display what the French call the *bijouterie Anglaise*. The same writer regrets that the Army Medical Department has not sent over any one to show these things. He does not suggest of what rank the showman should be, but probably an Inspector-General might serve the purpose; or perhaps he thinks the trip would be a nice holiday for the Director-General.

A vacancy is announced in the office of Gresham Professor of Medicine. The appointment, which is a pleasant little *bonne bouche* of one hundred a year and not onerous duties, is in the gift of the Mercers' Company. There are some excellent Physicians, who have more or less connexion with the Worshipful Company, in the field. Amongst them are Dr. Richardson and Dr. E. Symes Thompson, who, having done a great deal of very good and unpaid work, are suitable claimants for a chair where the emoluments are tangible and the work not severe. Dr. Reginald Southey, of St. Bartholomew's, whose father was for many years Gresham Professor, is also in the field.

The answer given by Lord John Manners to Mr. Goldsmid on the subject of the University of London building seems to prove that his Lordship has not got over his recent check, and is not at all disposed to brook any dictation from the Senate on the subject. We presume, however, that body have still under their control the same means of influencing the House of Commons which they recently exerted. Mr. Pennethorne is again to furnish a design. Most people would think that after two of that gentleman's plans had been rejected, it would have been better to throw the matter open to public competition.

The retirement of Dr. Jenner from the Chair of Medicine at University College, and of Dr. Hare from the office of Physician and Clinical Professor to the Hospital, have been announced. The 22nd of June is the last day for receiving applications from candidates for the vacancies so occasioned. We are happy to observe that the Hospital, is still to retain the valuable services of Dr. Jenner as Physician. We only hope that on this occasion the authorities of the College will not consider that to have been educated in that institution is any disqualification for holding its offices.

REPORT ON SYPHILISATION.

At the meeting of the Medico-Chirurgical Society, on Tuesday, the 11th, a paper of no ordinary importance was read by Mr. Gascoyen, being a report by himself, in conjunction with Mr. J. R. Lane, on the cases wherein syphilisation had been tried in this country. The treatment of some of the cases had been begun by Dr. Boeck, but was continued by the above-named gentlemen, and in some instances extended over a considerable period. But the conclusions were the most important part of the communication, and with regard to these the authors differed somewhat, Mr. Gascoyen being inclined to think that the process of syphilisation had no influence on the eradication of the disease, whilst Mr. Lane was of opinion that it aided somewhat in getting rid of the disease, whilst admitting that the rest, good food, and regular hours of Hospital life were the prime agents in producing a cure. Practically they were perfectly at one, both holding that it was altogether inadmissible as a mode of treatment, the delay, the pain, the annoyance far more than counterbalancing any good, if indeed there were any, produced by it. This decision was received,

by an unusually large meeting, with great applause. Many most interesting questions were incidentally alluded to in the course of the debate, but for a full account of these we must refer our readers to the report which will be published.

PROFESSOR GAIRDNER AND THE GLASGOW MERCHANTS.

In the course of an admirable address delivered by Professor Gairdner to the new Medical graduates of Glasgow on May 16, he pointed out the distinctions between Medicine and mercantile pursuits as regarded their nature, their scope, and the tests of success. Money-making, said Dr. Gairdner, can never be the prime object of the Medical Profession. Its measure of success cannot be the quantity of money made. The thing invested is not money, but time, brains, experience, skill; and these are things which cannot be estimated by a mere money standard. Hence the Medical Profession is apt to be unfairly treated in a commercial community. The merchant sees that the Medical man makes no large investment of money; he sees that he gives away a large portion of his real capital—his time and energy—without visible consideration; hence he comes to the conclusion that they are valueless; that the law of supply and demand ought to come into operation; and that if a Physician will take a shabby fee, there is no reason why he should be offered a handsome one. In fact, Dr. Gairdner's address reproaches the wealthy mercantile classes of Scotland in not making a spontaneous, prompt, and liberal return to the Physician for the exercise of his skill and benevolence. Medicine, as we have always said, is a noble profession, but a beggarly trade; and we cannot but feel disgusted when the Professional man who throws all the energies of mind and body into a beneficent attempt to save life, finds himself paid by a tradesman like a tradesman, at so much by the mile or the hour. A Glasgow merchant, Mr. Archibald Orr Ewing, takes exception to Professor Gairdner's statement, as if he had disparaged mercantile life, and had represented it as a calling in which money alone, and neither brains, time, nor experience were of value. He also holds up "success" as the test of "ability." Did Mr. Ewing ever hear of John Hunter, Dr. Prout, Professor Faraday, not to mention some men still living and working in our midst, and will he tell us if their success in £. s. d. is any measure of their ability? We do not undervalue the merchant; but we think the merchant in this case estimates the Physician by an unreal test.

THE MALIGNANT PURPURIC FEVER OF IRELAND.

This disease is clearly the result of a peculiar blood-poison of some kind, and no mere cerebro-spinal meningitis. The poison, however, appears to exhibit a peculiar affinity for the central parts of the nervous system. The marks of meningeal disease are probably only an expression of its presence and action; but these marks are by no means always present, nor do the sufferers always exhibit the symptoms of such affections during the attack. As so commonly happens in blood diseases, the patient rapidly succumbs, and nothing is left for the morbid anatomist in the way of structural changes. The symptoms during life are sufficiently various in different cases, but their similarity as a whole, and their conformity to one type, are quite sufficient to distinguish and group them together under some one common name. We have heard of two new cases of malignant purpuric fever at the Curragh Camp. The patients were young soldiers belonging to different regiments of infantry. Both were well in the morning, but became unwell towards evening. The earliest symptoms were referable to the gastro-enteric system—diarrhœa in one, and vomiting in the other. On the day following manifestations of fever occurred, combined with restlessness and cerebral disturbance amounting to oppression, and ending in insensibility; purple petechial spots appeared on the limbs, and rapidly increased in number and depth of colour. The disease proved fatal to both patients within forty-eight hours. There have now been, as far as we understand, three instances of this disease at the Curragh Camp. As has been observed in America and elsewhere, the attacks have been more frequent amongst the young than amongst the middle-aged or old. The opinion as to its contagious properties appears to be gaining ground. As the evidence of this increases with the progress and continuance of the disorder, the suspicion appears to be giving place to a pretty firm conviction that contagion is one, at least, and that not a subordinate, agent in its spread.

AN INTELLIGENT VESTRY.

On Thursday week last, Dr. Bachhoffner, the Chairman of the Sanitary Committee lately appointed by the Marylebone Vestry, presented his report. It contains numerous proposals to adopt clauses of the Sanitary Act of 1866, and, if carried out, will produce a complete sanitary revolution in the parish. The Vestry has determined to carry out the first recommendation—viz., to establish a separate building for the purpose of disinfecting the clothes, bedding, etc., used by persons suffering from infectious diseases. In the course of the discussion upon this valuable proposition, Dr. Whitmore (Medical Officer of Health), Mr. Hallam, and Professor Marks pointed out the great advantages, in regard to the prevention of infectious diseases, which would result from its adoption.

ST. ANDREWS GRADUATES' ASSOCIATION.

The Association of Medical Graduates of St. Andrews is becoming a powerful organisation. Every portion of the United Kingdom has supplied its members, and the greatest unanimity prevails amongst them. The first object of the Association is to defend the rights of its graduates in respect to the franchise, but we believe it is the general wish to place the Association on a permanent basis, and to labour for many still much-needed measures of reform. To reopen widely the doors of the University to qualified men who wish for a degree by a sound examinational test is a work alone, if there were none other, worthy of the best energies of the graduates. There are at the present time numbers of good men in the Profession who are anxious for a degree on such terms, who deserve the opportunity, and whose ripe experience would be benefited by the ordeal. The present graduates were nearly all admitted on these same terms; so that in moving for others they are simply asking for an extension of the benefits which they, more fortunate than their fellows, have been able to secure. We wish the new Association a long and successful career, and hope that its numbers will continue to increase.

THE PREVENTION OF TYPHUS.

One of the most important papers brought before the Epidemiological Society for some time was that read on Monday, June 3, by Dr. Clifford Allbutt, on the prevention of typhus by the improvement of the dwellings of the poor. There can be little doubt, as pointed out by the author of the paper, that typhus and its kindred are, if not originated in the foul dwellings of the poorest working classes, at least considerably extended through their influence, whilst the existing system of cellar and garret tenements constitutes one of the chief causes of the large mortality of our cities. It behoves us, therefore, to take immediate steps to improve the dwellings of the lowest labourers, if not from motives of philanthropy, at all events for the purpose of securing ourselves from the invasion of epidemics. The model dwellings constructed by Mr. Peabody and Miss Burdett Coutts are admirable in their way, but they have done nothing towards the removal of epidemics, for the simple reason that they provide only for a class of artisans whose former dwellings, however objectionable in other respects, were not characterised by the filfth and squalor which are invariably to be found in the dwellings of the

lowest class of labourers. Hitherto, the casual labourers, costermongers, and suchlike have been unprovided for; their occupations being irregular, and their wages low, they are obliged to live more like cattle than human beings. This state of things is abundantly seen in Leeds, where there is a large population of the very lowest class of labourers. To remedy it a company was started with the object of providing healthy dwellings at a low rental for the lower classes. A purely philanthropical project was not contemplated, it being the opinion of Dr. Allbutt and his fellow-workers that no scheme but one giving a fair percentage return was likely to be generally adopted throughout the country. The company being, therefore, formally incorporated, commenced its first experiment. This experiment consisted in the erection of a block of buildings in St. Ann's-square, Leeds, at a cost of £2000. The block contains four stories—there are no cellars—which are traversed by galleries on which open the doors of the various tenements. The rooms are in no instance large, but have an average space of about 980 cubic feet. They are provided with air bricks near the ceilings, and, except in the bedrooms, with fire-places. Attached to each tenement there is a coal-bin, a cupboard, a meat-safe, a water-tap and trap, and a convenience for a gas meter. Connected with the galleries are admirably contrived waterclosets, and a well-constructed dust-shaft, as well as boilers and wash-houses. These have been let at rents equal to those of the wretched cellars and garrets by which "middle-men" eke out a livelihood, and they have been taken by tenants who appear to realise the advantages offered them by the Company. So far, then, as the occupancy and the substitution of clean, healthy dwellings for loathsome dens are concerned, the experiment of the Leeds Company has been a thorough success. As to the commercial results it is as yet difficult to speak, but, so far as calculations can be made, there is every reason to think that in this respect, too, the aims of the Company will be fully achieved; the rents already yield a net return of £10½ per annum, certainly a very fair result for so experimental an undertaking.

But not only does the plan meet acceptance by the poor and return its projectors a not insignificant dividend, but it has brought about, so far as can be observed, the highest end aimed at by the Company—the suppression of disease. Dr. Allbutt's statistics on this point are not yet fully prepared, but there seems reason to believe that the further efforts of the Company will result in a decided diminution of the mortality in cases of typhus.

A great deal is already done for the London poor; there are wash-houses, baths, libraries provided by many parishes. But the question may be asked, Would it not be better to expend the sums employed in maintaining these establishments in erecting dwellings which would not only benefit the poor, but would, if properly managed, protect the health of the whole community?

THE BUILDING ACT.

The defects in the Building Acts have formed the subject of a strong representation on the part of the Health Officers of London to the Metropolitan Board, that in the proposed Bill for amending the Building Acts power should be taken to prevent new houses being built or old ones converted without regard to certain obvious sanitary necessities. Amongst other things it was urged that every new street should be efficiently sewered and paved before any house in it is allowed to be inhabited; that provision should be made for securing an open area at the rear of and adjoining inhabited houses; that the walls and foundation of every house should be so constructed as to prevent the rise of damp, and that there should be more effectual supervision to prevent the use of improper materials. Mr. Liddle, the Health Officer of Whitechapel, in his last quarterly report adds another recommendation to the foregoing—namely, that in order to secure for every street an adequate supply of sunlight, which is so essential to health, the buildings on either side of the street should not be permitted to exceed in height the width of the street. This is a point which was strongly advocated by the *Daily News* some three months ago on the ground that huge blocks of buildings which are everywhere being run up, even in narrow streets, "render the ways gloomy, damp, and retentive of the atmospheric impurities generated by the traffic streams." And as regards the requisite security that houses shall be so planned as to prevent the rise of damp, the *Daily News* adduces the following unanswerable reasons for such an amendment of the Building Acts as the Health Officers desiderate:—

"This is not difficult in the central districts, where there is abundant drainage; but in the suburban districts, which are being covered with elaborately stuccoed villas and so forth, what is wanted is to secure freedom not from damp only, but from injurious exhalations when the houses are built upon 'made ground'—in plain terms, upon strata of mud, rubbish, and the offal from the yards of dust collectors. You are recommended by your Medical man, or by a friend, to take a house in a certain locality because 'it's a gravelly soil, and very healthy;' and these encomiums on the natural attributes of the site may be quite true, while the present actual conditions have been altogether changed by the speculative builder, who has found a ready sale for the gravel and sand which he has excavated, and he has therefore substituted an artificial soil compounded as we have described. Now the Building Acts do not touch this practice, which has ruined the health of thousands, who have found their externally handsome villas to be whitened sepulchres, wherein damp and mildew soon communicate their blighting influence to the inmates."

FROM ABROAD.—IMPROVED NOSOLOGICAL NOMENCLATURE—EXTINCTION OF VENEREAL DISEASES—TREATMENT OF OPACITIES OF THE CORNEA.

Baron Haussmann, the ever-active and almost omnipotent Préfet of the Seine, has just appointed a Commission for the purpose of revising the Nosological Nomenclature now employed by the Medical Verifiers of Deaths in Paris, and of preparing a new one more in harmony with the progress of science. Those who have seen the monthly mortality returns issued by the Préfet, containing as they do a large amount of valuable information, must see the necessity of this reform, for the nomenclature employed therein is of the loosest description. Although that employed by our own Registrar-General is infinitely superior, it is generally admitted that, at all events, the classification of diseases employed is susceptible of amendment; and it does seem to us that this might be a very good opportunity for bringing the two countries to co-operate in the matter. The members of the Commission are Senator Dumas, the celebrated chemist, as President—a rather curious choice, by the way, if report says true that he is already so overladen with official business more in harmony with his pursuits as to prevent its satisfactory execution; Professor Tardieu, President of the Academy of Medicine; MM. Deville and Bourdon, Inspectors of Verifications of Deaths; M. Brochin, Editor of the *Gazette des Hôpitaux;* M. Husson, Medical Director of the General Administration of Public Assistance; and M. Pelletier, Director of Municipal Affairs.

Some time since the Imperial Society of Medicine of Lyons appointed a Committee for the purpose of considering the question of the prevalence of venereal disease in that city, and what means are best suited for its extinction. An interesting report has issued from the pen of M. Garin. We hear so much of syphilis in connexion with the Surgeons of Lyons, who seem to have converted it into a specialty, that the impression is naturally conveyed that it must be very prevalent in that city. M. Garin, however, gives a very satisfactory statement on this head. Venereal diseases, so far from having increased, have considerably diminished in number, and especially in gravity; organic lesions met with, both

among the prostitutes and the soldiers of the garrison, being usually very slight; while the number of cases and duration of treatment among these last are rapidly diminishing. The reporter believes, however, much more may yet be done than can be accomplished by mere inspection, and above all he recommends encouraging the more ready access to and more prolonged stay in the Hospitals for the subjects of the disease. This is, of course, a subject which is very interesting to ourselves, who, we fear, have not to contend with a merely decreasing prevalence of the disease; for it is upon the multiplication of hospital facilities we shall have in the end to rely, rather than upon preventive inspection. The latter is surrounded with difficulties, and even in France, where it is a matter of course, the report under notice shows that it is not alone sufficient, and requires to be supplemented with other measures. With respect to these, the following propositions are laid down:—

"1. The Hospital administration should admit, freely and unconditionally, into its establishments the venereal patients of both sexes, just as it does in other diseases. 2. These patients should be retained in the Hospitals a sufficient time for their cure to have become assured, especially in the syphilitic cases. 3. Patients incompletely cured, or suffering from relapse, should be encouraged by kindness to return voluntarily to the Hospitals on the consultation days, and even to re-enter them, in order to complete their cure. 4. Mere gratuitous consultations only prevent very incompletely the propagation of the disease. Temporary sequestration in Hospitals ought, as far as possible, to be substituted for the mischievous liberty left to these patients by the consultations. 5. The residence of patients in the Hospitals, and especially that of prostitutes, should be turned to profit for their moralisation by means of work and instruction. The corrupting idleness in which such patients generally live should be combated by every possible means. 6. A workshop should be annexed to each Hospital for the temporary reception of repentant prostitutes and women without employment whom destitution drives to prostitution."

These are excellent suggestions, although sometimes they may prove difficult of realisation; but M. Garin goes further than this, and enters dreamland when he comes to speak of the "extinction" of syphilis." A prime agent in effecting this is to be "international conferences," such as have been held for plague and cholera. We do not think that these examples hold out very encouraging results; but as this question of the prevention of syphilis is to come before the approaching Paris Medical Congress, we do not doubt that some benefit will accrue from its ventilation.

Dr. de Luca, of the *Incurabili* Hospital at Naples, has communicated to the Academy of Sciences a paper detailing his mode of treating opacities of the cornea. Very unsatisfied by the effects of their treatment by alcoholic and tannic substances, which coagulate albuminoid matters, and often do more harm than good, after numerous trials of other substances, he has found in the sulphate of soda a very eligible substance. He first used it in a saturated solution, dropping this several times a day on to the globe; but a more efficacious procedure is to employ the solid sulphate reduced to a very fine powder, which is applied to the globe twice a day, the patient's head being nearly in a horizontal posture, so that the powder may become dissolved by means of the liquids of the organ. As this solution takes place, a pleasant, cool sensation is produced.

PARLIAMENTARY.—THE "BLACK DEATH"—THE UNIVERSITY OF LONDON—GASES FROM SEWERS.

On Thursday, in the House of Commons,

Mr. Verner asked the Chief Secretary for Ireland whether he had received any information from the Registrar-General or other authority with regard to the very fatal disease called in the newspapers "black death," which had of late been prevalent in the neighbourhood of Dublin.

Lord Naas quoted the latest returns of the Registrar of Dublin, in which, among the names of the fatal diseases, that of "black death" did not occur; and he had the authority of the Superintendent General Registrar for stating that none of certain special diseases bore any analogy to the black death of the middle ages.

Mr. Goldsmid asked the First Commissioner of Works when the new design for the elevation of the University of London was likely to be finished; and whether he would, before giving orders for its execution, afford the House and the University an opportunity of expressing an opinion upon it.

Lord J. Manners could not say when Mr. Pennethorne was likely to finish the new design. The view he took of the vote the House arrived at last Friday was that the House wished itself to decide on the design; and, therefore, he should ask Mr. Pennethorne to place it in the library in order that hon. members might have the opportunity of inspecting it. He did not think it would be any part of his duty to submit the design to the Senate of the London University.

Sir G. Stucley asked the Vice-President of the Council whether his attention had been called to the present system of ventilating the sewers by shafts covered with open iron gratings placed in the centre of narrow and much frequented thoroughfares; and whether the gases dispersed by means of such gratings could not be carried off in some other way.

Lord R. Montagu said his attention had been called to the matter. No smell, however, issued from sewers which had been well constructed, and were well kept. It was from a deposit that the noxious gases arose. If a sewer were smooth and well flushed, all deposits were swept away. If sewers were not ventilated into the streets, they must be ventilated into houses. (Laughter and "Hear, hear.") If shafts were carried up houses for sewer ventilation, private property was interfered with. All this, however, was the business of the local authority, with which the central Government has nothing to do.

REVIEWS.

The Physiology and Pathology of the Mind. By Henry Maudsley, M.D. Lond., Physician to the West London Hospital, formerly Resident Physician of the Manchester Royal Lunatic Hospital, etc. London: Macmillan and Co. 1867. Pp. 442.

We do not know that we should do much good in discussing the earlier part of Dr. Maudsley's work, which is concerned with the philosophy of mind. In fact, we are not quite sure that we can agree to all his propositions; we think he is too exclusive in his views of the value of the objective method of inquiry in contradistinction to the subjective—the interrogation of self-consciousness. But still, of one thing we are sure, that for us, dealing, as we do, with insanity as a condition which is to be treated Medically—treated, as we can only treat it, through the medium of external conditions—we owe a debt of thankfulness to Dr. Maudsley for the very careful manner in which he has pointed out the relation of mental and moral phenomena to bodily constitution. Using the time-honoured *granum salis* as a corrective, this part may be read, and ought to be read, by any person desirous of attaining a satisfactory knowledge of the subject it treats of. It will repay the trouble abundantly, and we must say that it is much more readable, and much more readily to be comprehended, than a good deal that we have been compelled to wade through in the course of our experience. If the reader do not devour too much at a time, we can promise him that he will not be troubled with literary indigestion, but that he will be fortified for his battle with mental diseases by what he takes in. All we shall say, then, upon this part relates to one chapter—that on "Volition." His definition of will is this:—"The will appears then to be nothing but the desire or aversion sufficiently strong to produce an action after reflection or deliberation"—that is, he makes *willing* synonymous with *wishing*. He ignores the intermediate act or effort intervening between the wish and the action, bodily or mental, which happens when the wish is carried into effect by the individual who wishes. It is the fault of the exclusiveness of his school.

But to pass on to what will interest our readers chiefly—namely, the discussion of insanity. And here we must speak in terms of unqualified praise of Dr. Maudsley's volume. His remarks upon the etiology of insanity especially coincide with those views which we have over and over again expressed in this Journal. He condemns, as we have condemned till we are tired of doing so, the absurdity of the practice of referring insanity in any one instance to the operation of some single

cause; as if love, or anxiety, or over-strain of intellect, or sexual excesses, or any other mortal thing which nine hundred and ninety-nine people undergo without getting mad, can be regarded as the cause of insanity when the thousandth becomes insane. Well does the author say, "There is a concurrence of conditions, not one single effective cause," in those persons who suffer. "All the conditions which conspire to the production of an effect are alike causes, alike agents, and therefore all the conditions, whether they are in the individual or in the circumstances in which he is placed, which in a given case co-operate in the production of disease, must alike be regarded as causes. When we are told that a man has become deranged from anxiety or grief, we have learned very little if we rest content with that. How does it happen that another man, subjected to an exactly similar cause of grief, does not go mad? It is certain that the entire causes cannot be the same where the effects are so different; and what we want to have laid bare is the conspiracy of conditions, internal and external, by which a mental shock, inoperative in one case, has had such serious consequences in another. A complete biographical account of the individual, not neglecting the consideration of his hereditary antecedents, would alone suffice to set forth distinctly the causation of his insanity. If all the circumstances, internal and external, were duly scanned and weighed, it would be found that there is no accident in madness; the disease, whatever form it might take, by whatsoever complex concurrence of conditions or by how many successive links of causation it might be generated, would be traceable as the inevitable consequence of certain antecedents as plainly as the explosion of gunpowder may be traced to its causes, whether the train of events of which it is the issue be long or short. The germs of insanity are sometimes latent in the foundations of the character, and the final outbreak is perhaps the explosion of a long train of antecedent preparations."—P. 197.

Again: "From what has been said, it would seem that it cannot conduce to exact knowledge to maintain the violent distinction between physical and moral causes of insanity. This will appear more plainly if we call to mind the conclusions established in the first part of the book. There it was distinctly shown that thoughts, feelings, and actions leave behind them certain residua which become organised in the nervous centres, and thenceforth modify the manner of their development, or constitute their acquired nature; consequently, the moral manifestations throughout life inevitably determine physical organisation, and a slowly operating moral cause of insanity is all the while producing physical changes in the occult recesses of the supreme nervous centres of the mental life. When insanity occurs as the consummate exaggeration of a particular vice of character, as it sometimes does, the morbid mental manifestations mark an internal definite morbid action in the supreme nervous centres—a gradually effected modification of the mental organisation."—P. 199.

We have made this last quotation because it opens to the view the line or process of reasoning on which Dr. Maudsley's book is based.

We observe that Dr. Maudsley groups together impulsive and moral insanity as varieties of what he terms "affective insanity," and there certainly is a relation between them which warrants this sort of association.

The first thing observed when insanity is approaching is commonly a general perversion of feeling, of the affective life; the "mode of affection of the individual by events is entirely changed. This is the fundamental fact, from which flow as secondary facts the insane impulse, whether erotic, homicidal, or suicidal." Several cases are related illustrative of the method in which insane impulse comes about. With respect to moral insanity, the author adopts the view of Dr. Prichard, which we ourselves, when commenting on notorious cases of real or presumed insanity, have always adopted. "When moral insanity is thought to exist by itself," says Dr. Maudsley, "and to constitute the disease, as it certainly may do, it would be quite unjustifiable to assume that a particular vicious act or crime, or a series of vicious acts, proved its existence. In the previous history of the patient there will be evidence of a sufficient cause of disease having been followed by an entire *change* of manner of feeling and acting; the vicious act or crime will be logically traceable through a chain of symptoms to disease, as cause, as the acts of a sane man are traced to, or deduced from, his desires and motives. . . . Whatever name it may ultimately be thought best to give it, there can be no doubt of the necessity of recognising in practice the existence of such a form of disease. If, indeed, the evidence drawn from its own nature and causation were insufficient, the fact that it is often the immediate forerunner of the severest mental disease might suffice to teach its true pathological interpretation. When, therefore, a person in good social position, possessed of the feelings that belong to a certain social state, and hitherto without reproach in all the relations of life, does, after a cause known by experience to be capable of producing every kind of insanity, suddenly undergo a great change of character, lose all good feelings, and from being truthful, temperate, and considerate, become a shameless liar, shamelessly vicious, and brutally wicked, then it will certainly not be an act of charity, but an act of justice, to suspect the effects of disease. At any rate it behoves us not to be misled in our judgment by the manifest existence in such a patient of a full knowledge of the nature of his acts—of a consciousness, in fact, of right and wrong—but to remember that disease may weaken or abolish the power of volition without affecting consciousness."—P. 319.

Dr. Maudsley is as great an enemy as ourselves to the system now in vogue of shutting up lunatics of all classes in palatial asylums. But for a long time to come we shall most certainly protest in vain. Too much money has been spent out of county funds, and too heavy investments have been made in private asylums, for any change in system to be adopted, much as it may be desired. Dr. Maudsley traces the asylum system of the present day to the prejudices and false notions about lunatics handed down from the last generation. "To be a lunatic, as public sentiment goes, is to be cut off socially from humanity. With such feelings prevalent with regard to the insane, can it be thought possible that the treatment at present sanctioned by general approbation should be the most just and humane possible? The feeling is one that cannot be justified, and the system which it inspires cannot be just. That system is the indiscriminate sequestration—of locking up the person in an asylum simply because he is mad."—P. 424.

As to the argument which some advance that lunatics should be placed in confinement on grounds of public safety, because it is not possible to determine exactly whether an insane person is dangerous or not, he says that, practically, this argument is of no force. "There is no more difficulty to an experienced person in deciding that a patient is not dangerous to himself or others than in deciding that he is thus dangerous, which is a thing which every Physician who has to do with cases of insanity must constantly do, and which, with a few exceptions, he feels he can do with perfect confidence." He denies that there are not many single patients in England as well cared for in private families as they would be in asylums, and says, "When arrangements have been made for a systematic and more frequent visitation of single patients, then it cannot be doubted that the number of these will rapidly increase, to their infinite comfort, to the pressingly needed relief of our overgrown and overcrowded asylums, and to the general advantage of the community.

"For the reasons adduced, I cannot but think that future progress in the improvement of the treatment of the insane lies in the direction of lessening the sequestration, and increasing the liberty of them. Many chronic insane, incurable and harmless, will be allowed to spend the remaining days of their sorrowful pilgrimage in private families, having the comforts of family life, and the priceless blessing of the utmost freedom that is compatible with their proper care. The one great impediment to this reform at present lies in the public ignorance, the unreasoning fear, and the selfish avoidance of insanity. When knowledge is gradually made to take the place of ignorance, then will a kindly feeling of sympathy for the insane unite with a just recognition of their own interests on the part of those who receive them into their houses, to secure for them proper accommodation and good treatment. Then, also, will asylums, instead of being vast receptacles for the concealment and safe keeping of lunacy, acquire more and more the character of hospitals for the insane; while those who superintend them, being able to give more time and attention to the scientific study of insanity and to the means of its treatment, will no longer be open to the reproach of forgetting their character as Physicians, and degenerating into mere house stewards, farmers, or secretaries."—P. 431.

This book of Dr. Maudsley's is a book after our own heart. We condone what we disapprove in his philosophy for the sake of the practical value of all that he has written, for it is thoroughly practical from one end to the other.

PROVINCIAL CORRESPONDENCE.

BIRMINGHAM.

May, 1867.

At last there is an opportunity offered for the resuscitation of Queen's College, which, if embraced, will place it in the position it was intended to occupy by its founder as the seat of learning of the midland counties. The contentious spirit which has so long fettered the College, and cramped its functions, has been exorcised by a decree of the Master of the Rolls. On May 7 he gave his judgment in favour of the Attorney-General's scheme—a scheme based on one prepared by the Council of the College. He stated that he entirely concurred in its provisions. As was anticipated, there was a strong opposition made to it by the trustees of the late Dr. Warneford, the great benefactor of the College, who, it is stated, intend even now, in the face of the verdict of the Master of the Rolls, to take the case to a superior Court. It is to be hoped they will ponder long before taking this final and vexatious measure, which can tend only to increase the difficulties which beset the College, and drain to the dregs its already impoverished exchequer. The trustees will act now in a graceful manner if they will yield becomingly to the decree, and assist in carrying out the scheme which is pronounced by every one to be the best that could be devised under the circumstances of the case. They will thus show that they have not, in their opposition to it, been actuated by factious and acrimonious motives; by so doing they will add to the debt of gratitude which the town owes them, and to which they are eminently entitled. Birmingham is indebted to the Rev. Chancellor Law for his theological teachings within the walls of the College, for the zeal and earnestness with which he has on many occasions officiated as warden, in which office he discharged that rare grace of self-denial, the devotion of the emoluments of the office to the purposes of the College; in short, he was one of its warmest and staunchest friends. The obligations of Birmingham to Mr. Cox are universally acknowledged, and how can they be more strikingly shown than by the proclamation of this fact—that to him this town owes the establishment of two such splendid and useful institutions as the Queen's College and the Queen's Hospital?

There has been, in our daily papers, quite a warm controversy concerning the remuneration of Doctors, more particularly of club Doctors, and Dr. Heslop intends to move, at one of the Medical Societies, a resolution embodying the consideration of the subject. I hear that the Physicians here contemplate visiting only once for £1 1s., instead of twice, as they formerly did. This is a step in the right direction, as I think, as a rule, Medical men are very badly paid. The remuneration of our *confrères* in Australia is very much higher, as you will see from an extract I send you which appeared in a local paper:—

COPY OF SCALE OF PROFESSIONAL FEES AND CHARGES AUTHORISED BY THE MEDICAL ASSOCIATION OF SOUTH AUSTRALIA, OCTOBER 19, 1866.

Classification of Patients.

First Class.—Merchants, squatters, landowners, professional gentlemen, and others of independent means.

Second Class.—Small traders, tenant farmers, artisans, and patients not included in the first and third classes.

Third Class.—Domestic servants and labourers.

Advice at Home.

First Class	7s. 6d. to £1 1s.
Second Class . . .	5s. to 10s.
Third Class	5s.

Under exceptional circumstances this fee may be reduced.

Visits, Town and Suburbs.

First Class	7s. 6d. to £1 1s.
Second Class . . .	5s. to 10s.
Third Class	5s.

Visits between 8 p.m. and 8 a.m.—Double ordinary fee, and upwards.

Mileage, for distance out of town—3s. 6d. to 10s. per mile by day, or between 6 a.m. and 6 p.m.; and double by night, or between 6 p.m. and 6 a.m.

Detention by patient from any cause, except midwifery—5s. to £1 1s. per hour.

Consultation with another Practitioner—£1 1s., with mileage extra; fee payable at time of consultation.

Midwifery, £2 2s. and upwards.

Vaccination, not less than 3s. 6d.

Bleeding and extraction of teeth, 5s. and upwards.

Cupping, 10s. 6d. and upwards.

Administration of chloroform, 10s. 6d. to £1 1s.

Reducing fractures and dislocations, £2 2s. to £5 5s. . . . . } Mileage and subsequent attendance to be charged as per scale.

Reducing minor fractures and dislocations, £1 1s. . . . . }

Surgical operations to be charged according to circumstances.

When more than one in a family are prescribed for, an extra fee may be charged in each case.

Friendly Societies not less than 10s. per annum each member.

Henry Scott, F.R.C.S. Eng., Secretary.

Mr. Bracey has been appointed Honorary Surgeon to the Children's Hospital. In my former letter I mentioned that there were four candidates contesting the appointment, but they dwindled down to two. The claims of Mr. Bracey, who had also been a candidate for the Surgeoncy of the General Hospital, and obtained by Mr. Bartleet, were so superior that he was unanimously elected.

The Managing Committee of the Children's Hospital have held a special meeting to consider what steps should be taken with a view to change the present system of electing honorary Medical officers; a resolution was passed declaring that the present system was objectionable and required modification. The meeting then adjourned to obtain some information respecting the intentions of the other Hospitals in regard to this matter. In my last letter I alluded to this institution as a rising one, and here we have another proof of the progressive spirit by which its administrators are actuated, and which it is to be hoped may, in time, animate the authorities of those Hospitals which are lethargic on the subject of Hospital reform.

Dr. Wright has been elected House-Physician to the Queen's Hospital. He had for his rival Dr. James Hinds, tutor of Queen's College, and a former distinguished student of the Queen's Hospital and Queen's College. To show you the very unsatisfactory way in which Hospital elections are managed, I will describe the particulars of this one. The testimonials of the two candidates were very properly submitted by the Committee of Governors to the Medical Board for their consideration and report. They strongly recommended Dr. James Hinds for election on the grounds that he was an eminent student of both institutions, that he was Medical Tutor of Queen's College, and a native of the town, that they personally knew him, and had implicit confidence in his Professional ability; yet, in the teeth of such strong recommendation, and in direct opposition to their wishes, the Committee of Governors appointed Dr. Wright, who is known here only by the excellency of his testimonials.

In your paper of the 11th inst., in the paragraph relating to Queen's College, occurs the following passage—"for the management of this institution, which was considerably in debt, and principally supported by *voluntary annual subscriptions*. The scheme suggested that these subscribers should form the *future governors* of the College." This is incorrect. There has never been, nor is there now, any such body of annual subscribers, nor does the new scheme suggest that these subscribers shall form the future governing body of the College; but it states that persons on the payment of £25 shall be appointed governors, and that the governors shall elect the Council. It is probable that had Mr. Cox's efforts been seconded by subscriptions and by donations from the wealthy, the College would have been a credit and an ornament instead of a lasting reproach to the town.

GENERAL CORRESPONDENCE.

DR. HOGEBOOM'S IMPROVED STETHOSCOPE.

Letter from Dr. J. C. Thorowgood.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have been using lately a binaural stethoscope with the pectoral end covered with a membrane of india-rubber, after the fashion recommended by Dr. Hogeboom. I must say, however, that I greatly prefer the instrument without the "compressing membrane," for I cannot recognise any of the advantages found by the American Physician. The "roaring" noise seemed to me increased by the pressure of the membrane—certainly the difficulty of keeping the pectoral end steady on the chest was made greater, while the very least movement

caused audible friction-sounds very disturbing to the listener. Without the membrane I believe the binaural stethoscope to be most useful, for it enables one to hear deeper into the lung than the ordinary instrument does, and so conveys an idea of the general state of the respiratory sounds throughout the mass of the lung.

May I be allowed to add, in reference to Dr. Dewar's paper on "Sulphurous Medication," that I have been employing the bisulphide of carbon internally in some chronic pulmonary affections with decided benefit? The difficulty is to disguise the abominable flavour of the bisulphide.

I am, &c.

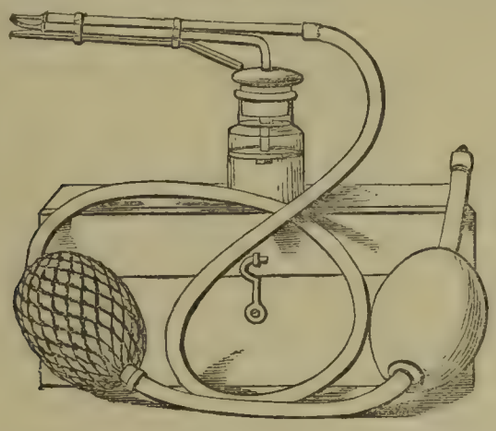
JOHN C. THOROWGOOD, M.D. Lond.,
Assistant-Physician to Victoria-park Hospital.

Queen Anne-street, May 28.

NEW INVENTIONS.

DR. DEWAR'S SULPHUROUS SPRAY FOR THE THROAT.

THIS instrument consists of an *odorateur* tube, fitted into a cork which can be put into a bottle of strong sulphurous acid. A constant current of air, impelled by a double india-rubber ball, as in Dr. Richardson's spray producer for local anæsthesia, raises a minute jet through the *odorateur* tube, and



propels it against the throat, or wherever else it may be wanted. We have tried Dr. Dewar's system on many persons of all ages during the past month, and can certify that, despite the suffocating odour of the sulphurous acid when smelled in bulk in the bottle, the spray is singularly agreeable and soothing to the throat; and we thank Dr. Dewar for having given the Profession a remedy so useful in the various asthenic and cachectic maladies of the fauces and trachea.

CHAPMAN AND CO'S. DIETETIC FARINA.

OFFICES: 107, London-wall, London, E.C.

OUR first essay with this farina was in the shape of a pudding with eggs, etc., which was condemned by several of the persons who tasted it, for its greenish colour and predominant leguminous flavour. But a next trial was more fortunate. We had an unfortunate little patient labouring under mesenteric disease, with that most distressing symptom, unappeasable hunger, and she had worn out most of the forms of nutriment offered her—including raw meat, asses' milk, *purée* of fish, etc., which one by one lost their effect, or became nauseous, or produced constipation, or diarrhœa, or both in turns. This compound farina, simply prepared with good milk, was offered as a forlorn hope, and turned out a perfect godsend. It allays the hunger, agrees with the bowels, and has for more than a fortnight proved a great comfort and stay to the patient. The leguminous flavour is not perceptible with good new milk.

EXTRACTUM ERGOTÆ LIQUIDUM.

FROM THE LABORATORY OF R. GOODWIN MUMBRAY, RICHMOND, LONDON, S.W.

AGENTS: Butler, St. Paul's Church-yard.

WE have tried this liquid extract in a case of uterine inertia after parturition, and found it answer quickly and well.

AT a congregation held at Oxford on the 7th inst., the following degree was conferred:—M.D. *comitatis causâ*, George Fred. Elliott, Trinity College, Dublin.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following Members of the College, having undergone the necessary examinations for the Fellowship on the 28th, 29th, and 30th ultimo, were reported to have acquitted themselves to the satisfaction of the Court of Examiners, and at a meeting of the Council on the 13th inst. were admitted Fellows of the College, viz.:—

Messrs. William Burns Beatson, H.M. Indian Army, diploma of membership dated November 6, 1846; William George Bacat, Blandford, Dorset, June 27, 1851; Robert Dick, H.M. Indian Army, May 2, 1854; William Newman, M.D. Univ. Lond., St. Martin's, Stamford, Lincolnshire, October 6, 1854; Joshua Plaskitt, Chapel-street, S.W., May 21, 1855; William Farquhar Davis, H.M. Indian Army, May 12, 1856; Charles Marchant Jones, L.R.C.P. Lond., Amoy, China, February 27, 1857; William Paul Swain, Devonport, May 1, 1857; Edward Harford Lloyd, M.B. Univ. Lond., Thornbury, Bristol, April 7, 1858; Edgecombe Venning, L.R.C.P. Lond., Army, August 2, 1858; Charles Henry Allfrey, M.D. Univ. Edinb., Chislehurst, Kent, November 14, 1861; Arthur Trehern Norton, Upper Berkeley-street, November 18, 1862; George Hunt Orton, Narborough Hall, Leicestershire, May 6, 1863; Edward Bellamy, Montague-place, November 17, 1863; and Frederick William Richards, L.R.C.P. Lond., Winchester, April 28, 1864.

Of the unprecedented large number of thirty-two candidates who presented themselves for the above distinction, it appears that fifteen went up for the Anatomical and Physiological Examination only, out of which number it is stated that four failed to acquit themselves to the satisfaction of the Court, and were consequently referred to their studies for the period of six months. The remaining seventeen candidates—viz., twelve seniors and five juniors—went up for the full examinations for the Fellowship, and it is stated that out of the number only two seniors failed to satisfy the Court as to their proficiency, and were, therefore, referred to their Professional studies for one year.

Fellow by Election.—The following Member of the College of Surgeons, having been elected a Fellow at a previous meeting of the Council, was admitted as such on the 13th inst., viz.:—

Mr. William Scott, of Aughnacloy, County Tyrone, diploma of membership dated May 8, 1839.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, June 6, 1867:—

John Ashton Richardson, Hull Infirmary; John Webb, Hannington, Hants; George Langsford Clay, Birmingham; Samuel John Truman, Poultry, Nottingham; Charles Sangster, 15, Lambeth-terrace; Robert Lewis Willcox, Wareham, Dorset; David Havard, Newport, Pembrokeshire.

The following gentleman also, on the same day, passed his First Examination:—

Walter Henry Drew, University College.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

ARMSTRONG, H. E., M.R.C.S.E., has been elected Resident Medical Officer to the Newcastle-on-Tyne Dispensary.

BENNETT, W. J., M.R.C.S.E., has been appointed House-Surgeon to the Dorset County Hospital.

EDIS, ARTHUR W., M.B., M.R.C.S. Eng., has been elected Physician-Accoucheur to the St. George's and St. James's Dispensary.

MARTIN, ALEXANDER, A.M., M.D., L.R.C.S.E., has been appointed Medical Officer to the Combination Poor-house of Kincardineshire, situated at Stonehaven.

STANGER, WM., M.R.C.S.E., has been appointed Assistant Medical Officer to the County and Borough Lunatic Asylum, Snenton, near Nottingham.

THOMAS, M., M.D., has been elected Medical Superintendent of the Royal Infirmary, Glasgow.

BIRTHS.

BENNETT.—On June 8, at College-house, Hammersmith, the wife of C. H. Bennett, M.D., of a son.

BUSWELL.—On June 8, at 5, Loughborough-villas, Brixton, the wife of R. Buswell, M.R.C.S., of a daughter.

JONES.—On May 2, at Cawnpore, India, the wife of J. Jones, M.D., Civil Surgeon, Cawnpore, of a daughter.

MARRIAGES.

BLUNT—ROME.—On May 30, at the British Embassy, Paris, T. Blunt, M.D., of Leicester, to Ann, eldest daughter of the late J. Rome, Esq., Groundslow, Staffordshire.

BURT—AINSLIE.—On June 7, at Elvington, Gladsmuir, County of Haddington, B. Burt, M.D., Surgeon Bengal Army (retired), to Martha, eldest daughter of R. Ainslie, Esq., of Elvington and Muirton, Rossshire.

GOGARTY—SANDERSON.—On June 6, at Cottingham, H. A Gogarty, M.B., Assistant-Surgeon 52nd Light Infantry, to Emily, only daughter of the late C. R. Sanderson, Esq., of Hull.

JEAFFRESON—SQUAREY.—On June 6, at Barnes Church, H. Jeaffreson, M D, of West-hill, Wandsworth, to Helen Mary, youngest daughter of the late C. Squarey, Esq., of Salisbury.

SANDWELL—CLARKE.—On June 8, at St. Anne's, Soho, E. Sandwell, M.R.C.S.E., of Charles-street, Soho-square, to Mary Jane, second daughter of J. F. Clarke, M.R.C.S.E., L.S.A., of Gerrard-street, Soho. No cards.

TAYLOR—SOTHERN.—On June 5, at St. Mary Abbotts Church, Kensington, J. M. Taylor, F.R.C.S., Royal Horse Artillery, to Mary Ellen Worrall, daughter of the late J. Sothern, Esq., the Priory, near Liverpool. No cards.

DEATHS.

BROMLEY, H. W., M.R.C.S.E., of Gosforth, Cumberland, at Calderbridge, on May 20, aged 39.

CUST, J. C., M.R.C.S.E., of Barnardcastle, Durham, on May 29, aged 50.

HOOD, D., M.D., Assistant-Surgeon H.M. Bengal Army, at the Bedford Hotel, Covent-garden, on June 2, aged 36.

RAMADGE, F. H., M.D., at 12, Clarges-street, Piccadilly, on June 8, in his 74th year.

VACANCIES.

BIRMINGHAM GENERAL DISPENSARY.—Junior Resident Surgeon.

KENT AND CANTERBURY HOSPITAL. — Assistant House-Surgeon and Dispenser.

ST. MARYLEBONE GENERAL DISPENSARY.—Resident Apothecary.

UNIVERSITY COLLEGE.—Professor of Medicine.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Builth Union.—Mr. Thomas Jones has resigned the Builth District; area 70,890; population 4521; salary £60 per annum.

Clifton Union.—The South District of St. Philip and St. Jacob is vacant; area 365; population 16,482; salary £50 per annum.

Wincanton Union.—Mr. Larcombe has resigned the Castle Cary District; salary £75 per annum.

APPOINTMENTS.

Boston Union.—William J. Marsh, M.R.C.S.E., L.S.A., to the Kirton District.

Cardiff Union.—Frederic W. Granger, M.R.C.S.E., L.S.A., to the Cardiff West District.

Macclesfield Union.—Samuel H. Smith, M.R.C.S.E., L.S.A., to the Alderley and Gawsworth District.

Meriden Union.—James Lafarelle, M.R.C.S.E., L.S.A., to the Maxstoke District.

Ross Union.—Thomas F. Fernandez, M.D. Glas., M.R.C.S.E., to the St. Weonards District.

Spalding Union.—Edward C. Anderson, M.R.C.S.E., L.S.A., L.M., to the Moulton District.

Stroud Union.—John D. Watson, M.C. Edin., M.B. Edin., to the Fifth District.

Tonbridge Union.—Edward Leeds, M.B. Oxon, M.R.C.S.E., L.S.A., to the Seventh District.

West Bromwich Union.—Alfred P. Evans, M.R.C.S.E., L.S.A., to the Workhouse.

M. NÉLATON has just received at the hands of his little patient the insignia of Grand Officer of the Legion of Honour.

ACADÉMIE DES SCIENCES.—The Section of Medicine and Surgery, into which M. Nélaton has just been elected, is now composed of the following members:—MM. Serres (1828), Andral (1843), Velpeau (1843), Claude Bernard (1854), Cloquet (1855), and Nélaton (1867).

COLLEGIATE ELECTION.—In an advertisement which appeared in the *London Gazette*, it is stated that the retiring members of the Council of the College of Surgeons, Messrs. Skey, Wormald, and Kiernan, will offer themselves for re-election at the annual meeting of the Fellows on the 4th proximo, but will meet with opposition from the following gentlemen—viz., Mr. Prescott Gardner Hewett, of Chesterfield-street, who has been nominated by Messrs. Bowman, Erichsen, Lee, Birkett, Canton, and Savory. The fifth candidate is Mr. Henry Spencer Smith, of Queen Anne-street, nominated by Messrs. Birkett, Wiblin, Pollock, Thompson, Moore, and J. R. Lane. The sixth candidate is Mr. John Birkett, of Green-street, Grosvenor-square, nominated by Messrs. Simon, Pollock, Forster, Moore, Spencer Smith, and Durham. The seventh and last candidate is Mr. Luther Holden, of Gower-street, who has been nominated by Messrs. Callender, Erichsen, Wiblin, Brooke, Carden, and Durham.

HOSPITALS FOR WORKHOUSES.—The Poor-law Board has issued an order uniting the several unions into one district in order to make arrangements for the establishment of general fever and small-pox Hospitals, asylums for the insane, and so forth. Four Hospitals are, we believe, contemplated, of which the Islington Fever Hospital will be one. This is one of the first indications of the working of Mr. Hardy's scheme of centralisation.

THE CHOLERA IN THE MEDITERRANEAN.—In the *Journal des Débats* of June 9, there appears a letter from Naples, dated May 30, from which we learn that the cholera is extending along the Mediterranean sea-board. Cases have occurred at Rosano, a little town of Calabria, on the Ionian Sea.

WAR OFFICE, June 7. (From Friday's *Gazette*.)—The Secretary of State for War, having authorised the termination of the temporary measures announced in the London *Gazette* of November 12, 1866, has appointed William Stuart, Esq., M.D., to be Visiting Surgeon for Chatham, under the Contagious Diseases Act, 1866.

THE foundation of the Prudhoe Convalescent Home, in memory of the late Duke of Northumberland, was laid at Whitley, near Newcastle, on Tuesday week, by Lord Warkworth. The building, which is in the Gothic style, is designed by Mr. T. Oliver, architect.

TESTIMONIAL.—A handsome Surgical pocket-case and ophthalmoscope have this week been presented to Mr. J. J. H. Bartlett, late Resident Medical Officer to the Kensington Dispensary. The former bears on a silver plate the following inscription:—"Presented to J. J. H. Bartlett, Esq., on his leaving the Kensington Dispensary, as a token of gratitude from those who have experienced his great kindness and skill."

THE PRINCESS ROYAL OF PRUSSIA AT THE HÔPITAL LA RIBOISIERE.—Last week the Hôpital la Riboisière received a visit from the Princess Royal of Prussia. The visit was completely devoid of ceremony, the Princess's attendants being Lord Cowley and Sir J. F. Olliffe. The Princess was received by the director of the Hospital, and having spoken very kindly to several of the patients, she expressed her warm approval of the general conduct of the institution.

A TESTIMONIAL to Henry Fenton, Esq., of Shrewsbury, was, on Tuesday, May 28, presented by a committee formed to carry out the wishes of the contributors. When Mr. Fenton recently resigned the charge of the Shrewsbury Dispensary, so general was the expression of opinion as to the high value of the services, and so widely spread was the esteem he had won in the discharge of his office, that it was resolved to present him with some enduring token of respect. The contributions received for the testimonial amounted to £215, of which £65 were spent in the purchase of a microscope, and in a record of the names of the contributors, and the remaining £150 were handed to Mr. Fenton, to be devoted by him to such purpose as he might himself select.

ROYAL INSTITUTION OF GREAT BRITAIN. — At the general monthly meeting held on Monday, June 3, Sir Henry Holland, Bart., M.D., D.C.L., F.R.S., President, in the chair, the Hon. John William Strutt, and Mrs. Susan Lumley, were elected members of the Royal Institution. The special thanks of the members were returned for the following addition to "the Donation Fund for the Promotion of Experimental Researches:"—Sir Henry Holland, Bart., the President (9th annual donation), £40. The presents received since the last meeting were laid on the table, and the thanks of the members returned for the same.

IRISH TRADERS AND THE CATTLE PLAGUE.—By order of Lord Naas it has been notified to the Irish cattle dealers that the Stanley market for store-stock has been closed in Liverpool because of the occurrence there of a case of cattle plague. The Irish dealers are therefore acting on the alert, and already in Dublin a petition is being extensively signed, says the *Pall Mall Gazette*, praying that all animals coming from abroad may be slaughtered at the place where they are landed. This is urged as a precautionary measure against the re-importation of the Rinderpest and foot and mouth distemper into Great Britain.

THE CONSEQUENCES OF THE DOG-TAX.—The efficient working of the dog-tax regulation has shown itself in a somewhat unpleasant fashion. The first effect of its operation seems to have been the destruction of immense numbers of dogs, whose proprietors were unwilling or unable to pay for them. Father Thames was brought into requisition for the purpose, and now affords ample nasal testimony of this fact. It is stated that during one week in last month no fewer than 292 bodies of dead dogs were seen floating off Greenwich, and of these 78 were found attached to the chains of the *Dreadnought* Hospital-ship. These are facts to which we would direct the attention of the Thames Conservancy Board. Till something is done to prevent the unnecessary pollution of our river, it will be useless to contemplate any broad scheme for rendering the winter and summer streams uniform in volume.

MEDICAL CHARITIES.—The will of Dr. Lewis Powell, F.R.C.S. Eng., of John-street, Berkeley-square, has just been proved under £70,000. Among other legacies directed to be paid free of duty, this gentleman bequeaths to the Royal Westminster Ophthalmic Hospital £100; St. George's Hospital, £100; the Westminster Hospital, £100; Queen Charlotte's Lying-in Hospital, £100; and the Brecon Infirmary, £100. Miss Mary Hotton Copp, of Park-house, St. Thomas', Exeter, has bequeathed, in addition to large sums to other charities not strictly Medical, but amounting to £11,000, the following legacies to our metropolitan and provincial Hospitals:—£300 to the Seaman's Hospital Ship *Dreadnought;* £300 to the Charing-cross Hospital; £300 to the Brompton Consumption Hospital; £300 to the Samaritan Free Hospital; £300 to the Cancer Hospital; £300 to the Blenheim-street Dispensary; £300 to the Institution for Nursing Sisters; £300 to the Devon and Exeter Hospital; £300 to the Asylum for Idiots; £200 to the Asylum for Cripples; and £100 to the Teignmouth Dispensary.

THE CATTLE PLAGUE.—We learn with much pleasure from a letter of M. Van Thal that the cattle plague is decreasing in Holland, the return of cases for the week ending May 25 being the insignificant number 39. It is to be regretted that we cannot report as favourably of our own country. Since our last number a meeting of the Court of Common Council has been held, and information has been received that the Rinderpest is making its way among us once more. Mr. Rudkin informed the chairman of the meeting that "the cattle plague has broken out in a most virulent form almost all over the metropolis, with the exception of the City of London." The authorities are adopting measures to prevent the further extension of the plague, and Orders in Council have been issued to prevent foreign cattle being driven through the streets of the metropolis to the cattle market.

LADY MEDICAL STUDENTS.—It seems that the judicious provision of the Apothecaries' Society, requiring all ladies desirous of taking their licence to practise to pursue their studies in the recognised Medical Schools, will not always act as a deterrent, at all events for those of them who may come from the other side of the Atlantic. A lady, it seems, is unblushingly attending anatomical lectures in Paris, in the midst of a crowded class-room, and is thus tenderly dealt with by one of the Paris Medical journals, *à la mode de Paris*:—"An American doctress is at the present time attending Professor Fort's course of anatomy. She is remarkably intelligent, young, and good-looking, and is getting on very rapidly. If there is anything remarkable about her amidst her male fellow-students, it is the unaffected impassibility which she maintains during the various descriptions which an anatomical course necessarily entails." We cannot but believe that many of the students really bent upon work must regard the presence of this pretty little dear as an intolerable intrusion.

CHIGNONS AND COOKERY.—According to the report of the Inspector of Nuisances for Bermondsey, an oven, situate at 65, Richardson-street, in that district, is employed during week-days in heating hair to destroy parasitic germs before it is converted into chignons, and on Sundays it is employed to cook the dinners of the poor. Who, we should like to know, is the humane and enterprising proprietor of this oven which is thus contrived "a double debt to pay?"

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

A Subscriber.—Write to the Rev. S. Haughton, M.D., Trinity College, Dublin.

The authoress of the pamphlet entitled "Women Doctors: an Appeal to the Gentlemen of England," is a good specimen of her dear, illogical, charmingly inconsistent sex. In one page she appeals to the argument from delicacy, in behalf of having women to attend women; at another she sneers at the notion of delicacy as a reason for men and women not mixing in the same theatres and dissecting-rooms. In one place she claims the privilege of practising Medicine, because honourable and lucrative occupation is so hard to find for women; in another she denounces them as unfit for teaching, and most women as unfit for any of the duties of life, because so ill educated! We feel sure that the panacea for women is a good education; and that, if they had this, they would fill all the offices of single life more creditably, and be more likely to marry. And this is the real object, after all.

The Cock-lane Ghost.—Both were desirous of notoriety; but that of Woburn-square created the greatest amount of ridicule.

Q. E. D.—The three retiring members of the Council who offer themselves for re-election are members of the Court of Examiners, and, doubtless, will remain so, following the example of Mr. Luke.

A Metropolitan Fellow.—The time for sending in applications for seats in the Council expired on Monday last. Mr. Holden had no alternative. Had he declined, a *junior* would have taken his place.

Q in the Corner.—The notes of the Commission were *not* supplied to our contemporary by the gentleman named. The other Commissioners know which of their colleagues it was who favoured the journal with this exclusive information; and so do we.

Soul and Body cared for at Bull-fights.—"Sometimes, when a horse has its belly torn open and the entrails let out, but is not otherwise seriously injured, the horse is taken out of the ring, has the extruding bowels cut off, the belly filled up with straw or hay, then sewed up, and is again brought in to face another bull. A Surgeon is always present to dress the wounds any *torero* may receive, and a priest, in case of need, to administer extreme unction."—*Glasgow Weekly Herald.*

PRESCRIBING DRUGGISTS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The subjoined advertisement is extracted from this day's *Telegraph*:—

"To Parents and Guardians.—An excellent opportunity is afforded for an Apprentice in an old-established Prescribing Druggist's business. He will also have the advantage of learning practical and mechanical dentistry. Premium required. Address A. C., care of Mr. Noad, Law Stationer, 90, Chancery-lane, W.C."

As the General Medical Council is at present in session, it may be a favourable opportunity for the members to define the Professional position of the "Prescribing Druggist." I am, &c.

June 12. M. B.

MEDICAL OFFICERS AND THE MILITARY CLUBS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—As members of the Army Medical Department, we were unaware, until we had read the letter of your correspondent "M.R.C.S.E." in your paper of the 8th inst., that any objection existed in the "Senior" or any other military Club to the admission of Medical officers of the army. All we can say is, that if the objection do exist, we cannot feel or express any surprise or indignation on the subject, so long as members of the "black-balled" Profession are capable of rushing into print on such a subject in such undignified style. It is really too bad that officers of the Army Medical Department should be compromised in their relations to their combatant brethren by such vapid scolds as "M.R.C.S.E."

What has "the House" to say to the regulations which a collection of private gentlemen, elderly or otherwise, may choose to make in the selection of their companions? If it has been the misfortune of the members of the military clubs of London to meet Medical officers with whom they do not wish to associate, they have a perfect right to avoid doing so, and the letter of "M.R.C.S.E." in your columns will do more to confirm combatant officers in their objections in general to their Medical brethren if such really exist, which we are inclined to deny) than any particular instances of friendship between the two classes (of which many exist) will eradicate or remove. Were "M.R.C.S E." a candidate for admission to any military club, and we members of the same, we might probably join Mars in blackballing Æsculapius.

June 8. We are, &c. A. B. AND C. D.

THE VACCINATION BILL.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—My letter in reply to Dr. Edward Seaton's two chief arguments for this mischievous and unrighteous piece of legislation has two typographical errors. I intended to have said "eleven years' experience in the *work*" (*i.e.*, of promoting vaccination), not "in the north." Again, which is of more importance, the active registrar in my sanitary district registers only *thirty*, not eighty, per cent. of the children born as having been successfully vaccinated. This he does, not by hunting up, as Dr. Seaton states the country registrars do, the unvaccinated babies, but by canvassing the Medical Practitioners for their certificates.

The Registrar-General has thrown the framers of this Bill a practical suggestion which will do more towards perfecting the useless register of cow-pox than all the convictions and fines imposed on public and private vaccinators. He says, let the register form the pay-sheet for the public vaccinators' fees. It has been already adopted and incorporated in the Bill. It certainly is a very practical and happy thought for completing and utilising the register. The public vaccinator will now have the ineffable satisfaction of not only contributing without fee or reward, under heavy penalties, to form a national register of vaccinations, but also of remitting to the ratepayers about one-fourth of his fees—viz., those for all the children who were not born in his district.

I am, &c. SEPTIMUS GIBBON, M.B. Cantab.

13, Finsbury-square, E. C., June 5.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I request you will be good enough to allow me space in your next number, not by any means to renew my argument for vaccination registration as the inevitable machinery of a compulsory system—which I am quite content to leave as it stands—but simply for one or two points of explanation.

In the first place, the fact which you, in your editorial comment on my letter of the 14th ult., incline to think I have disguised is, I assure you, no fact at all, but, as Thomas Carlyle would say, "is indeed curiously the reverse of fact." For so far is it from being the case, that "in those districts . . . where the registers are used for hunting up recusants, the registrar is himself the public vaccinator, and has consequently a double interest in making use of the register," that all my colleagues as well as myself have continually reported that, with a few notable exceptions, we have not found the combination of the offices of public vaccinator and registrar to work well. If you will refer to a report of Dr. Sanderson's in the Fourth Report of the Medical Officer of the Privy Council, you will find him stating that out of 93 registration districts visited by him there were 24 in which special action was taken by the registrar in furtherance of vaccination, or about a fourth of the districts inspected. Of the 93 registrars, 12 were also public vaccinators, but only two of these, or one-

sixth, were among the registrars who used their registers to promote vaccination. Again, in a subsequent inspection recorded in the fifth report, the registrars of 31 out of 79 registration districts were found to have taken special means for the promotion of vaccination. Of the 79 registrars, seven were also public vaccinators, but of these only two had availed themselves of their office as registrar to push the vaccination. And similar to this has been the experience of all of us. The reasons why this is so are not, I think, far to seek. In part they are referred to in the extract from one of Dr. Stevens' reports, which I gave in my former letter. At present, however, I am only concerned in pointing out the fact.

Further, it would be an utter mistake to suppose that the beneficial action of the registrars has been limited to rural districts, or that it is in these or in places of small population only that vaccination duties can be effectively attended to. It is quite true that it is in towns, and especially in large towns, that the difficulties and imperfections of the present system have been most felt, but the zeal and pains and punctuality in the discharge of all their duties generally manifested by the registrars, even under the discouragements of this system, show clearly what the result would be when a proper system is substituted. Glasgow has neither a rural nor a small population: it contains a large number of the migratory class; but the Act works quite well there, though its registration districts are, on the average, much more populous than the registration districts of the metropolis.

I will only add that in arguing for vaccination registration I did not commit myself to any particular form of keeping registers. I am quite aware how much it would simplify matters if, as you suggest, the registration of vaccination were effected by a memorandum in the birth register. This is the very plan which the Epidemiological Society proposed in 1853, and it is the plan which, I have reason to believe, would have been embodied in the present Bill but for certain objections to it which it was understood that the Registrar-General had entertained. As I know it has Dr. Farr's sanction, I trust the Registrar-General's objections may not be insuperable, in which case nothing can be easier than to alter clause 24 to this effect. The certifying provisions of this Bill are quite as simple as the certifying provisions in Scotland, but if anything can be suggested to make them more simple, the suggestion, I am sure, will be cordially welcomed.

I heartily concur in the necessity for a compulsory registration of births; but this is not a thing to be done in a vaccination act. It requires a separate act, and when that is obtained the vaccination of course will get the benefit of it. I am, &c.

Athenæum Club, Pall-mall, June 4. EDWARD CATOR SEATON, M.D.

COMMUNICATIONS have been received from—

Dr. VINEY; Mr. FURNEAUX JORDAN; Dr. LIGERTWOOD; Dr. MCKAY; Dr. BURD; Dr. ELLIOTT; Mr. T. J. E. BROWN; A SUBSCRIBER; Dr. SEDGWICK; Dr. MARSH; Mr. HOLMES; M.B.; M.D.; Dr. B. W. RICHARDSON; Mr. J. CHATTO.

BOOKS RECEIVED—

Cooley's Mixture Book—Women Doctors—Grimshaw's Thermometric Observations in Typhus Fever—Meadows' Prescriber's Companion, second edition—Retrospect of New Sydenham Society, Vol. XXXII.—Myrtle on the Harrogate Waters—Steele's Contributions to Practical Midwifery—MacCormac's Reports of Hospital Cases—New York Medical Journal, May—Reade on Syphilitic Diseases—Morris's Germinal Matter—Hilton's Hunterian Oration—Lee's State of the Medical Profession.

NEWSPAPERS RECEIVED—

Clerkenwell News—Gazette Hebdomadaire—Laboratory.

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 8, 1867.

BIRTHS.

Births of Boys, 965; Girls, 957; Total, 1922.
Average of 10 corresponding weeks, 1857-66, 1791·3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	559	544	1103
Average of the ten years 1857-66	574·0	545·0	1119·0
Average corrected to increased population..	..	..	1231
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,388	2	..	5	2	9	7	4	..
North ..	618,210	5	2	4	5	6	9	3	..
Central	378,058	..	1	..	1	2	4	2	..
East ..	571,158	10	5	2	1	7	9	4	..
South ..	773,175	11	9	7	2	11	9	6	..
Total ..	2,803,989	28	17	18	11	35	38	19	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·710 in.
Mean temperature	56·8
Highest point of thermometer	79·7
Lowest point of thermometer	46·0
Mean dew-point temperature	51·2
General direction of wind	S.W.
Whole amount of rain in the week	1·70

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, June 8, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending June 8.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending June 8.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	1922	1421	1103	79·7	46·0	56·8	1·70	172
Bristol (City) . .	165572	35·3	84	74	‡64	69·1	44·7	55·2	1·84	186
Birmingham (Boro')	343948	43·9	230	167	127	66·3	45·1	55·3	1·51	153
Liverpool (Borough)	492439	96·4	367	285	227	65·5	44·2	55·2	0·65	66
Manchester (City) .	362823	80·9	263	205	‡183	68·0	45·0	54·8	1·34	135
Salford (Borough) .	115013	22·2	79	58	47	65·9	43·6	54·3	1·05	106
Sheffield (Borough).	225199	9·9	160	119	99	68·0	41·7	53·8	1·76	178
Leeds (Borough) .	232428	10·8	153	118	113	68·3	38·5	54·6	1·54	156
Hull (Borough) .	106740	30·0	77	49	50	..	..	..	..	..
Newcstl-on-Tyne, do.	124960	23·4	75	66	63	63·0	40·0	53·1	1·12	113
Edinburgh (City) .	176081	39·8	124	85	122	66·7	43·0	54·5	2·20	222
Glasgow (City) .	440979	87·1	411	257	252	66·0	41·0	54·5	1·92	194
Dublin (City and some suburbs) .	319210	32·8	129	†157	156	72·1	38·5	56·9	0·45	45
Total of 13 large Towns . . .	6187764	34·8	4074	3061	2606	79·7	38·5	55·0	1·42	143
					Week ending June 1.	Week ending June 1.				
Vienna (City) . .	(1863) 560000	..	..	..	333	..	..	§ 64·4	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·710 in. The barometrical reading decreased from 29·96 in. at the beginning of the week to 29·55 in. on Monday, June 3, increased to 29·85 in. on Tuesday, June 4, decreased to 29·55 in. on Thursday, June 6, and was 29·90 in. at the end of the week.

The general direction of the wind was S.W.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 59·0°.

APPOINTMENTS FOR THE WEEK.

June 15. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

17. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 p.m. Dr. Anstie, "On the Prognosis and Treatment of certain Acute Diseases, with special reference to the indications afforded by the Graphic Study of the Arterial Pulse."

18. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ANTHROPOLOGICAL SOCIETY OF LONDON, 8 p.m. Meeting.

19. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 2 p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.

20. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

21. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8 p.m. Prof. Tyndall, "On Some Effects of Sonorous Vibration."

GENERAL MEDICAL COUNCIL.

MEETING HELD AT THE ROYAL COLLEGE OF PHYSICIANS, PALL MALL EAST.

SEVENTH DAY.—WEDNESDAY, JUNE 5.

PRESENT: Dr. Burrows, President, in the chair; Dr. Bennett, Mr. Hawkins, Mr. Cooper, Dr. Acland, Dr. Paget, Dr. Embleton, Dr. Storrar, Dr. Alexander Wood, Dr. Andrew Wood, Dr. Fleming, Mr. Syme, Dr. Thomson, Dr. A. Smith, Mr. Hargrave, Dr. Leet, Dr. Apjohn, Sir J. D. Corrigan, Bart., Dr. Sharpey, Dr. Parkes, Dr. Quain, Mr. Rumsey, Dr. Christison, Dr. Stokes, and Dr. Francis Hawkins, Registrar.

After some discussion upon the Minutes in reference to Dr. Acland's motion, they were confirmed with a slight alteration.

MEDICAL ACTS AMENDMENT BILL—REGISTRATION OF FOREIGN DEGREES.

Dr. PAGET moved:—"That the following amendment of Clause 11 of the Medical Acts Amendment Bill, proposed by the Medical Acts Amendment Committee, be adopted—'It shall be lawful for the General Council by special orders to dispense with such provisions of the Medical Acts, or with such part of any regulations made by authority of the said Acts, as to them shall seem fit, in favour of persons who shall make application to be registered under the said Acts on foreign or colonial diplomas or degrees: Provided such persons shall have resided in the United Kingdom for a period of not less than twelve months immediately previous to making application to be registered; provided the holders of those diplomas or degrees have the right to practise Medicine and Surgery in the countries where they have been granted: And Provided the Council shall receive satisfactory evidence that those degrees or diplomas, or licences to practise, have been granted after a course of study and examinations such as to secure the possession by persons obtaining them of the requisite knowledge and skill for the practice of their Profession.'" I need scarcely say that the reason for my making any such motion as this is that the Council were unanimously dissatisfied with the clause proposed by Mr. Walpole. With regard to the clause which I now introduce for the consideration of the Council, the general form of it, and the first words of it, are taken from Clause 46 of the original Medical Act of 1858. That was a clause the purpose of which was to save existing interests, and among others the interests of gentlemen who were practising in this country, at the time of the passing of that Act, on the strength of foreign or colonial diplomas without possessing any British qualification. The clause authorised the Council to dispense with the provisions of the Act in favour, among others, of those gentlemen. The Council, as is well known, exercised that right, and, I think, exercised it with great judgment and discretion, and with a very wise liberality. Now the way in which the Council discharged that duty in the early years of its existence would be a strong reason for entrusting it with similar duties on a subsequent occasion. The first part of this clause would enable the Council to draw up deliberately regulations for the admission to the Register of gentlemen who, coming to England or being in England with foreign or colonial diplomas, are not inclined to seek any Medical examination. It would enable the Council to put them upon the Medical Register if they should be thought deserving of it, without requiring them to attach themselves to any British University or College. And it would enable the Council positively to refuse to put on the Register those persons who, in their judgment, were not so entitled. Now, with regard to the first of these powers, there may be reasons for an unwillingness on the part of gentlemen with foreign diplomas to attach themselves to a British University, which we can all understand. There might be the reason that they did not feel themselves quite capable of passing a clinical examination. (Applause.) The second part of the clause is nothing more than a provision that "such persons shall have resided in the United Kingdom for a period of not less than twelve months immediately previous to making application to be registered; provided the holders of those diplomas or degrees have the right to practise Medicine and Surgery in the countries where they have been granted." That is added because of the well-known fact that in some European countries the possession of a degree, even from a distinguished University, does not necessarily confer the right of practising—for instance, the degree of Doctor of Medicine, which would confer the right to teach Medicine, would not necessarily confer the right to practise it; and, as a matter of fact, in those countries the Doctor of Medicine has to go through a further examination before he can practise even in the very town where his diploma has been granted. The third section of the clause refers to a matter of which the Council is the only body that I know of capable of judging. At all events, it is the only public body to whom the duty can reasonably be assigned, and that provision is really and truly for the safety of the public. I beg leave to propose, therefore, the adoption of this clause in place of the one which was submitted to the Council by Mr. Walpole. (Hear, hear.)

Mr. CÆSAR HAWKINS: I have great pleasure in seconding this motion. I think it is the best way of effecting what the Council have in view. Individually, indeed, I should have preferred that we should have gone on in our old plan, because there were no complaints that I am aware of from any persons the holders of foreign degrees and diplomas, great numbers of whom were in the habit of coming every year to this country, and submitting themselves to an examination, which either might be strict or might not be strict, as the examining bodies chose to test the qualification of the persons who came before them, and by which they were subjected to a certain amount of control, which they are now to be free from, according to present regulation. I think it would be much better if the Act continued. But when I looked at the succession of proposals made, and the expectations that are now created in foreign countries, and the colonies especially, I do not think we can help taking some such step as this for the recognition of degrees without examinations. We cannot lose sight, indeed, of the manner in which it was forced upon us. No doubt the Government proposal was instigated by a person who has made himself notorious both in our courts of law and justice, and who has influence enough with our Secretaries of State to bring down a proposal of this kind upon us, which we are induced to acquiesce in, because we are told we could not otherwise introduce the other clauses. I believe the majority of the Council would vote against it if it were left to their own discretion; but, under the circumstances, I shall vote for this proposition, because I think it is the best that we can have. When we look at the proposal of Sir G. Grey, we cannot forget how objectionable it was. It was that we should have the exercise of this power thrown upon Parliament—that we should give them a list of the bodies from whom we received graduates, and that they might discuss the matter. Then there was an improvement upon that, by which we were to form a list, to be submitted to the Privy Council, for the same purpose. But we cannot forget that the members of the Privy Council from time to time might have views which would interfere with the interests of the Profession. (A laugh.) The next was Mr. Walpole's proposal that the Secretary of State should be put on perfect equality with ourselves as a judge of the qualifications of persons to practise Medicine. Then, finally, we have this proposal, by which we are brought back again to a similar clause to that which we had in the original Act—viz., that we should exercise the same powers as we did with regard to degrees obtained before the Act; and, as Dr. Paget has said, I am sure the way in which the Council exercised their power on that occasion is sufficient to show that there is not likely to be any complaint whatever of the manner in which those functions will be carried out.

Sir J. D. CORRIGAN: I am sorry I must rise to oppose this resolution, or at least to move an amendment upon it. Dr. Paget has made an observation to which I would ask to draw his attention. In the concluding part of his speech he said that this resolution would enable the Council to draw up such regulations as they saw fit for the admission of the holders of foreign degrees. Now this resolution precludes the Council from doing any such thing, for it prescribes strictly and legally the conditions upon which the Council must admit them—viz., that they should reside here a twelvemonth, and should produce satisfactory proof of their fitness to practise. It does not enable us to go beyond those two conditions. Dr. Paget stated as an objection to subject foreign or colonial graduates to examination, that he need not mention other reasons, but that among them was one which it was sufficient to state—viz., that a foreign graduate felt that he might not pass such an examination. (Hear, and laughter.) Now, I think that, instead of being a reason for admitting them, is the strongest reason for excluding them without an examination. I would propose with regard to this resolution that we treat foreign and colonial degrees in totally different paragraphs. I think it is impossible to place them in the

same without getting into a web from which we cannot extricate ourselves; and, before going further, I shall therefore propose the amendment which I now offer to this resolution. The first part of the amendment relates merely to the omission of the words "or colonial" in the fifth line of the resolution. My object in omitting those two words is that we should deal altogether in separate clauses with foreign degrees and colonial degrees. The other part of the amendment is this, that after the word "registered," in the eighth line, all the words should be omitted, and that the words of this amendment be substituted—"And that the holders of such foreign diplomas have presented themselves for examination, and have obtained the licence or degree, after such examination, of some one of the licensing bodies now legally authorised to grant degrees or licences in the United Kingdom; that it shall be lawful for any of the licensing bodies of the United Kingdom to examine the holder of a foreign licence or degree on the production of such licence or degree, and, in the event of the several licensing bodies refusing to examine such holder of a foreign diploma, that it shall then be lawful, if the Council see fit, to register the holder of such foreign diploma without such examination." My reason for putting in the last clause is to meet a practical difficulty which may be suggested in the House of Commons or by people outside the Council—viz., that the whole of the licensing bodies might enter into a conspiracy to refuse the holder of a foreign diploma an examination. Now, I know such a thing is practically impossible; but lest the objection should be raised out of doors, I put that in, so that supposing such an almost impossible contingency should arise, then the Council would be able to look into the evidence of that man's competency, and remedy the injustice. Now, my reason for wishing to treat the foreign and colonial degrees in different paragraphs is that I do not think we can get on clearly if we confound them together, and I must say that I have a very strong objection to mixing up, even in a paragraph, such Universities as Melbourne, Calcutta, and others from which we had communications the day before yesterday—and of the good order and the high standing of those Universities not a man at this table entertains a doubt—in the same paragraph with a lot of Universities and Colleges both in Europe and America, and especially in the latter, of which it is impossible for us to know anything. If it were necessary to examine into the competency and character of the examination required in our colonial Universities, we never should have any difficulty in arriving at the truth; but I do not see how it is possible for you to arrive at the truth as to the honesty of these examinations of the thousand-and-one Universities of America and the numerous ones in Germany and other foreign countries over which we have no control and with whose officers of state we have no direct communication. I say it would be perfectly impossible to arrive at anything like a satisfactory conclusion without sending some person over to be present at the examinations, and then having him met with the probable objection that it was contrary to the laws of the country for him to be present. Therefore, whether as regards the position of our colonial Universities, their well-known character and high standing, or the manner in which they conduct their examinations, I think it is due to them to separate them altogether in this question from the category of foreign diplomas. I will now draw your attention to this amendment, dealing simply and solely with foreign diplomas. At the very outset I meet a difficulty, which I adduce at present simply to show how cautious we ought to be in this matter. I find on reading this paragraph that the condition is that he is entitled to be put on our Register provided he has a right to practise Medicine and Surgery in the country where his diploma has been granted. Now, I would ask your attention to those two lines. Under that very paragraph, at the very outset—and I mention it purely as an illustration to show with what caution I mean we should proceed—an *officier de santé*, coming over here from France, would be entitled to have his name put on our Register as a Practitioner in Surgery in quite a different grade from that which he would enjoy in his own country. We do not know the laws of foreign countries sufficiently to accept them in that way. An *officier de santé* in France is in his sphere no doubt a very valuable person; but he holds quite an inferior position in the Profession. He is authorised under his diploma to practise Medicine and Surgery in France, and so far he would comply with our condition. But what does the French Government say?—"We allow you to practise, but only in a particular district; you must not go out of that district; you are not entitled on that inferior diploma to leave Auvergne and to come to Paris." But, sir, we go beyond that, and we say, provided that man is entitled to practise his own country, provided that man has his diploma, he put on our Register, and can go where he likes. We gi him a liberty, a privilege, and a rank which he never possess in his own country. (Applause.) Now, this matter, in n mind, in itself constitutes a very strong illustration to sho how careful we should be in the course we are going to pursu But, sir, I have another objection to that sentence—"Provide the holders of those diplomas or degrees have the right practise Medicine and Surgery in the countries where the have been granted." The rulers of those countries who pr tect the lives of their subjects in a way that we do not, wi regard to bad practice and incompetency, permit these men practise Medicine and Surgery, but they draw a line of di tinction, and say, "You must practise upon those who choo to submit themselves voluntarily to your care, but you sha not hold any public appointment unless you pass a certa examining body." So that upon this clause we should al absolutely permit to hold public appointments in this Unite Kingdom men who would not be allowed to do so in their ow country. The next point I come to is this, that by doing th we absolutely hold out a bonus to young men in this countr in Ireland, and in Scotland, to go to Germany in preference our own licensing bodies to obtain their qualifications. ("Oh and interruption.) Hear me out, and you will see that there reason in what I say. In our licensing bodies we have control and a command over them; the young men, in additi to that, know very well that we do not, according to our prese laws, accept any diplomas from our own bodies unless th submit to the visitation of their examinations. In addition the proofs which those bodies produce by their regulation etc., we demand a preliminary education, and further add that this proviso—that we subject our own bodies to a visitati of their examinations. We have thus this addition guarantee in the opinion of the majority of this Council th our own body shall have a sufficient examination. But this clause you put all these wretched universities and colleg throughout Germany (for I exclude France in this matte where they are almost as plentiful as mushrooms—(a laugh) and you put all those numberless universities and colleg throughout America, where there is no end to them at all, a nobody knows their number—we put them above our ov colleges, and we say it is only necessary for you to p forward on your certificates that you are very good examine and we will receive your diplomas; while, on the other han we have so low an opinion of the character of our ov licensing bodies, that we deem a visitation of their examin tions necessary. (Applause.) I think admitting forei degrees without examinations is absolutely to stamp an insu upon our own bodies. I have said that this clause, if passe is a direct bonus and inducement to young men to quit o licensing bodies and to go to the Continent for diploma There is no danger of them going to our colonial universitie because a journey to Melbourne and back is rather a serio and expensive thing—(a laugh)—but we know that man can go to Erlangen or some other of those equal respectable universities in Edinburgh—(loud laughter) I mean in Germany—at an expense not exceeding £ I have said this; there is a bonus and inducement to o students to go to these colleges, and it consists in two thin —the one is, that they know they are going to be examin before licensing bodies who are very fond of money—and Germany we know they all are—so much so, that without a examination whatever, and merely on a certificate, they w grant a degree. But beyond that, the student goes to licensing body altogether removed from our power, and who examinations we never can visit; and that at an expense less than he would incur in nearly all of our own bodies (applause)—so that I say, in permitting the holder of forei diplomas to be put on our Register without examination are absolutely insulting our own bodies, and holding out bonus to the student to go to Germany for his examinatio (Applause.) The amendment which I propose involves hardship upon the holder of the foreign diploma; it is doi precisely what they do in France at the present moment, a I think it is an exceedingly fair regulation. Some years a it was the custom and the law in France for the holder of foreign diploma going to France to apply to the Minist of Public Instruction, and he then, if he pleased, issu his permission to that man to practise without a further inquiry as to his qualification. An experience of so years in France has shown this to be productive of some gre abuses. I have only returned from France within the last fe

days, and I devoted a considerable portion of my time there to understanding the working of their Medical laws; and the rule at the present time is that, on the holder of a foreign diploma presenting himself and asking liberty to practise, he is referred to the Faculty of Medicine in Paris, in Montpelier, or in Strasbourg. He is told, "Present your foreign diploma, and simply on the production of that we examine you. And if you pass our examination we then permit you to practise in France." They do not require any proof of education; they simply say "You have obtained a diploma somewhere, but really, after all the abuses that have occurred, the Minister of State and the Faculty of Medicine have decided, for the protection of the public, that the holder of a foreign diploma must present himself, and, if he pass an examination, then he is permitted to practise." I do not think anything can be fairer than that; it is going as far as liberality ought to go, having regard to the safety of the public—and upon that opinion I press this amendment. I say, let us do, then, just what France does, and when a man comes to us with a foreign diploma in his hand, we can say justly to him, "We have no means of satisfying ourselves under what terms you have got this foreign diploma—whether it be a young man who has pursued his studies here, or a foreigner—all we ask is this, go before any one of our licensing bodies; we ask no proof of your having gone through any course of education to comply with our regulations, but we ask you simply to go in for examination." I think there is great reason in what Dr. Paget says, that a man might have a great disinclination to pass our examination; but, as I said before, that would be in my mind the strongest reason for supporting the view I take. ("Hear, hear," from Dr. Paget.") It may be said the expense might stop him. What is the expense? He can get a Medical licence now at prices varying in the United Kingdom from 10s. 6d. up to five or twenty guineas. Surely the payment of 10s. 6d. would not be a hardship; surely the payment of five guineas is no great hardship? That is the price of a degree in Medicine in the Queen's Universities in Ireland. I do not know what the expense is in the other colleges and universities, but I believe in no case does it exceed at present twenty guineas.

Mr. Hargrave seconded the amendment.

Dr. Alexander Wood: I rise only to say that the object of the motion proposed by Dr. Paget and the object of this discussion was to hold out some privilege to holders of colonial degrees, so as to satisfy the requirements of the Government and of the House of Commons, and I have to ask, supposing Sir Dominic Corrigan's amendment be carried, what possible good we confer upon them that they do not already possess? Is there at this moment any law in our statute book, is there any regulation in any licensing body, which prevents a man from presenting himself for examination when he holds a foreign diploma? Listening to that long speech of Sir Dominic Corrigan, one would have imagined that no man who had lived abroad and studied abroad and came across the Channel was permitted to appear and be examined by licensing boards. What does Sir Dominic Corrigan tell these gentlemen? "We have nothing to do with the education you have received or the degree you have received. Come and present yourselves for examination to any Medical board, and if they grant you a licence we will put you on the Register." Well, we have an expression in Scotland, "Thank you for nothing," and I think that would be the very answer that these gentlemen holding foreign and colonial diplomas would make to Sir Dominic Corrigan's offer. I think the motion of Dr. Paget is singularly well contrived to meet the difficulties of this question. Now, if Dr. Paget's motion be carried, it will just place the Council in the same position in which it stood during the first three years of carrying out the Medical Act. I cannot sit down without—and I am sure many others will agree with me—entering my protest against the very sweeping condemnation which Sir D. Corrigan passed on all foreign Universities. Why, he spoke of them as if there were none that we could trust.

The President: No, he said his observations did not apply to France. (Hear, hear.)

Dr. Alexander Wood: He spoke of the German Universities. ("Hear" from Sir D. Corrigan.) Now, that there have been some Universities in Germany and elsewhere that have prostituted their right of licensing there can be no doubt; but when we look at home and consider that it is from foreign Universities that our own have derived most of that which adorns them—(applause)—that they are formed on the same model as the foreign Universities, and that we owe many of our best regulations to them, I think we should be very careful how we speak of them in a disrespectful manner. (Applause.) With these observations I support the motion of Dr. Paget.

Mr. Syme said that there could be no doubt from the communications they had received from the late Home Secretary, and also from his predecessor, there was a considerable desire on the part of the Government that the Council should accede to the admission of foreign and colonial Practitioners; and if that desire were not complied with, the door would be broken open by means of such a clause as that proposed by Mr. Walpole. The question was—Should the Council remain satisfied with their present position, or should they do something more to satisfy the Government? He thought the latter was the proper and wise course to pursue; and the plan proposed by Dr. Paget was, as far as he could judge, the very best that could be suggested. It was not too open or too rigid, and it would do all that was necessary. Therefore, he had great pleasure in supporting it. He would not go into what was said as to the danger of admitting unqualified persons, because he did not believe any such danger existed; and with regard to what had been said as to certain Practitioners in France being limited to a prescribed territory, the Physicians and Surgeons of Glasgow were, within his own recollection, limited to certain districts. Again, to notice another argument of Sir Dominic Corrigan, it did not at all follow because a Practitioner was not suited for the public service, therefore he was fit for no other practice. Knowing the difficulty of the question, he was very glad such an unobjectionable proposal as that of Dr. Paget's had been arrived at, and as far as he was concerned it should receive his support.

Dr. Risdon Bennett thought it desirable that a distinction should be made between foreign and colonial diplomas—(applause)—and he wished that the proposition of Dr. Paget's had made that distinction; for he thought the Council might have said something of this sort to the Government:—That we were quite ready to put all colonial diplomas and degrees in precisely the same condition as our own—that is to say, if they shall show us what their system of education is, and shall admit their examinations to be visited by assessors or visitors appointed by ourselves; that we will then put them on the Register when they come to reside in this country without any further question or examination, but simply by virtue of their diplomas received from their licensing bodies approved of by us. (Applause.) But with regard to foreign diplomas, the Government say—"We must have the door open for the admission of these men to the Register;" and it becomes us, therefore, to confine ourselves simply to how this opening can be arranged so as to exclude incompetent men, admitting only those who are efficient for the exercise of their duties. I, therefore, think we shall do well to take into consideration this proposition of Dr. Paget's, rather than to admit Sir D. Corrigan's amendment; and that it would be desirable to modify the motion in the way I have mentioned, so as to separate one set of degrees from the other. There was one subject connected with this matter which is certainly of some interest, and that is the question of reciprocity. (Applause.) No doubt many of our British Practitioners abroad have to submit to various hardships in consequence of their not being allowed to practise as readily as might be desired. They are, in point of fact, illegal Practitioners, unless they go through a certain form and pass certain examinations; and I hold in my hand a letter from a gentleman practising abroad, who complains very much that, while we are exercising liberality towards foreign countries, we do not seek similar advantages towards our fellow-countrymen practising abroad. (Applause.) I think it would be well to let the Government see that really we are the most liberal Medical body in Europe, as matters now stand, and that we are doing for foreign applicants a great deal more than their respective Governments do for us.

Mr. Hargrave: Mr. President, in seconding Sir D. Corrigan's amendment, I must ask one question—whether it is the fact that on Practitioners going to Canada they are obliged to submit to an examination before they can practise there?

Dr. Andrew Wood: That has been done away with.

Mr. Hargrave: Then I will ask Sir D. Corrigan to divide his amendment into two portions. As regards the admission of foreign Practitioners into this country, I certainly think that there is no reciprocity on the part of the Continental Governments; and I do not think there is any great hardship in insisting on an examination before we allow them to practise, considering that they subject us to the same test when we go abroad.

Dr. Fleming: It has been stated by several gentlemen who addressed the Council that one great reason for adopting Dr.

Paget's proposal is, that it will lead to what the Government and Parliament are anxious to obtain. Now I think this is too small a view to take of so large and important questions. We ought not, on the ground of expediency, to adopt a measure that we do not think thoroughly well calculated for the welfare of the public and the Profession. ("Hear, hear," and applause.) I am decidedly of opinion that the proposal made by Sir D. Corrigan is a great improvement upon what was suggested by Dr. Paget. I have just been in France, and, like Sir D. Corrigan, I have made inquiries on the subject; and, in confirmation of what he has said, I may mention that a friend of mine, who practised in Paris for fifteen years, and is now practising with great success there, was within the last six months required to submit to an examination of the Faculty of Medicine in Paris, and he told me he was subjected to a severe test on that occasion. Since the passing of the Medical Act, a number of years have passed, and much has been done to raise the standard of the Profession; and I do not think that we ought to go back to the loose way of dealing with so important a matter as was allowed then. Sir D. Corrigan alluded to the German Universities. I have a far greater dread of the American, and if we are to admit all diplomas and degrees which come upon us, without the means of ascertaining how they are acquired, or what was the state of education in the city where they were granted, the whole burden of obtaining that information is to be thrown upon this Council, and we know already the difficulties we have in obtaining it, even in our own country. With respect to what fell from Professor Syme with regard to the Faculties of Glasgow previous to the passing of the Medical Act of 1858, I am not aware that its jurisdiction was more limited than any other board in the kingdom. We had a monopoly of certain districts, including Edinburgh and the suburbs; but, sir, even your body was limited to within a certain distance of London.

A Member: No.

The President: You are to a certain extent right. There is no doubt the Royal College of Physicians of London had, prior to 1858, the power to exclude all persons practising within a radius of seven miles unless they came before this board.

Dr. Aquilla Smith: It was the same in Ireland.

Dr. Fleming: One of the most important points of the Medical Act was doing away with those enactments, and giving reciprocity over the whole kingdom. I quite agree with Sir D. Corrigan in his separation of foreign and colonial diplomas, and I do hope the subject will receive the full consideration of this Council. At the same time the latter part of his proposition was, I think, raising a man of straw to knock him down, because it is scarcely possible the licensing bodies of this kingdom would conspire together to refuse to examine a person. Excluding that portion, I have great pleasure in supporting his amendment.

The President: Before we proceed, I think the Council should be quite aware of the condition in which we stand with the Government upon the question of the admission of foreign and colonial graduates to the Register. You will recollect that upon the Medical Amendment Bill you expressed a desire that the 40th clause of the original Act should be amended—namely, the clause which imposes a penalty upon those who assume titles—and in my interview with Sir George Grey I found the Government would not consent to a modification of the 40th clause such as was desired by this Council and by the Profession out of doors, unless some means were adopted for the admission of foreign and colonial degrees on our Register. I am not arguing one way or the other, but I wish to put you in possession of the facts of the case. I cannot tell what may be the opinion of her Majesty's present Government; because really in the interviews I had with Mr. Walpole I never could get him to give me a definite idea, with the exception of this letter which has been read to the Council. But the opinion of the Government before was that they could not accede to your wish unless some provision could be made in the Act for the admission of foreign and colonial graduates in Medicine.

Dr. Christison: I wish to draw the attention of Sir D. Corrigan, and also of Dr. Fleming, particularly to the fact that in this motion there is nothing to prevent this Council from directing an examination if they think fit. It appears to me that it would be a very hard proceeding indeed to require that all foreign graduates from such universities, for instance, as Paris, Berlin, and Vienna, should undergo an examination. (Applause.) At the same time, from what we know of certain universities abroad, it would be quite right that we should retain the power of directing these gentlemen to be examined. Now it appears to me that this motion precisely retains that power, because it says: "It should be lawful for the General Council, by special orders, to dispense with such provisions of the Medical Acts, or with such part of any regulations made by authority of the said Acts." Therefore it is perfectly competent for this Council, in any case in which there is a doubt as to the competency of the examination to which the applicant has been subjected, to require that he undergo an examination in this country. (Hear, hear.) There is only one other observation that has fallen from any member to which I should like to allude for a single instant, and that is where our own liberality was contrasted with the illiberality of foreign countries. (Applause, and "Hear, hear.") I am very sorry that this contrast should exist, and I have no doubt it is quite right to put ourselves in communication with the Government, and try to obtain the same concessions from other countries—at least, from France—that we offered to them. But I do not think we ought to allow the illiberality of a foreign government to influence us in the least degree. (Applause.) We are exactly in the same position as the Government with regard to free trade, and I hold that we should adopt the liberal principle in all our dealings.

Dr. Andrew Wood: In reference to the very important observations made by Dr. Christison, I will, if you will allow me, look back to what happened in regard to the admission of foreign graduates in vol. i. p. 40 of our minutes. You will find that in one of the reports there are a great many gentlemen put down there who had foreign degrees conferred with insufficient examination, and whom this Council refused to register. There are about twenty-six of those gentlemen whose cases were inquired into, and the Committee came to the conclusion that the examination and the education which they had received from those Universities were not sufficient to entitle them to be registered, and accordingly they were not registered. Now we must recollect several things in relation to this question. First, what you have called our attention to, that we are pledged to the Government to agree to the registration, upon some condition or other, of foreign and colonial graduates; and I feel quite satisfied that if you are to go up to the Government now, after having been in communication with them, and after having suggested the clause of last year, and say, "We have changed our minds, and now consider it necessary to hold examinations in this country," the Government will say, "Really, we do not feel at all inclined to recognise your attempts at legislation." There is another thing you must recollect. We are entering upon a new state of matters. Supposing the Medical Bill passes—supposing our new clause in lieu of Clause 40 is substituted—it prevents any holder of a foreign degree from practising in this country, and I do not wonder that the Government should have looked with great jealousy upon that clause, which would apply too firm a barrier altogether. You will find the clause at vol. iv. p. 130. "If any person practising Medicine or Surgery, or engaged in the cure or treatment of diseases or injuries, not being registered under the Medical Acts, takes or uses any of the designations enumerated in Schedule A to the Medical Act, 1858, as amended by this Act, or by any other of the Medical Acts, or the designation of Physician, Surgeon, Doctor, or Apothecary, or any other designation used by or used to distinguish duly qualified Practitioners of Medicine or Surgery, or any class thereof, or the designation of Professor of Medicine or of Professor of Surgery, he shall for every such offence be liable, on summary conviction, to a penalty not exceeding £20." Now you see that will at once disfranchise every foreign or colonial Practitioner. There would be no open door of any kind for any one of them to find an entrance into our ranks, except what Sir J. D. Corrigan proposes in this clause, but which is quite unnecessary, because it already exists—namely, that they should go to a board and be examined. I do sincerely trust that we shall not be less liberal now than we were last year, and I should be very sorry, as Dr. Christison says, because they are illiberal abroad, we should be so here. And if we ourselves establish a permission for the registration of foreign degrees in this country, we should have a very good claim upon the Government to obtain a reciprocity treaty with regard to the degrees such as they have already obtained with regard to mercantile affairs. (Applause.) Sir J. D. Corrigan has said something about *officiers de santé*, and has asked "Would you allow them to come over and be registered under our Act, and be qualified to practise throughout the whole of

England, when they are only qualified for a small part of France?" I answer that would depend very much upon what they came and showed they possessed in the way of knowledge. If I found that the education and examination to which they had been subjected when they obtained their licences were not such as to satisfy the requirements of this Council, then I would say to them, "We cannot register you; we are not going to put you on a better footing than you have at home." The clause also protects us against what Sir J. D. Corrigan suggested (and it came under the consideration of the Committee), that you would put a premium upon young men going abroad and obtaining foreign degrees and diplomas with a view of getting with greater ease upon our Register. No doubt that would be a very improper thing; but then in our clause we provide against it, because we should look upon every case upon its own merits. Every man will be obliged to give us the necessary information, or, if he will not, he cannot care much about being registered; so that we should not have any trouble in the matter. I do therefore trust we shall accept this clause as proposed by Dr. Paget. I do not see the use of making an unnecessary division of the clause; I think it is amply liberal both to the colonial and the foreign Universities. I think Mr. Hardy will be satisfied that the clause of Mr. Walpole is totally and utterly inadmissible, and that if that clause is pressed upon us our answer would be at once "Upon these conditions we decline to have anything more to do with the Medical Bill." I therefore do trust that Sir J. D. Corrigan, on reconsideration, will perhaps see that it is our duty and, I think, our interest to act with liberality on the present occasion.

Dr. Paget: The objections stated against the motion which I have brought before the Council have been so completely answered by the subsequent speakers that I need not detain you two minutes in my reply. I would say only, in regard to the distinction between colonial and foreign degrees, it seems to me perhaps the resolution provides for the very distinction that may be proper or desirable to deal with, because it will be for the Council to consider separately the cases of all the different Universities; and if they are satisfied that the course of study and examinations in the colonial Universities is more trustworthy, better, and more complete than those of foreign Universities, of course they would give the preference to the one, and would not treat the colonial Universities in the same way as the others. Looking back to the printed Proceedings of this Council, I think the first volume or two are full of excellent instances and precedents that may guide this Council in considering this matter. I observe in page 159 there is an elaborate report respecting the case of five gentlemen who applied to have their names put on the Register in virtue of certain degrees obtained in America; and there is this remark made: "It seems that charters are granted with very great facility by the legislature of some of the States of America, and it therefore becomes a very great question for the Council to decide how far they are prepared to recognise the bodies so chartered in the sense intended by the Medical Act." These gentlemen who made the application actually pushed the question into a court of law, and if I remember aright the Council took a legal opinion on the point, which supported them in their refusal.

Dr. Alexander Wood: That refers to the University of Ohio.

Dr. Paget: Of course we all know that that power of granting those charters is exercised not only by the governments of the United States, but by each individual State, and these bodies are established with the utmost facility, each having the power of granting degrees. I remember reading from an American journal that it became a by-word, so easily were Doctors made, that when a man was fit for nothing else he became a Doctor. But I need not repeat the clause gives the Council perfect liberty to refuse any application if it should see fit.

Sir Dominic Corrigan explained that his proposal would do m re than leave foreign graduates in the same position which they at present held, for the Queen's Universities of Ireland could not examine on the production of a foreign diploma—the holder of such a diploma must pass at least one session at the College. The same remark applied to Trinity College and the College of Surgeons. This was enough to show that all the licensing bodies had not that power under the law which he proposed to give them by his amendment.

Mr. Hargrave said the College of Surgeons in Ireland had the power of examining members on foreign diplomas, and if they were satisfactory such members were examined.

The amendment was then put, and negatived by a large majority.

The motion, having been put, was carried.

Sir J. D. Corrigan requested that the names should be taken down. They were as follows:—Majority (17): Dr. Bennett, Mr. Hawkins, Mr. Cooper, Dr. Acland, Dr. Paget, Dr. Embleton, Dr. Alexander Wood, Dr. Andrew Wood, Mr. Syme, Dr. Thomson, Dr. Leet, Dr. Apjohn, Dr. Sharpey, Dr. Parkes, Mr. Rumsey, Dr. Christison, Dr. Stokes. Minority (4): Dr. Fleming, Dr. A. Smith, Mr. Hargrave, Sir J. D. Corrigan.

The Deputation to Mr. Gathorne Hardy.

Dr. Andrew Wood moved, and Dr. Parkes seconded, a motion for the appointment of a deputation of the Council to wait on Mr. Gathorne Hardy on the next day at half-past eleven o'clock.

Sir J. D. Corrigan said he could not consent to the motion in its present form. It did not state for what purpose the deputation were to wait on the Secretary of State. Surely it was only common sense to say what the Council authorised the deputation to do. In its present form the motion would authorise them to request him to bring in the Bill in its present form, pledging the Council to give it their support. (Laughter.)

Dr. Andrew Wood said he had altered the resolution in a way which he thought would suit all parties—"That a deputation of the Council be appointed to wait on the Right Hon. Gathorne Hardy, the Home Secretary, to-morrow, according to his appointment, at half-past twelve, in reference to the Medical Acts Amendment Bill."

Sir J. D. Corrigan proposed the following amendment:—"That the deputation shall suggest to the Home Secretary the expediency of introducing an amended Medical Bill this session, with the view of its being fully considered between the end of this session and the beginning of next, and the introduction of such amendment as may be suggested."

The amendment was put, and negatived by a majority of 15 to 3. The original motion was therefore carried unanimously.

After some discussion, in which several members of the Council proposed that the President alone should form the deputation, the following gentlemen were appointed to that office:—The President, Dr. Paget, Dr. Andrew Wood, Dr. Christison, Dr. Apjohn, and Mr. Cæsar Hawkins.

Dr. Acland's Motion.—The Remaining Clauses.

Dr. Acland said that, after the vote of the previous day, he thought the better plan would be, if the Council should consent to permit it, that he should postpone the remainder of the clauses which he had proposed. He did not ask the Council to allow him to withdraw the remainder, but to postpone it, and one reason for that was that the more he thought on the subject the more convinced he was that the remaining two clauses, whatever opinion may be held concerning those that are passed by, sooner or later will require the attention of the Council. But to proceed with the next clause concerning the licences or qualifications in hygiene and State Medicine would be very undesirable, considering what has happened to the preceding clause.

Case of Richard Organ.

The Registrar read the report of the Committee on the case of Mr. Richard Organ:—

The Committee on Mr. Richard Organ's application have to report as follows:—

The Committee having examined the documents accompanying the application of Mr. Richard Organ, and having taken into consideration the circumstances of Mr. Organ's original offence, his subsequent course of defence, and the careful decision of the Council on a similar petition arrived at last year after full deliberation, recommend that the Council decline to entertain Mr. Organ's application unless at the request of a licensing body which desires to admit him to examination.

(Signed) Allen Thomson, Chairman.

Dr. Thomson: I hope from the terms in which this report is framed it will not be necessary to detain you at any length now in moving that the recommendation of the Committee on Mr. Richard Organ's application be accepted by the Council. The Committee having examined the documents, and having endeavoured to ascertain as nearly as possible the sentiments of the different members of this Council, have framed the recommendation in accordance with what they conceive to be the general wish of the Council, and it is in the hope that there will be no objections made to this recommendation that I abstain from giving any further explanation upon it.

Dr. Aquilla Smith seconded the adoption of the report.

Mr. Syme: I am very sorry that I must object to this report.

I hope the concluding clause will be omitted, because it appears to me to be throwing upon the licensing bodies a duty which belongs to us. I think that is a shabby sort of way of getting out of it. It is practically declining his request, at the same time throwing the odium upon other bodies. I shall move that these concluding words be left out.

Dr. Alexander Wood: I beg to second that. It will be all the words after "application."

Mr. Cæsar Hawkins said he conceived it was assuming a power which the Council did not possess. The Council had no such power over the examining bodies.

Dr. Storrar: I entirely agree with the observations of Mr. Cæsar Hawkins, but I have another objection to make to the alteration proposed. Bear in mind, if you please, that this is a report of the Committee, and we cannot alter a word of the report of a committee. Therefore, what I propose to do is, to go back to the motion which I made on Monday last, and which led to the appointment of this committee—namely, that the Council, having considered the report of the committee on the application of Mr. Richard Organ, see no occasion to alter their decision of May 19, 1866.

After some discussion, Professor Syme's amendment was agreed to *nem. con.*

The Returns from the Army Medical Department.

Sir J. D. Corrigan then moved, and Dr. Stokes seconded, this resolution:—"That the following communications and returns from the Director-General of the Army Medical Department be entered on the Minutes."

Dr. Alexander Wood: If this is the only opportunity of making a few observations upon these returns, I wish to avail myself of it. When a motion to a similar effect was made last year, I opposed it on the ground that to enter all these returns upon our Minutes in the shape in which they appeared last year is unfair to several licensing boards. There are gentlemen who go up to the Army Boards, and who hold licences of several distinct bodies; and agreeably to that several of the examining boards, when a person presents himself for examination, having already a diploma, only examine him upon certain subjects. The representative of the College of Physicians in London has told you that that is the practice in the distinguished body which he represents. It is also the practice, as I have had occasion to say, in the College of Physicians of Edinburgh; and I believe it is the practice in several other bodies. Now, it appeared by the returns of last year that a large number of students were rejected of those who had presented themselves to the College of Physicians of Edinburgh; and this went forth to the world, and was the subject of a great deal of ill-natured comment in various ways, when all the while I was satisfied that they were rejected on subjects of which the College of Physicians took no cognisance, and I was satisfied of that for two reasons:—1st, having been present myself at a great many of the examinations of our College, and knowing the strictness with which our examinations are conducted, I could not suppose that any one passing those examinations was incompetent, as the returns of the Army and Navy Medical Board would lead you to believe; and 2ndly, because I saw in another table printed on your Minutes last year, that the proportion of rejections to those passed by the Edinburgh College was so large in comparison with other bodies as to show that great care was exercised in passing only those who were competent to practise their profession. I have no objection to these returns being printed this year, because they are so full and complete, and point out so clearly the subjects on which the candidates are rejected, that they will do justice; and I can only say that in looking at these I am glad to see what I hazarded as a conjecture last year comes out as a fact, and that, with one exception, those of the licentiates of Edinburgh who were rejected at the Army and Navy Board were rejected on subjects for which the College of Physicians are not responsible. I have always held that it is not a good principle to say that a Board is deficient in examining powers or strictness simply because a candidate may have gone through it to another Board and failed. There are various circumstances which may occur, and in corroboration of that I have a letter received from Dr. Haldane, of the College of Physicians, Edinburgh, to this effect. It mentions the case of a gentleman who was rejected as a very bad student indeed by the College of Physicians' examiners, and who afterwards sent him a letter stating that he had gone to the Army and Navy Medical Board, and had passed their examination, and now trusted that the College of Physicians would give him his licence. This shows that, after all, the mere fact of a man passing at one board and not at another is no proof of the strictness of examinations—and I mention it for that purpose, and also to show how much obliged the Council should feel for the very full and complete reports which are furnished this year, and which I trust will be printed on the Minutes.

Sir J. D. Corrigan: I perfectly agree with every word that Dr. Wood has said—namely, that the accounts in their present form do not give us at all an accurate view of what occurs. For instance, we find a candidate, passed by the Royal College of Physicians, has failed in anatomy and Surgery. I suppose the rule of these colleges is similar to ours, and that if a man comes up with a certain qualification, they do not examine him upon that; and no doubt you get persons deficient on the subjects for which you do not examine them.

Dr. Andrew Wood: Exactly.

Sir J. D. Corrigan: There was also another instance which might be mentioned with regard to the College of Surgeons. Now, there are two ways of meeting it:—First, if Dr. Wood would kindly turn his attention to it, to draw up a table in such a form as might be suggested to the Director-General. I am sure he would give it his best attention. That is one course to be adopted. The other course that might be adopted would be that where a candidate presents himself with two qualifications, as he must (Dr. Parkes has told us this), it would be marked "Qualifications—*e.g.*, of the College of Physicians of Edinburgh and the College of Surgeons of London;" and then we should have the two bodies that sent that man, and we should know at once on the side of which body the fault lay or the oversight took place. Now, I think if I were to propose that alteration, it would be a very good and useful thing indeed to prevent these occurrences again. But if Dr. Wood and Dr. Parkes would turn their attention to it, and suggest some modes of returns so as to get us out of our difficulties, I think we should feel indebted to them.

Dr. Alexander Wood: I think the Navy Returns have pretty well got over the difficulty.

Dr. Parkes expressed his confident belief that the Director-General would willingly meet the wishes of the Council.

The President put the motion, which was unanimously adopted.

Dr. Andrew Wood moved, and Mr. Hargrave seconded, this resolution—"That the best thanks of the Council be given to the Director-General of the Army Medical Department for the returns which he has been good enough to transmit to the Council." Carried unanimously.

Ballot for the Executive Committee.

The Council then proceeded to ballot for the Executive Committee.

Dr. Alexander Wood declined to vote upon the appointment of the Executive Committee, on account of the objection which he had to its constitution, and which he stated last year.

The result of the vote was as follows:—Mr. Hawkins, Dr. Acland, Dr. Paget, Dr. Andrew Wood, Dr. A. Smith, and Dr. Sharpey.

The President, being called away on important business, with the consent of the Council withdrew. Dr. Paget took the chair.

The Chairman: I have a motion before me, moved by Dr. Embleton, and seconded by Mr. Hargrave—"That the Secretary of State for India in Council be respectfully requested to furnish to the Medical Council annually lists of the examinations held at Chelsea of Medical candidates for the Indian service, in like manner as that furnished by the Director-General of the Army." The next business on our programme will be with reference to the returns of the Navy Board.

Sir J. D. Corrigan proposed, in like manner as with regard to the Army Department, that they should be inserted on the Minutes.

Dr. Embleton seconded the motion, which was carried unanimously.

The Naval Medical Returns.

Dr. Fleming proposed—"That the best thanks of the Council be returned to the Director-General of the Medical Department of the Navy, for his valuable communication relative to the examination of candidates for Medical commissions in the navy."

Mr. Cooper seconded it.

Dr. Embleton, in moving "That the letter read from Dr. Bryson, Director-General of the Navy Medical Board, on the

subject of an erroneous entry (part of No. 16) in the 'Table showing the Qualifications, according to Schedule A, of the different Candidates who were examined for Medical Commissions in the Royal Navy in 1864, with the results of the Examinations,' be received and entered on the Minutes,' said: Perhaps I need not, after having stated the matter on hand before the Council the other day, repeat what I said then. I wish merely to explain that there is an erroneous entry on the return of the Navy Medical Board of 1864 as regards the University of Durham. It is at vol. iii., page 160, item No. 16. The words are "Bachelor Licentiate of the University of Durham, Member of the Royal College of Surgeons England," and that candidate is stated to have been rejected for the third time—"Anatomy and Surgery bad." As I said the other day, I corresponded with Dr. Bryson, and satisfied him that this was an erroneous entry. I then referred you to a letter which had been sent here from the office, but which could not be found at the time of the meeting. It was, however, found immediately afterwards, and, perhaps, with your leave, I may read it. [The letter, dated Admiralty, July 10, 1866, was to the effect that the Director-General of the Navy Medical Board had ascertained that the candidate in question held no such degree as that attributed to him, and that the title had been attached to his number in consequence of his having signed a document to the following effect:—"I have the degree of M.B. from the University of Durham with a residence." This letter is sent to Dr. Hawkins, Secretary to the General Council of Medical Education.] At the last meeting when this subject was mentioned I wrote again to Dr. Bryson (because Dr. Storrar objected to entering on the Minutes a letter which had been sent to me on the ground that it was a private letter), informing the Director-General that his letter had either not reached the Council or had been mislaid. I will now request the Registrar to read the letter which has been received.

The Registrar read the letter, as follows:—

Admiralty, W.C., June 3, 1867.

Sir,—In reference to my letter of July 25, 1866, I have to acquaint you, for the information of the General Council of Medical Education and Registration, that the evidence submitted to me by Dr. Embleton, the Member of Council for the University of Durham, has quite satisfied me that the gentleman, numbered 16, referred to in that letter, was not a Bachelor of Medicine of the University of Durham.

I am, Sir, your obedient servant,

(Signed) A. Bryson, Director-General.

Dr. F. Hawkins, Registrar, the General Council of Medical Education and Registration, 32, Soho square.

Dr. Embleton: I beg to move that the letter now read from Dr. Bryson be received and entered on the Minutes.

In course of conversation as to whether the University should take any further action on the matter,

Dr. Christison said: There is a precedent on the part of the University of Edinburgh which may be followed. The case occurred in London, where a person had produced a forged diploma of the University of Edinburgh. It was discovered in consequence of his giving evidence in a court of law in an insurance case; and as soon as it was ascertained he was found guilty, and for this act of forgery he was sentenced to one day's imprisonment. (Loud laughter.)

Dr. Embleton: They said they had not so much cause to complain of the person who misrepresented the matter as of those who seemed to be so easily deceived by such a misrepresentation.

The motion was carried unanimously.

The Pharmacopœia Committee.

The Chairman: The Council will now revert to Dr. Christison's motion with reference to the Pharmacopœia, "That, in accordance with the recommendation of the Pharmacopœia Committee, a committee be appointed to watch the progress of pharmacy."

Dr. Christison moved that the Committee should consist of the old Committee, the President, Dr. Quain, Dr. Sharpey, Dr. Apjohn, and himself.

Dr. Storrar seconded the motion. He thought the Committee that had produced the Pharmacopœia had given the best earnest of its fitness to watch over the interests of pharmacy. (Applause.)

The motion, together with the appointment of the Committee, was unanimously adopted.

Report on Preliminary Examinations.

Dr. Alexander Wood then read the report from the Committee upon the preliminary examinations. The report first recapitulates the recommendations of the Council in 1866, and then continues:—

Your Committee are of opinion that it would be unwise to disturb, this year, recommendations carefully considered by the Council last session, which have not yet had a sufficient trial, and some of which have not yet come into operation, especially as the visitors of examinations give in most cases a satisfactory report of the manner in which the examinations in general education are conducted. The Committee are, however, of opinion that the time has come when the Council, without going beyond the minimum adopted in 1866, should indicate more precisely how the knowledge possessed by students of the subjects contained in that minimum may be best tested. Further, your Committee are of opinion that the Council should consider how far it might be possible for them, by friendly communication with the national educational bodies, to whom they have repeatedly recommended that general education should be entrusted, to secure some means of visiting their examinations, and of making suggestions in regard to the mode of conducting them of a similar nature to those which have proved beneficial in regard to professional examinations.

It is very evident, as indeed the reports of the visitors of examinations demonstrate, that the subjects contained in the minimum laid down by the Council may be variously understood, and the examinations may be variously conducted by the examining bodies.

For example: 1. "English Language, including Grammar and Composition," as recommended in 1866, may be a sufficient test in the hands of one examiner, and insufficient in the hands of another; in fact, the test may be so applied as utterly to fail in preventing the entrance of illiterate persons into the Profession.

Your Committee would recommend that in re-issuing this recommendation notes to the following effect should be appended:—

The General Medical Council will not consider any examination in English sufficient that does not fully test the ability of the candidate—

1st. To write a few sentences in correct English on a given theme, attention being paid to spelling and punctuation as well as to composition. 2nd. To write a portion of an English author to dictation. 3rd. To explain the grammatical construction of one or two sentences. 4th. To point out the grammatical errors in a sentence ungrammatically composed, and to explain their nature. 5. To give the derivation and definition of a few English words in common use.

2. "Arithmetic and Algebra" seem not to need any comment.

3. "Geometry—*First two books of Euclid.*"—It is obvious that an examination conducted under this brief instruction is not necessarily efficient, unless the question be so put as to exclude the deception which may arise from the candidate answering without real knowledge, merely through the help of a powerful memory and careful "cramming." Precautions, therefore, should be taken against this risk, and to secure that he possesses a real knowledge of the subject.

4. "Latin."—It is perhaps in Latin, next to English, that the Committee think it necessary that the Council should recommend what would, in their opinion, constitute a satisfactory examination. Your Committee would suggest—

1st. That the candidate, with the aid of a dictionary if desired, should be required to translate three or four sentences from an easy author, not having been informed beforehand from what author the sentences will be selected. 2nd. That he should be required to translate easy sentences from English into Latin, either with the aid of a dictionary or on being furnished with the Latin words, altered in order, number, case, mood, and tense. 3rd. That he should be required to parse a Latin sentence, so as to show his acquaintance with the Latin grammar.

Your Committee would consider it more satisfactory if the preliminary examination were made in every case to include an oral as well as a written examination. They are well aware that there are great difficulties in the way of such an arrangement, but still they would recommend the Council to encourage it as far as it may be practicable.

Your Committee are of opinion that the minimum of general education laid down in 1866 will eventually require alteration, but as the report of the Royal Commission in Scotland on the school education of that country very recently published, and the report of the Royal English Commission, now in course of preparation, will throw much light on the school education of both countries, the Council will hereafter be enabled thereby to judge more accurately both of the amount and of the kind of knowledge that can be fairly demanded of well-educated youths of 16 or 17 years of age.

The last subject on which your Committee would touch is the question by what boards the examinations should be conducted. They still adhere to the opinion early expressed in this Council, and never deviated from in former reports on the subject—"That, as far as may be practicable, testimonials of proficiency, granted by the national educational bodies, be accepted as sufficient evidence of a student's acquirements in general education, and that the examination on general education be eventually left entirely to the examining boards of national educational bodies recognised by the Medical Council."

Your Committee fear that a too liberal interpretation of this resolution has led to the admission of several bodies on the list whose examinations do not come up even to the minimum which the Council has resolved in the meantime to accept. To remedy this defect, your Committee would suggest that the Council should recommend—

1st. That after 1868, all examinations be removed from the list of those recognised which do not in all respects come up to the minimum which the Council laid down in 1866.

2nd. That the various licensing boards be recommended to discourage the practice of receiving the certificates of these bodies on some branches, and then supplementing their examinations by others in the omitted branches.

3rd. That examinations in arts, specially designed for Medical students, should not in any case imply education inferior to that of students intended for other professions.

4th. That all examinations in arts should be conducted by examiners specially qualified in arts.

5th. That it be remitted to the Branch Councils to consider how the means of examining Medical students in general education can be most easily provided at the several seats of Medical education under their jurisdiction, and to report on this subject to the Council in 1868.

6th. That it be remitted to the Branch Councils to visit as far as possible the different preliminary examinations held by educational as well as licensing bodies, and to report their opinion of these examinations to the next meeting of the General Medical Council.

Since the foregoing report was prepared, the Council have instructed the Committee to consider and report on two communications addressed to the Council.

1. An application from McGill University, Montreal, to have their certificates of preliminary examinations recognised by the Council.

2. A recommendation in a memorial from the County and City of Cork Medical Protective Association to the following effect:—"That the course for a degree in arts in the different Universities should, in the opinion of your memorialists, be preliminary to that for a degree in Medicine, and that a course of education, embodying both classical studies and the various branches of physical science, should be indispensable before entrance on Medical and Surgical education of whatever character."

In regard to the first, the Committee have to report that the requirements of the examinations of McGill College are founded on the recommendations of the Medical Council; that it has a good reputation; and that if the examinations are efficiently conducted, there should be no difficulty about its recognition, provided the present system is to be continued. The whole question, however, of the recognition of colonial degrees, licences, and examinations is one of great delicacy, and ought to be considered and reported on by a separate Committee.

In regard to the recommendation in the memorial of the Cork Medical Protective Association, referred to your Committee for their consideration, your Committee are of opinion that the Council, having already decided that the examination on general education shall be undergone before the student commences his Medical studies, and having endeavoured gradually to improve the preliminary education, are going, as fast as it is safe to do, in the direction indicated by the memorialists.

ALEXANDER WOOD, *Chairman.*

Dr. ALEXANDER WOOD moved, "That this report be received and entered on the Minutes," and that its consideration be deferred until to-morrow (June 6).

The motion was seconded by Mr. HARGRAVE, and unanimously agreed to.

Adjourned.

EIGHTH DAY.—THURSDAY, JUNE 6.

PRESENT: As before.

THE DEPUTATION TO MR. HARDY.

THE PRESIDENT: Before proceeding to the regular business I beg to inform the Council that the deputation appointed yesterday waited upon the Home Secretary at half-past twelve o'clock this morning. Mr. Hardy was kind enough to listen to a statement from your President, which was supplemented by the other members of the deputation, and he seemed to give every attention to the important subject brought under his consideration. Mr. Hardy did not feel in a position to give a promise to the Council that he could, at the present stage of the Parliamentary session, undertake what was desired of him, but he promised to give his best consideration to the subject, and to take an early opportunity of conferring with Mr. Walpole. More than that we cannot yet expect. Mr. Hardy seemed to a certain extent conversant with the subject, having a recollection of what took place in 1858 on the passing of the Medical Act, and he appeared to enter into all that was brought before him with great attention and consideration.

Dr. CHRISTISON desired to mention that the statement made to Mr. Hardy by the President was most complete in all its parts, and could not have failed to make an impression upon him. The subject was now at an end so far as the meeting of the Council was concerned, but the proceedings must be continued after the sittings terminated. He therefore proposed, "That it be delegated to the Executive Committee to resume its conferences with the Government regarding the Bill for amendment of the Medical Acts as now adjusted by the Medical Council, and to take such steps as they may find advisable towards carrying the Bill through the Legislature in the same manner as the Medical Act itself, and as all amendments on that Act." By the phrase "in the same manner as the Medical Act itself, and as all amendments on that Act," he meant that the present Act should be taken up by some member of the Government.

Dr. BENNETT seconded the motion, which was unanimously agreed to.

THE REPORT ON PRELIMINARY EXAMINATIONS.

The report(a) was presented by the Committee appointed last year "to take into consideration and report how the Council can best deal with the whole subject of preliminary examinations."

Dr. ALEXANDER WOOD said it would be unnecessary to state the grounds on which the Committee based their recommendations, as that had been done most fully in the report itself. He would therefore confine himself to moving the adoption of the various recommendations, reserving to himself the right of replying to any objections that might be made. With regard to the first recommendation—that referring to the English language—the Committee thought it absolutely necessary to indicate more fully what the Council expected under that head. He therefore proposed the adoption of the suggestion of the Committee, that "in reissuing this recommendation, notes to the following effect should be appended:—The General Medical Council will not consider any examination in English sufficient that does not fully test the ability of the candidate— 1st. To write a few sentences in correct English on a given theme, attention being paid to spelling and punctuation as well as to composition. 2nd. To write a portion of an English author to dictation. 3rd. To explain the grammatical construction of one or two sentences. 4th. To point out the grammatical errors in a sentence ungrammatically composed, and explain their nature. 5th. To give the derivation and definition of a few English words in common use." The Army and Navy Returns afforded an additional argument in favour of the recommendation, for it was melancholy to find that many of the students who had received the *testamur* of one or more Medical bodies were utterly deficient in English literature.

(a) See yesterday's proceedings.

Dr. EMBLETON seconded the motion.

Mr. RUMSEY said he had listened to the recommendation of the Committee with a feeling of melancholy and shame that such a paragraph should go forth to the public, leading them to infer that it was necessary to instruct the examiners in preliminary education that persons entering as Medical students should be able to write a few sentences in correct English, and give the derivation and definition of a few English words in common use. There was scarcely a national school in the country in which that could not be done, and in nearly all commercial schools it would be done well. He thought if such an intimation to the examiners was necessary, it would be better to convey it privately, and not embody it in a document.

Dr. ANDREW WOOD considered the recommendation highly necessary, as the papers of candidates in the preliminary examinations often showed a lamentable deficiency in the knowledge of the English language. The same ignorance was also sometimes exhibited in the papers produced at the Professional examinations. One cause of this deficiency was that boys and girls were seldom practised in written exercises. A year or two ago he became a director of an Edinburgh academy, and was the means of introducing written examinations, the results of which had proved highly satisfactory. He believed, if the Council issued its recommendation, no examiner would henceforth pass a person whose spelling and grammar were so bad as to disgrace one of the learned professions.

Dr. STORRAR said the prospectus of the Civil Service examinations contained a similar requirement. The best schools in the country were now turning their attention to the subject. He had recently visited a large public school in London, where he was informed that no session was allowed to pass without an analysis being required of a play of Shakspeare's, or some work of corresponding merit.

Dr. CHRISTISON said that the examiners in law and theology in Scotland found the same defects in the papers of those about to enter upon their Professional studies.

Dr. ACLAND agreed with Dr. Andrew Wood and Dr. Storrar in thinking that the evil was a serious one, and required a prompt remedy.

Dr. BENNETT believed that it frequently happened in Cambridge that young men obtained scholarships who were incompetent to pass such an examination as that which the Committee required, their attention having been wholly devoted to the higher class of subjects.

Dr. PAGET said if he had been asked six months ago he should have said that any examinee who did not spell correctly, would undoubtedly have been rejected, but from recent inquiry he found that different opinions prevailed on the subject.

Mr. SYME doubted whether spelling was to be regarded as a safe criterion. There was a specialty in some persons' minds that enabled them to acquire a knowledge of spelling with great facility, while others acquired it with great difficulty.

Mr. HAWKINS doubted the practical utility of the resolution, as the Council had no power over any of the licensing bodies, and could only issue recommendations.

Dr. ALEXANDER WOOD said that the recommendation was not intended for good examining bodies like Oxford and Cambridge, but for inefficient ones. If the licensing bodies refused to adopt the recommendations of the Council, the remedy was a very simple one—viz., to erase them from the list prepared by the Council.

The motion was then put and carried by a majority of 12 against 5.

Dr. ALEXANDER WOOD moved the adoption of the recommendation of the Committee with reference to geometry. He said it had been thought desirable to present this suggestion

in a very vague form, as it was exceedingly difficult to lay down specific laws with regard to this subject.

Dr. Embleton seconded the motion.

Sir J. D. Corrigan did not understand what was meant by questions being "so put as to exclude the deception which may arise from the candidate answering without real knowledge." The adoption of such a recommendation would be like shooting a sparrow with a twenty-four pounder.

Mr. Rumsey thought that if geometry was mentioned they ought not to confine themselves to the first two books of Euclid, the Book of Proportions being of the utmost consequence to those who were entering on the study of the exact sciences.

After some further discussion,

Dr. Alexander Wood, with the permission of the Council, withdrew the motion, and then moved the adoption of the Committee's recommendation with regard to Latin.

Dr. Paget objected to the words "with the aid of a dictionary if required." At Oxford and Cambridge no examinee was ever allowed the use of a dictionary. He suggested the substitution of the words "with or without the aid of a dictionary."

Dr. Alexander Wood accepted the alteration suggested by Dr. Paget.

Dr. Bennett thought it was preposterous to suppose that the examiners of the licensing bodies should require to be told in what manner a candidate was to show his knowledge of Latin.

Mr. Hargrave thought the Committee had entered into details far too minute, and that if the recommendation was adopted very few persons would go up for examination. He suggested that the report should be recommitted for further consideration.

Dr. Parkes said that the University of London always advertised the books in which the candidates would be examined.

Dr. Andrew Wood considered that an examination was deficient in which all the books in which a candidate was to be examined were specially named. He thought every candidate should be required to translate some easy sentences with regard to which he had not been previously informed.

Dr. Storrar hoped Dr. Alexander Wood would withdraw the recommendation. Last year the Council recommended "Latin, including translation and grammar," to which he proposed to add "and composition." If the examination in grammar and composition was honestly carried out, it would go a long way to correct the vices of cramming.

Dr. Alexander Wood consented to withdraw his motion in favour of that proposed by Dr. Storrar.

Dr. Fleming thought the recommendations of last year ought not to be too soon disturbed. He suggested the withdrawal of the whole of the report except these two recommendations: "That it be remitted to the Branch Councils to consider how the means of examining Medical students in general education could be most easily provided in the several seats of Medical education under their jurisdiction," and also that it be remitted to the Branch Councils to visit as far as possible the preliminary examinations of the educational and licensing bodies, and to report on these subjects to the General Council.

Mr. Hawkins thought time should be allowed, to see how the previous recommendations were carried out, before any alterations were made.

The recommendation of the Committee was then withdrawn, and the following motion substituted:—"That in reissuing the recommendations of the Council of 1866, to No. 4—namely, 'Latin, including translation and grammar'—the word 'composition' be added."

The motion, on being put to the Council, was negatived, four voting for it, and thirteen against it.

The President: It appears to me to be an extraordinary course to adopt certain regulations and issue them to the examining bodies, telling them that they are not to come into operation until 1868, and then, in the year 1867, to remodel them, and unsettle the minds of the licensing bodies at so early a period.

Dr. Alexander Wood said the whole report was based upon the principle of not disturbing the regulations of last year. The Committee had merely attempted to define the reqirements of the Council more clearly than was previously done. He did not think the report of the Committee had received fair treatment at the hands of the Council, and he was quite willing to move that the Council decline to consider any more of the report.

Mr. Hawkins moved, "That the Council postpone the further consideration of the report as far as it relates to education, and proceed to the latter part of the report, relative to the McGill University and the Cork Medical Protective Association."

Dr. Andrew Wood hoped that the report would not be so unceremoniously tossed overboard, as it contained some recommendations very well deserving the attention of the Council.

Dr. Apjohn seconded the motion of Mr. Hawkins, which was put to the vote, nine members voting for it and nine against, leaving the result to the casting vote of the President.

The President considered it was not respectful to the Committee to treat its recommendations in the way proposed; he should therefore vote against the motion.

The motion was accordingly negatived.

Dr. Andrew Wood moved the adoption of the Committee's recommendation, "That after 1868 all examinations be removed from the list of recognised which do not in all respects come up to the minimum which the Council laid down in 1866."

Dr. Parkes seconded the motion, which was carried by a majority of 11 against 5.

Dr. Fleming moved the adoption of recommendation No. 5.

Sir J. D. Corrigan objected to the recommendation.

Dr. Parkes considered the proposed instruction too indefinite to be adopted.

Dr. Paget suggested that the words "in the three divisions of the kingdom respectively" be substituted for "in the several seats of Medical education under their jurisdiction."

After a brief discussion, the motion was withdrawn.

No motion was made for the adoption of the recommendation No. 6, with reference to visitations. The Council then took into consideration the application from the McGill University, Montreal.

Dr. Alexander Wood said he did not see how the certificates of the McGill College could be recognised unless something more was known about the examiners.

Dr. Christison said that if the McGill College was the same now as it was some years ago, he could bear testimony to its efficiency. The University of Edinburgh received the certificates of the College after very careful investigation.

Dr. Alexander Wood said that the Committee desired that the Council should consider the whole question of the recognition of colonial degrees and licences, which was a question perpetually cropping up, and would come into prominent notice in discussing the new Medical Amendment Act.

Dr. Parkes proposed, "That the communication from McGill College be referred to a committee, and that it be an instruction to that committee to consider on what principle the recognition of colonial examinations should be made."

Dr. Andrew Wood seconded the motion.

Dr. Storrar thought that the subject might be advantageously referred to the Executive Committee.

Dr. Andrew Wood said that many young men of great ability came from the College to pursue their studies in England, and it would be a great hardship to them if, after having passed a satisfactory examination in Montreal, Madras, Calcutta, or Melbourne, they were required to go through another preliminary examination in this country. He thought it would be advisable for the Council to appoint some gentlemen in the colonies to visit and report upon the examinations.

Mr. Syme moved, "That the application from the McGill College to have their certificates of preliminary examination recognised by the Council be acceded to."

Dr. Storrar seconded the motion.

Dr. Parkes withdrew his motion in favour of that proposed by Mr. Syme.

Mr. Syme's motion was then carried.

On the motion of Dr. Parkes, seconded by Mr. Hargrave, it was resolved, "That an answer be sent to the Cork Medical Protective Association, to the effect that the Council having already decided that the examination in general education shall be undergone before the student commences his Medical studies, and having endeavoured gradually to improve the preliminary education, are going as fast as it is safe to do in the direction indicated by the Cork Medical Protective Association."

Financial Statement.

The following report was presented from the Finance Committee.

Report of the Finance Committee.

The Finance Committee beg leave to present, in the table subjoined, a statement of the estimated and actual income and expenditure of the year 1866; also an estimate of the income from ordinary sources, and of the expenditure, as far as the Committee are able to judge, for the year 1867.

The expenditure of 1866 has exceeded that of 1865 by £513 1s. 5d. This excess is in considerable part due to an increase in the expense for printing the Minutes of the Council. The increase of charge over that of the previous year, for attendance at the Executive Committee, is £50 16s.

From the figures in the table, it will appear that the actual income of the past year exceeds the estimate by £53 6s. 9d.; but as, on the other hand, the actual expenditure is greater than what was estimated, there is a balance of £455 16s. 11d. against the Council.

As observed in the report of last year respecting such estimates, it is scarcely possible to judge of the prospective expenditure with any near approach to accuracy, inasmuch as the amount is greatly dependent on the duration of the sessions of Council, which cannot with certainty be determined beforehand.

A statement of the receipts and disbursements on account of the British Pharmacopœia, since the date of the account presented last year, and of the balance in the bank to the credit of the General Council, is given up to January, 1867.

The Committee also present an account of the expense of preparing and publishing the new edition of the Pharmacopœia, so far as known or estimated, with an estimate of the proceeds of the sale of the entire impression of 20,000 copies.

	Estimated Income for the Year 1866.		Actual Income for the Year 1866.		Estimated Income for the Year 1867.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Fees received by—						
Branch Council for England	2300 0 0		2267 0 0		2300 0 0	
,, ,, Scotland	600 0 0		611 15 0		600 0 0	
,, ,, Ireland	700 0 0		774 10 0		730 0 0	
		3600 0 0		3653 5 0		3630 0 0
Dividends received by—						
Branch Council for England	620 0 0		633 15 4		630 0 0	
,, ,, Scotland	80 0 0		82 2 3		80 0 0	
,, ,, Ireland	70 0 0		68 9 2		60 0 0	
		770 0 0		784 6 9		770 0 0
Sale of Registers		300 0 0		285 15 0		300 0 0
		£4670 0 0		£4723 6 9		£4700 0 0

	Estimated Expenditure for the Year 1866.		Actual Expenditure for the Year 1866.		Estimated Expenditure for the Year 1867.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Expenses of—						
General Council		3200 0 0		3775 2 9		3200 0 0
Branch Council for England	700 0 0		801 17 5		800 0 0	
,, ,, Scotland	280 0 0		332 4 6		340 0 0	
,, ,, Ireland	340 0 0		269 19 0		300 0 0	
		1320 0 0		1404 0 11		1440 0 0
		4520 0 0	Total expenditure	5179 3 8		4640 0 0
Balance in favour of Medical Council		150 0 0	Total income	4723 6 9	Balance in favour of Medical Council	60 0 0
		£4670 0 0	Excess of expenditure over income	£455 16 11		£4700 0 0

Account of the British Pharmacopœia (1864) *for the Year ending January 5*, 1867.

1867.—January 5. To Receipts :—	£ s. d.
Balance as per last Statement (Jan. 5, 1866)	1598 17 1
Sale of 494 copies of the British Pharmacopœia, 32mo edition	102 12 0
Interest	59 2 2
	£1760 11 3

1867.—January 5. By Disbursements :—	£ s. d.
For reporting on progress of Pharmacy—Dr. Moore	20 0 0
Advertisements	6 6 0
Carriage of parcels, booking, and messenger	1 2 0
Law charges (1865)	9 6 8
Keeping type standing (three years)	60 0 0
	96 14 8
Balance	1663 16 7
	£1760 11 3

British Pharmacopœia Statement—Total Cost of Preparing and Publishing the New Edition of the British Pharmacopœia (1867).

CHARGE.

	£ s. d.
To printing, binding, etc., etc., 20,000 copies	1764 0 0
Remuneration to two editors	550 0 0
Pharmaceutical investigations	100 0 0
Travelling expenses to Dr. Apjohn	25 4 0
Honorarium to Pharmacopœia Committee	500 0 0
Advertising, etc., etc. (estimate)	86 0 0
	3025 4 0
Amount due to Medical Council on publication of the first edition	600 0 0
Balance	374 16 0
	£4000 0 0

DISCHARGE.

	£ s. d.
By 20,000 copies at 6s. each	6000 0 0
Deduct allowance of one-third to booksellers	2 00 0 0
	£4000 0 0

Dr. ANDREW WOOD said that the financial state of the Council was such as to call upon every member to endeavour to shorten the period of the session. He hoped that, as the Executive Committee had the power to prepare reports during the recess, a great deal of time would be saved, so that the sittings of the General Council might not in future extend over more than a few days.

The PRESIDENT said he thought it right, before he put to the Council the adoption of the report of the Finance Committee, to call attention to an item in the "British Pharmacopœia" statement—"Honorarium to the Pharmacopœia Committee, £500." He did not think the members of that Committee, of which he formed a part, would like the Council to separate without expressing their gratification that their services had been acknowledged in such a way. Under ordinary circumstances the members of the Committee would unquestionably have been unwilling to receive any honorarium for their services, but considering the amount of labour bestowed, and the sacrifice of time entailed upon the members of the Committee, and considering also that from the labour of that Committee the Council was to derive a considerable amount of income, the members had not felt the same delicacy as they otherwise would have felt in accepting this honorarium. He thought he was justified in saying on the part of the Committee that they were very grateful for the acknowledgment of their services by word of mouth, and also for the more substantial acknowledgment in the honorarium awarded to them.

The report of the Finance Committee was then adopted, and the Council adjourned.

NINTH DAY.—FRIDAY, JUNE 7.

PRESENT: As before.

THE PRESIDENT: Before proceeding with the general business of the day, I think it is only fair to read a letter which has been received by the representative of the College of Physicians of Edinburgh, in reference to the case of Forman. It is as follows:—"My dear Wood, I write a line to say Forman has returned his diploma, so that now the College is free from him. Yours very truly." (Applause.) It is a satisfactory thing to know that.

REPORT OF COMMITTEE ON THE VISITATION OF EXAMINATIONS.

On the motion of Mr. HARGRAVE, seconded by Mr. COOPER, the report of the Committee appointed to prepare a scheme for the visitation of examinations was read by the Registrar as follows:—

Your Committee report that, by the Medical Act, two methods of visitation of examinations are permitted—one by the members of Council, the other by persons deputed by the Council; and they presume that a combination of the two would not be contrary either to the spirit or the letter of the Medical Act.

A Committee appointed by the Council on this subject reported in favour of the second of these methods (see Minutes, vol. i. p. 126); but their suggestions were, on July 1, 1861, rejected by large majorities in the General Council.

On April 6, 1865, the following motion was agreed to by the Council (Minutes, vol. iii. p. 165):—"That each of the Branch Councils, or such of their members as may be deputed by such Councils, shall from time to time visit the examinations, preliminary as well as professional, con-

ducted by the qualifying bodies in their respective divisions of the United Kingdom, and report the results of their observations to the General Council." Under this resolution the Branch Councils gave in reports in 1866.

In 1866 the same plan was continued, with this addition, that the visitors were required to include in their reports a statement of the facts observed, and of their opinion of the efficiency of the examinations, as also such remarks and suggestions on defects in them as circumstances may indicate. (Minutes, vol. iv. p. 279.)

Under this resolution, reports have been given in, in 1867, which have been repeatedly admitted by various members of the Council to be of great interest and value; and they will in all probability be rendered more conducive to the improvement of the examinations by the labours of the Committee appointed by the Council this session, and which is still sitting.

Your Committee regret to find that, while the examinations of every licensing body in England have been visited and reported on, the reports from Scotland and Ireland are defective; that of Scotland not including any report on the University of St. Andrews, the Royal College of Physicians of Edinburgh, and the Royal College of Surgeons of Edinburgh, although the joint examination held by these bodies is reported on; while from Ireland no report has been given on the examinations of the Apothecaries' Company.

After a very full consideration of the subject, your Committee have determined to report that it appears to them desirable to continue the present system for one year longer at least.

They are, however, of opinion that each Branch Council should consider how far it is necessary to visit annually the examinations of each licensing body, and whether the labour and expense of conducting these visitations might not be abridged by limiting the visitations of each year to the examinations of certain bodies only.

In regard to the visitation of the Arts Examinations, the Committee have fully considered the propriety of having it conducted by special examiners as well as by mixed boards; they are of opinion, however, on the whole, that such a change is not desirable.

In conclusion, the Committee beg to recommend that the visitors of examinations should in future receive payment for their services; when at a distance, at the same rate as for attending the General Council; when at the place of their residence, at the rate allowed for attending a meeting of the Branch Council, in addition to travelling expenses.

ALEXANDER WOOD, *Chairman.*

EXPENSES AND FEES OF VISITORS OF EXAMINATIONS.

Sir J. D. CORRIGAN inquired what was meant by "travelling expenses." He could understand it in regard to visitors living at a distance, but some of the visitors would be on the spot. He would suggest that the last four lines relating to travelling expenses should be erased.

Dr. STORRAR said that the learned baronet forgot that Dr. Paget and Dr. Acland, Mr. Rumsey and Dr. Embleton, would have to travel great distances if they were appointed to visit examinations in London, and of course they ought to have their travelling expenses.

Mr. SYME inquired whether every member of a Branch Council might go as often as he liked, and receive a fee for it. If so, he thought the visitations would be very thoroughly carried out. (Laughter.)

Sir J. D. CORRIGAN said he could not agree to the adoption of the report, if it were only for the paragraph—"They are, however, of opinion, that each Branch Council should consider how far it is necessary to visit annually the examinations of each licensing body, and whether the labour and expense of conducting these visitations might not be abridged by limiting the visitations of each year to the examinations of certain bodies only." According to that paragraph a Branch Council might only choose to visit one each year; in that way it would take about nineteen years to go round, so that each body would then be perfectly sure, having been once visited, it would not be visited again for a great number of years.

Dr. ALEXANDER WOOD said Sir Dominic Corrigan was the most perfect master of the art of setting up a man of straw on purpose to knock him down again that ever he met with. Who ever proposed such a piece of absurdity as that which he objected to? Really, if the time of the Council were to be taken up by such irrelevant discussions, he did not wonder at people grumbling at the length of their session. Surely the Branch Councils had some common sense, and they might be trusted not improperly to use the freedom which was given to them. It was a most unnecessary thing, having once fully visited and reported on examinations which were found to be perfectly satisfactory, that they should have to go through the same routine every year. With regard to Professor Syme's jocular remark that members of the Branch Council might go as often as they liked, and charge for so doing, and the result that might follow from such a liberty, the answer was this, that when the members were going to be paid for doing their duty, the Council proposed to lay down a scheme for the visitation in such a way as not to lead to any unnecessary expenditure of the funds.

Mr. CÆSAR HAWKINS proposed that the paragraph referred to by Sir D. Corrigan should read thus—"They are, however, of opinion that each Branch Council should consider how far it is necessary to visit in the ensuing year the examination of each licensing body," altering "annually" into "the ensuing year." He did not see why the labour and expense of visitations might not be abridged by limiting the visitations from year to year to the examinations of such bodies as had not yet been fully reported on.

Dr. ALEXANDER WOOD said that would not answer, because there were certain bodies who did not satisfy the visitors last year, and, therefore, it would be the duty of the Council to visit them again to see if they were better.

Mr. CÆSAR HAWKINS thought it was a subject of importance, and that Sir D. Corrigan did not deserve the observations which Dr. Alexander Wood had made upon him.

Sir D. CORRIGAN: Oh, don't trouble yourself about me. (Laughter.)

Dr. ANDREW WOOD believed that hundreds of pounds would not cover the additional expense incidental upon these paid visitations. Therefore, he would propose that the Branch Councils should meet and go over the visitations of last year and the year before, and determine in what cases it was necessary to visit. He thought Mr. Cæsar Hawkins was wrong in supposing that any who had been reported on before should not be reported on again. Some of those which had been already reported on needed visitation perhaps more than those which had not. He was rather chary about the very high fees that were proposed for visiting at a distance. Five guineas seemed to be too much. When the Executive Council were paid at the rate of two guineas a head to come up to London, he did not see why, supposing he went to Glasgow, he should get five guineas as a fee. If something were not done to curtail the expenses, they would have a balance against them, as they had last year, and the Council would not stand well in the opinion of the Profession.

Dr. STORRAR suggested that they should get rid of the difficulty by limiting the fee to the fee paid to the Branch Council.

Dr. ANDREW WOOD: If you will move that, I shall be very glad.

Dr. STORRAR said he had always felt that they were entitled to some remuneration; but, at the same time, he wished to set his face against the idea that they were like a set of harpies, feeding upon the purse of the rest of the Profession.

Mr. SYME said his observation was not a claim for remuneration, but was rather intended to warn the Council against the possibility of abuses.

Sir J. D. CORRIGAN said that the resolution, as proposed to be amended by Dr. Storrar, would cause great dissatisfaction in Ireland, because there had been a serious dispute going on between members of the Medical Profession and the judges and grand juries and Solicitors for the Crown with reference to the fee which was allowed to the Doctor for attending in Crown cases. He would have to travel, perhaps, thirty miles, and be kept a whole day in the court—the fee being two guineas. There was a great outcry against that; but if the Crown Solicitors found that this Council only allowed its visitors a small fee of that amount, it was clear no redress could be gained. For this reason he must vote against the resolution.

Dr. STORRAR said the cases were not at all similar.

Mr. SYME inquired whether going to Galway for two guineas might not be called a smaller remuneration than coming up here upon the Council? It was quite plain that there was something more than money in it.

Mr. HARGRAVE said, if visitors were to be criticised in the way he had been (and for no fault of his, for he had returned as perfect a report as was possible), he thought they ought not to be required to do their work for nothing. He would leave the resolution as it stood.

Dr. PAGET, before the matter was put to the vote, wished to inquire what fund these remunerations would be paid out of—from the funds of the General Council or of the Branch Council?

Dr. SHARPEY (the Treasurer): By the Branch Council.

Dr. PAGET: I was about to move an amendment which, I think, will meet Sir J. D. Corrigan's view—"That it be left to the Branch Councils to determine what amount of remuneration should be paid for visitations of examinations."

Sir J. D. CORRIGAN: I have no objection to that.

Dr. AQUILLA SMITH: I take it, whatever money may be expended on these occasions should be paid out of the general fund. It is for work done by order of the Council, and not originating in the Branch Councils.

The PRESIDENT said that in the report just read the direction

of the visitation was left entirely to the Branch Councils, and not to the General Council.

Dr. Andrew Wood: I object to the expenses of this visitation—which is an imperial visitation, if I may so express it, and not an expense on any part of the country—being thrown on the Branch Councils. If you look at it, you will find how unfair it is. In England you have a larger country and more bodies to examine than we have in Scotland, and yet the expenditure will be so much thrown on us in Scotland that we shall be beggared. I therefore beg leave to move "That the expenses of the visitation be paid out of the General Fund."

Dr. Paget: If the visitation be directed by the Branch Councils, then it does seem to be a reason why the expenses should be paid by them; but if, on the contrary, it is regarded as a matter of the General Council, then the expenses should be borne in like manner. In my former suggestion, which did not meet with approval, I proposed that the expenses should be borne by the General Council; but I also proposed that the visitors should be chosen by the General Council, which makes all the difference. (Applause.)

The President: The motion is that the report be adopted with the exception of the last paragraph. Dr. Paget's amendment is, "That it be left to the Branch Councils to determine what amount of remuneration should be paid for visitations of examinations."

Dr. Christison said one Branch Council might pursue one method, and another another. With regard to Sir J. D. Corrigan's remarks, he had never known such a conglomeration of ideas as to compare together two such incomparable proceedings as that of a duty undertaken voluntarily by a member of this Board—which he might avoid if he pleased, and which was only undertaken under a sense of duty—and a duty which a man could not avoid, but was compelled by law to perform—namely, when he had to attend a court of justice to give evidence. It was notorious that nine men out of ten would rather not be concerned in such matters. (Applause.)

Mr. Cæsar Hawkins thought it was introducing a new principle to allow the Branch Councils to vote what they should receive from the general fund. He felt that it could not be right.

Dr. Andrew Wood said they had taken the opinion of a solicitor two years ago as to whether the Council would be entitled to pay their own members for visiting examinations. The solicitor said, "Oh! yes, if they are employed in special functions," just as we paid them when engaged in forming the Pharmacopœia; and he said he thought there was no more legitimate mode of disposing of the Council's funds than by paying men for services rendered.

Mr. Cæsar Hawkins said he hoped it would be distinctly understood that there must be a separate motion for the one now before the meeting, in order to sanction such an important question of principle.

Dr. Storrar: I think this will make the point clear. I propose as an amendment "That the visitors of examinations shall in future receive payment for their services, at the same rate as for attending a meeting of the Branch Council, in addition to travelling expenses."

The amendment, having been seconded by Mr. Syme, was put to the Council, and carried by a majority of 11 to 5.

Dr. Andrew Wood: I now move "That the expenses of visiting the examinations be paid from the funds of the General Council."

Dr. Parkes seconded the motion.

Dr. Paget: I certainly object to that, because we have already adopted the report, and in that report it is recommended that the visitations of examinations should be directed and the visitors appointed by the Branch Councils. I think there is an anomaly in the idea that in visitations which are directed by the Branch Councils the expenses should be paid by the General Council, and the more so because those visitations are made to supply omissions in the visitations of the last two years; so that, in point of fact, those Branch Councils which have hitherto neglected their duty will get an advantage out of the General Council in virtue of their very omissions. (Cries of "Oh, oh," and laughter.)

Dr. Aquilla Smith said that if this expense be imposed on the Branch Council he would answer for Ireland, and Dr. Wood had answered for Scotland, that the income of neither Branch Council would be sufficient to meet the expenses. The Irish Branch Council had been obliged uniformly to sell a portion of stock from year to year. He was decidedly of opinion that the Branch Councils ought not to be expected to pay for this matter.

Mr. Syme said the Council delegated the duty to the Branch Councils for the good of all; and it was quite certain if it were a good thing it was worth paying for—if not, he would advise the Council not to do it. It was quite clear that if the expenses had to be borne by the Branch Councils of Ireland and Scotland, if done at all it would be done imperfectly. (Applause.)

The President: An amendment has been put into my hands, proposed by Dr. Paget and seconded by Dr. Embleton, "That the expenses of visitations be paid by the Branch Councils."

Dr. Sharpey: I should be inclined to say that there is an objection to allowing a Branch Council to deal with the funds of the General Council; but I think Mr. Syme has cut the knot. We delegate duties to them, and if we do not afford the expenses out of the funds of the General Council, we shall come to a dead lock. The Branch Councils, I know, from year to year have been obliged to draw upon their stock. Therefore, there is no means of paying the expenses, and the wishes of the Council would not be fulfilled of having these visitations held. If they are to be paid, the General Council must pay them, and I must, therefore, support the original motion.

Dr. Thomson: I shall not vote on this question, because I disapprove entirely of payment for this duty.

Dr. Embleton: I may be allowed to support the amendment by saying that if the power is delegated to a Branch Council of directing and appointing visitations of examinations, the power should also be delegated to them of paying the visitors. (Laughter.)

Sir J. D. Corrigan said he had hitherto taken no part in the visitations; but he must now take an active part if a resolution were come to that the payments should be made out of the funds of the Branch Council—he must then actively oppose any visitation at all; and that for the same reason that the Lord Mayor gave to Charles II. (Laughter.) The fact is (continued Sir Dominic), we have no money, and you surely do not expect we are going to get into debt for it.

Dr. Acland: I do not at all agree with Dr. Embleton that because there is no money in one part of the kingdom, therefore money is not to be devoted to such a purpose as this. It is simply an accident that there is not so much money in other parts of the kingdom as in England; and I look upon the funds of this Council as belonging to the whole kingdom, and, if necessary, to Canada—that is to say, for whatever imperial purposes we think necessary. With regard to what Sir D. Corrigan has said—that one of the first things would be, there being no money, the visitations would be suspended—I would remind him that a great part of our duty here is really paid in another way altogether. (Applause.) And it is just as incorrect to suppose that the visitations of examinations would not be carried on without payment, as to suppose that Professor Syme leaves his business in Edinburgh for the five guineas which he gets here. ("Hear, hear," and applause.)

The President: As I intended to vote on the present occasion, I must state my reasons for so doing. Ever since I have had a seat at this Board I have, whether as a simple member or as one of your officers, opposed the principle that all our receipts should be thrown into a common fund, and all our expenses should be paid out of a common fund. I have always thought it right myself that the receipts and expenses of particular parts of the kingdom should be applicable to those parts only where the receipts were obtained and the expenses incurred. But I confess I look upon this question from a different point of view. I think Professor Syme has put it very clearly before us, and that the visitation of examinations is one of the great duties imposed on this Council as a body, and although the Council has thought proper in the first instance to delegate this duty to the Branch Councils, we are all agreed that it is not the best mode of conducting those visitations, and we might at any moment institute another. If this Council should at any time determine to have another body of gentlemen appointed independent of the Branch Councils, most unquestionably we should be called upon by the Council as a body to remunerate them. I have, ever since I have been at this Board, opposed any attempt to make a general fund out of which the expenses of the several Branch Councils should be paid, because I thought it would lead to extravagance and improper charges. (Applause.) But here I think it is, as has been justly said by Dr. Andrew Wood, quite an imperial measure, and therefore it would be very unfair to

call upon the several Branch Councils to pay for the carrying out of the wishes and intentions of the General Council as a body.

The amendment having been put and negatived, the motion was put to the vote, and carried by a large majority.

The Report of the Committee on Professional Examinations.

The Registrar, on the motion of Dr. Quain, seconded by Mr. Hargrave, read the report as follows:—

The Committee appointed to consider and report "what are the subjects without a knowledge of which no candidate should be allowed to obtain a qualification entitling him to be registered," beg to submit the following list of subjects:—1. Descriptive Anatomy. 2. General Anatomy. 3. Physiology. 4. Chemistry. 5. Materia Medica. 6. Practical Pharmacy. 7. Medicine. 8. Surgery. 9. Midwifery. 10. Forensic Medicine. The Committee, in enumerating the subjects a knowledge of which should constitute a minimum of the acquirements possessed by every registered Medical Practitioner, desire to add the following explanatory remarks:—"Chemistry" should include a knowledge of the principles of chemistry, and of those details of the science which bear on the study of Medicine. "Medicine and Surgery" should include a knowledge of systematic and Clinical Medicine and Surgery, and also of morbid anatomy. "Forensic Medicine" should include a knowledge of toxicology and of the principles of hygiene. The Committee desire further to recommend that the knowledge of these subjects should be not only theoretical, but such as can be tested by practical examination. Richard Quain.

The President being called away on important business, Dr. Christison took the chair.

Qualifications required for Registration.

Dr. Parkes: Is it to be understood that every candidate receiving a qualification entitling him to be registered is to pass an examination on all those subjects—that is to say, every Surgeon and every Apothecary—so that every qualification is to include the whole of these?

Dr. Andrew Wood: Yes.

Dr. Parkes: Then it is a very important thing.

Sir J. D. Corrigan inquired whether, if a man presented himself for a licence in Midwifery to the College of Surgeons in London, he would be obliged to present qualifications for all these subjects.

Dr. Acland, in the same way, wished to ask for information whether every person seeking to obtain a qualification *bona fide* as a Physician is to be examined in operative Surgery and the like.

Dr. Andrew Wood: You will see what is said in the last paragraph.

Mr. Rumsey said he must oppose the motion with regard to Forensic Medicine.

The Chairman said he had some observations to make upon Nos. 5 and 6 (Materia Medica and Pharmacy).

Mr. Cæsar Hawkins said the report should be considered paragraph by paragraph.

Mr. Syme: Before we do that, there is a general question. (Hear, hear.) For my own part, I shall pursue a very consistent course, because this Council had hardly met when I expressed the opinion that no man's name should appear on the Register without a full and entire Professional education, so that if a man broke his leg and sent for, let us say, Dr. Acland, he would be sure of finding a gentleman with a practical knowledge of Surgery. Every man should be possessed of that knowledge, and I know I could mention many instances where Physicians (our chairman himself, for instance), from their knowledge of Surgery, have saved the lives of patients. Take, for instance, cases of hæmorrhage of blood, diseases of the heart, or injury to the head. I have known diseases of the rectum treated as diarrhœa by Physicians who were not acquainted with the subject, and did not think it necessary to make an examination. They treated them with their opiates and so on. (Cries of "order.") I think it quite right I should bring this forward. No man should be considered a duly qualified Practitioner unless he has studied and been examined in every part of his Profession.

Dr. Paget said he was not aware of anything in the Act of 1858 pretending to enable persons to distinguish Physicians from Surgeons. If a gentleman intended to practise as a Physician in a large town, or even in a town, say, of 30,000 or 40,000 inhabitants, it was not absolutely necessary for him to have any particular knowledge of operative Surgery. There were always in the same town, and probably in the same street, many other individuals who could do what was necessary far better than he could, and who ought, as a matter of course, to be called in when their services were required. (Applause.) No doubt every Practitioner should have a general knowledge of the principles of Surgery; but that every Practitioner should be well instructed exactly what to do in cases requiring an operation, he held to be quite a mistake in regard to gentlemen who practised in large towns. It would be insisting upon too much if the Council were to ask that.

Dr. Risdon Bennett saw a great difference between the subjects of study to which a man should direct his attention and those on which he was to be specifically examined before he received his specific licence. He was a party to the report now under discussion, and he understood it to mean that before a man should come up before the licensing bodies he was to give a proof of having attended more or less to all these subjects. But if he came up to the College of Physicians in London simply requiring to be received as a member, and stating that he is going to practise as a Physician, then the College would not be compelled by these recommendations, if they passed into a law, to modify their existing regulations. All that they could do would be to say, "Well, before you come up to us to be examined as a member, you must show us that you have not only attended to Physiology, Anatomy, Medicine, and Forensic Medicine, but that you have paid more or less attention to Pharmacy and Surgery—that is to say, that you know the leading principles upon which fractures are treated, for example, and the mode in which prescriptions ought to be prepared, so as to know whether the thing is rightly done or not;" but not that he should be prepared to pass a satisfactory examination in any of those branches in which he is not about to practise. He objected to the terms of Dr. Quain's motion as originally proposed, although it accomplished to a great extent the object he had in view. Dr. Quain said, "without a knowledge of which no candidate should be allowed to obtain a qualification." Did that mean that a man was to have a full and competent knowledge on all those subjects, or only a certain amount of knowledge?

Dr. Quain, in moving "That the subjects enumerated in this report be the subjects of which a competent knowledge should be required of every one seeking to obtain a qualification and to be registered," said: I take it to be the great and important duty of this Council to point out who is qualified, and who is not, for the emergencies and duties of Professional life; and no one can be held out to the public as so qualified without a sound knowledge of all the subjects here mentioned. (Applause.) This is a duty which the Council has to perform with delicacy, not imperatively. They tell the examining bodies, "You ought to require these things from every man who comes up to you for examination;" and I listen with regret to the representative of any examining board who would come here and say, "We will ask less." (Applause.) With regard to the examination in Surgery, I am sure the representative of the College of Physicians will not tell us that a Fellow of that College is any the worse because he knows that in a phthisical patient he may have to look out for a scrofulous knee. We do not ask him to prove that he has operated on so many bodies, but we simply tell the examining board, "Be satisfied that your candidates have a knowledge of practical Surgery"—(applause)—and not a simply theoretical acquaintance with the subject. We do not tell them that they are to require the general Practitioner to be able to cut for stone, but merely that he shall have acquired a competent knowledge of these subjects. We want to arrive at the point that every man writing "Doctor" on his door, and liable therefore to be called in in every sort of emergency, shall have this minimum of education required by every properly qualified Practitioner. The same remark applies to Members of the College of Surgeons, and to Licentiates of the Apothecaries' Hall. If the report of this Committee be adopted and acted upon by the licensing bodies, there will be a decisive step made towards remedying the deficiencies that at present exist. (Hear, hear.)

Dr. Aquilla Smith said the majority of the Council would, in the main, agree with Dr. Quain's remarks. They all went to prove that the present Medical Act was insufficient to protect the public, or to enable them to distinguish between the qualified and unqualified Practitioner. There were 3000 Practitioners registered who possessed no other qualification than M.R.C.S. London; and the Council well knew that these gentlemen had not been examined in Medicine, or Materia Medica, or Pharmacy. Still, they undertook to practise the Profession in all its branches; but he thought Dr. Quain's motion rather pointed to the amendment of the Medical Act.

Dr. Storrar said he was considerably astonished to hear the objection raised to this report, and especially at what Dr. Smith had just said with regard to the existing Medical Act.

The way in which he met that objection was this: that the knowledge of these ten subjects was just as necessary for the Surgeon as for the Physician, and *vice versâ*; and the College of Surgeons, to which Dr. Smith alluded, actually at the present time required attendance on lectures on the whole of these ten subjects.

Mr. Cæsar Hawkins: With the exception of Hygiene and Forensic Medicine.

Dr. Storrar: The College of Surgeons required evidence that those lectures had been attended, but did not examine candidates upon them. He did not state this as any charge against the College of Surgeons, but only to show that the Council had power under their present Act to require all that was recommended in the report. He trusted, therefore, that the objection made with regard to the Act would not affect the judgment of the Council in deciding upon this important subject. (Hear, hear.)

Mr. Cooper supported the motion. It was not intended that every man should be required to be a demonstrator of anatomy, or to fill a chair of Medicine; only a practical acquaintance with these various subjects was expected. The general Practitioner was liable to be called at one part of the day to attend to a broken limb; it might be a compound fracture, and it must be treated scientifically and properly. At another part of the day he would be called in to a patient suffering from tremendous headache, great prostration of strength, and weariness of limb—in fact, with a fever of some sort upon him. The Practitioner must be up to the work, and able to diagnose and treat such a case properly. At another part of the day he might be called in to a midwifery case of some difficulty, and instead of sending for some great obstetrical professor, he must be prepared to do the work himself. He (Mr. Cooper) did not think there was one of these subjects of which a man ought not to have an efficient knowledge in order to practise his profession. He hoped, therefore, the resolution would be carried.

Dr. Apjohn was greatly surprised to find Botany omitted from the list of subjects. He could not understand how a degree in Medicine could be conferred without a competent knowledge of that important science, and it was equally difficult to understand how a person could be qualified in Forensic Medicine without a similar knowledge.

Dr. Quain said the subject of botany had been dealt with in the former report, in which it would come under the subject of natural history.

Dr. Andrew Wood: Mr. President, this question seems to be a very much larger one than might appear from the first glance at this report. It is not a question merely as to what are the items of a Professional curriculum, but it is something more. It challenges from this Council an opinion whether the general Practitioner should not be qualified in every branch of his Profession. (Hear, hear.) That is the question; and when I look at the Register and think that out of the 24,000 gentlemen whose names are inserted in that Register a mere sprinkling only are going to devote themselves to certain departments of the Profession, I feel that our duty is to endeavour, as far as our influence will go, to secure that no gentleman shall be placed on the Register holding himself out to the public as a man capable of practising as a general Practitioner unless he has been tested in every branch of the Profession—(hear, hear)—and I hail with the greatest pleasure the liberal and enlightened views of my friend Mr. Cooper, the Master of the Apothecaries' Hall, because he himself might have been expected to have been an opponent of this, seeing that the qualification of the body which he represents does not include an examination in Surgery. But I think, if there was a strong expression of opinion to go forth from this Council that no man's name should appear on the Register who had not been tested in every branch of Medicine and Surgery, it would expedite, in some degree, the carrying out of that important clause in the Medical Act (No. 19), which, in view of this very question, has been an enabling clause to enable bodies which cannot confer a complete qualification to do so by combination. (Applause.) I have for years advocated these combinations, and have felt it would never do in the present state of our Profession to hold out to the public any idea that a man could be a good Physician who knew nothing of Surgery, or *vice versâ*. I say a man can never be a good Physician or a good Surgeon unless he has not only been educated in every branch enumerated here, but has been tested on them. (Hear, hear.) The fact is, we are not to legislate for mere Physicians or Surgeons, but we are to legislate for the general public by securing that those men to whom their lives are entrusted shall be qualified in every branch of their Profession.

Mr. Cæsar Hawkins said the body he represented had been alluded to several times in the course of the debate, and he wished to make an explanation upon one or two points. More than one speaker had alluded to the fact that the Act of Parliament allowed Licentiates of Midwifery to be entered on the Register. The body that he represented had taken the greatest care to see that such persons should not be inexperienced, and it was actually more difficult for a man to become a Licentiate in Midwifery than a member of the College. He must have gone through all the education that the College of Surgeons requires for their members, and he must have done something in addition to entitle him to be called a Licentiate in Midwifery. The consequence was that not a single person had ever been entered on the Medical Register for that licence alone—they had all passed as members beforehand, with one exception. He (Mr. Cæsar Hawkins) had taken especial pains in drawing up the rules, and it had cost him some time to get all the members of his own body to agree to them. With regard to memberships it had been stated that the candidates in several instances were not examined in all these subjects, but the Council must remember the difficulties which the College had to encounter. The Act of Parliament prevented them from doing it. It was very recently—within the last few months—that they had obtained a legal opinion in favour of the power which they wished to exercise, and immediately upon receiving it they were going to take steps to put it in force. The effect would be this, that a person must either have a licence to practise Medicine from some body or other legally entitled to grant the same, or else the College would say to him, "You may pass through our examination for membership, but you shall not have our diploma until you have gone through the examination of some body who has got a licence in Medicine to give you." The present resolution was rather tending towards the idea that all candidates were to go through the same examination; but he thought that while the Council should take care that persons were not entered on the Register who were not entitled to be so entered, they would sufficiently comply with the Act of Parliament if candidates gave sufficient proof that they were qualified for Medicine or Surgery, or both. He, however, agreed on the whole with the motion, except with regard to the last subject mentioned—namely, Forensic Medicine. Upon that subject he heartily wished they had something like the system in Scotland—namely, that experts should give evidence before courts of law, and not that any one of the 20,000 members of the Medical Profession should be called upon to give opinions upon the most abstruse subjects—subjects upon which many of them were utterly unfit to express an opinion.

Dr. Leet cordially supported the motion, and stated that the body he represented already required the subjects mentioned therein.

Mr. Rumsey: I regret that I cannot be supported here to-day in my view by a member who had given me reason to believe he would be on my side. I allude to Dr. Stokes. My objection is a short one, but it involves a long discussion. I object to the insertion of Forensic Medicine on this list. I might object to an error in terminology, because, in fact, Forensic Medicine does not comprehend all the subjects included under State or legal Medicine. But I ask the question at once—Should Forensic Medicine, or legal Medicine, or public Medicine, be included as a necessary subject of Professional education and examination? If it is not to include the other branches of public Medicine, then by far too little is required; but if preventive Medicine, or prophylactic Medicine, or the elements of psychological Medicine, are to be included, then the demands are surely too great. I observe Forensic Medicine is to include the principles of Hygiene and upon that Dr. Parkes will have to make some remarks. I conclude from that it is meant not only that the candidate has attended one or two courses of lectures given under that name at the Medical schools in the kingdom, but, I apprehend, the principles of Hygiene must be taken to include a vast cycle of science; it must include a knowledge of the physical sciences, such as is demanded by the London University for its degrees—a knowledge of pathology, of vital and sanitary statistics, and of the deductions from them—of Medical topography, and of the effects of climates. You cannot judge of the physical circumstances of the population for whose health you are to advise the public authorities, without all those different departments of science; and Hygiene should also

include etiology, or the science of causation. Now, if this demand be comprehensive enough, I assert it to be too great to impose on all Practitioners, for the following reasons:—Because within the age of 21—the age at which we permit youths to enter the Profession—within the four years of Medical study which we deem a sufficient period for fitting them to practise, so wide a group of studies cannot be taught or effectively learned; and, secondly, because those subjects which are of the greatest importance to the general Medical Practitioner ought to occupy the whole period allotted to Professional education. Now, to introduce State Medicine (for I will include all I have said under that name) into this course would have necessarily one of two results. If the pupil devotes full attention to the ordinary subjects of Professional education, all of which he must know before he is turned loose upon the public, he will have no time left to master the great and growing questions included in the terms preventive and legal Medicine, and which are not adequately provided for in the present course of Medical education in any school that I am aware of in the United Kingdom. The other result will be that if a pupil bestows that careful attention upon the various branches of study which their importance demands within the period that I have defined for Professional education, then I maintain, unless he be a man of extraordinary power—a sort of Admirable Crichton—he will not have time to prepare for the ordinary work of a curative Practitioner; the whole of which work I believe to be included under the first nine heads stated in this report. These are my reasons for objecting to a proposal which, if it be not supplemented by one for further study and additional examination, must either end in the grant of a sham qualification, in the production of an imperfectly qualified body of Medical jurists, in the frequent performance of Medico-legal farces in courts of justice, or in the efficient supply of fallacious and absurd sanitary advice to local administrative bodies; or, on the other hand, it must impair materially the student's chances of obtaining a sufficient amount of good curative knowledge of Medicine and Surgery. Now, let me not be misunderstood on this point. I propose this amendment, not for the purpose of banishing Hygiene and Medico-legal study from Medical examinations, or of interfering with any step made by our various bodies and great Medical schools in this direction, but I do it for the purpose of ultimately establishing those studies and qualifications on a safe and true basis. When the proper time arrives, I am prepared to propose such an extension of our scheme of Medical education as will produce a substantial and trustworthy qualification in State Medicine. I do not think of creating a numerous class of such men as Taylor. I might add the name of our Chairman (Dr. Christison), and Geoghegan, of Dublin. It would be impossible to provide a numerous class of men of that stamp; but my amendment is this—"That, in order to promote the attainment of a high qualification in preventive, legal, and psychological Medicine, a further period of study in these subjects should be required, and that the age of 23 be the earliest age at which any candidate having previously obtained a licence to practise from one of the bodies in Schedule A. should be admitted to examination for a certificate in public or State Medicine." The public demand something of that kind. A class of men distinguished by special qualifications on these subjects is necessary, not only for the credit of the Profession, but for the security of society. There is an increasing demand for men so qualified by public bodies, by coroners, and courts of law; and the unfitness of the existing body of Practitioners in this respect is most nobly and candidly confessed by some of our best authorities on the subject. [Mr. Rumsey here supported his views by quotations from the writings of Drs. Anstie, Symonds, and Graves.] Now, I implore the Council not to stultify their proceedings by requiring an impossibility, and by sanctioning a system of Professional employment throughout the country in public inquiries, which has hitherto inflicted so much obloquy upon Medicine, and caused such extreme dissatisfaction and distrust in the public mind. I should be prepared, if the Council agree to my amendment to omit the words "Forensic Medicine," to propose the further amendment I have already read in the course of my remarks.

Dr. Embleton took a very simple view of the motion before the Council. What they had to decide was, whether the subjects in the list before them should be required of all Practitioners alike. He thought they should, whether the Practitioner was entering the Profession as Physician, Surgeon, General Practitioner, or even as Licentiate of Midwifery. (Applause.) Those subjects formed a broad foundation upon which Medical education must be based.

Dr. Fleming, while quite agreeing that the list formed a minimum upon which students should, at all events, possess information before entering upon practice, thought it by no means followed that they should be equally qualified upon, or should pay equal attention to, all those subjects. (Hear, hear.) According to the description of the practice which they were destined to follow ought their study to be directed. With regard to the question of Forensic Medicine raised by Mr. Rumsey, it was one of such a very comprehensive nature that he feared the Council would never be able to lay down a course by which every man entering the Profession of Medicine or Surgery would be able to take his place efficiently upon all subjects connected with Forensic Medicine upon which he might be called to give evidence in a court of law. Then, in regard to what fell from Dr. Apjohn as to botany being omitted, the Committee had not included it in the minimum of study; but it was quite competent for any of the licensing bodies, if they thought fit to have a knowledge of botany, to require it at the hands of their candidates.

Sir J. D. Corrigan wished to make an observation upon the omission of botany, which he thought was a very serious matter. He did not see how a man could understand Forensic Medicine or go into a court of law unless he knew the character of poisonous plants. In 1796, in consequence of the ignorance that prevailed in Ireland on the part of those who compounded medicine, the Apothecaries' Hall was founded, and had carried out its functions admirably. Its functions were to supply medicine of a pure character for the use of Physicians and Surgeons and the army and navy. The Profession in Ireland had great confidence in the excellence of the preparations of the Apothecaries' Hall; but now the very branch of Medical science which was most necessary for carrying out the functions of the Hall—namely, a knowledge of medicinal plants—would no longer be necessary, and henceforth the prescriber might confound what was called in Ireland "woody nightshade," or solanum dulcamara, with "deadly nightshade," or atropa belladonna. (Laughter.)

Dr. Quain: Botany was left out because it was believed that the knowledge was previously obtained.

Mr. Hargrave supported Dr. Apjohn's view upon this subject.

Dr. Acland felt some difficulty in expressing himself concerning this matter. At the commencement of the debate he had asked, by way of starting the difficulty which arose upon such a programme as this, how far operative Surgery, tested by operations on the subject, was to be required of persons intending to be Physicians. His reason for putting the question was to extract from the members of the Committee their view as to the extent of knowledge which would be required in these several departments from every Practitioner. No rational person in the Profession or out of it would suppose for a moment at the present time of day that it was advisable to place upon the Register as a fit and proper person to practise his Profession anybody grossly ignorant of many of its branches. It was not necessary to discuss that now—it was fully recognised—but it would be of service to teachers, students, and to examining boards to know to what extent this examination was to go, and whether it would be for all persons alike. Mr. Rumsey had stated a difficulty with regard to Forensic Medicine, and he (Dr. Acland) might make a similar objection as to general knowledge. But the question was, to what extent ought the instruction and examination to be carried of every person seeking an entrance into the Profession? The old and much-vexed question as to whether or not persons should be specially prepared for special practice or not need not arise. In justice to his own University, he thought it right to say, after what had fallen pleasantly enough from Professor Syme as to Physicians and Surgeons and so on, that in Oxford some years ago, in the youth of all of us, they only licensed Physicians. With regard to particular men devoting themselves to specialties, some years ago the University of Oxford required of all those who were going to practise as Physicians pure, a knowledge of Midwifery, the principles of Surgery, and the vexed question Hygiene. Therefore they did not require any reminder in that respect; they had required from all their students a general examination on those subjects. But it would be of real service to the examiners (and he had drawn the attention of the Council to this several times) to know the extent to which a knowledge of all these special subjects should be insisted upon in every case. (Hear, hear.) If the

Committee meant to say broadly that all these subjects were to be required in a general manner of all students, that was quite intelligible, and he had not the slightest objection to it; and he confessed most of the licensing bodies would be very much surprised at the Council thinking it necessary to inform them of the fact – he did not know which of them needed the information in a general sense. It was necessary to provide for the masses, and it was necessary to provide not a theoretical or book statement of subjects, but a system which should truly and practically educate not for the purposes of science, but of practice, the masses of General Practitioners. (Applause.) He would support the motion on the general principle, but he waited with some desire for a consideration of the details on some future occasion.

Mr. Syme explained that when the Committee put "Surgery" on the list, it did not mean that the candidates were to perform operations

Dr. Alexander Wood: When I look at this list of subjects, and when I find those subjects to be the minimum of Professional education, I am really inclined to ask if the Committee have decided as to what the maximum is to be. (A laugh.) I find the only addition which can possibly be suggested by members of this Council is the addition of botany. When I look at the different regulations of the examining boards, I find those bodies which, generally speaking, give the highest class of education, all exclude botany. They do not exclude it because they hope the day is not far distant when botany will form part of the education of every gentleman, and fall within the ambit of preliminary education. But I think those who have framed this report have forgotten what the meaning of minimum is. (Laughter.) Do they mean to say no man is competent to practise who is not capable of undergoing an examination on every one of these subjects? Then I must tell them to take a practical view of the matter, and to look at the country districts of, I will not say this rich kingdom we are now in, but to my own poor country, where many of these men will have to make their living, and ask themselves what their probable income will be during their toilsome and often short-lived existence, and then let them say whether it is necessary for such a Practitioner to have mastered every one of these subjects. I say the thing is simply ridiculous, and that if you attempt to draw the strings too tight you will snap them altogether—(hear, hear) and if you pass any such resolutions founded on a report like this, you will do more to encourage irregular practice than all that the Act of Parliament enables you to do to discourage it. I also object to this report because it says virtually, though not actually, that there shall be one system of education for every branch and grade of the Profession. I deny utterly the advisability of that. If you lay down this stringent rule, I very much suspect you will not have the same amount of obedience on the part of the examining bodies that you have hitherto had. I repeat what I have said over and over again, that the great defect of our students is not in professional but in preliminary education, and therefore I think this scheme should not be carried out at the present time.

Dr. Parkes said, with regard to the observation of Mr. Rumsey as to whether or not hygiene should be included, he would beg the Council to consider the very great desirability of not including such a subject in Forensic Medicine. On the whole, he was inclined to think it was undesirable to demand a knowledge of hygiene in the way anatomy and other subjects were required. With regard to the observations of Dr. Alexander Wood he did not see that there was any subject mentioned which had not constantly been required by all the great licensing bodies in the Kingdom, and he thought it was only right that the Council should demand from every person who was put on the Register a competent knowledge of all those subjects.

The Chairman: I hope the Council will allow me from the chair to make a few remarks upon this report. The first point is the very difficult question of botany. In the University of Edinburgh we require a very thorough knowledge of botany, not merely on account of its applications in Medicine, but on account of its being a very excellent science for cultivating the minds of our students. (Hear, hear.) But if you go into the question of botany for every branch of the Profession, it becomes a different question; and that is a point upon which it would be necessary to hear a great deal more said than has been said yet, if we are to take up the question whether botany should not be added to this list, because, after all, the applications of botany to the several branches of Medicine are not very numerous, and not necessarily very difficult to comprehend. We certainly should always expect that a Physician when called to a case where, for instance, there is a suspicion of poison, and a patient gives up certain blackberries—we certainly should expect him to be able to distinguish black currants, for instance, from the berry of the belladonna. Now, there is some resemblance between the two, and especially if they are partly decomposed. But we certainly should expect that a Physician would be able to tell on the spot whether it is a case of, we will say, a child having eaten too many black currants or one or two belladonna berries. So with regard to botany in pharmacy. Therefore I think we should define very carefully what we mean, if we add it to the list. The next point upon which I perhaps am competent to give an opinion is Nos. 5 and 6, Materia Medica and Pharmacy; but perhaps I should understand better the state of things if Dr. Quain would tell me whether he means practical pharmacy.

Dr. Quain: Yes.

The Chairman: Then I think it should be so expressed, because there is a great confusion in the minds of many people as to the meaning of Materia Medica. We hear about lectures on Materia Medica and pharmacy. Is not pharmacy a part of it? We all know that Materia Medica is defined very accurately by Dioscorides, when, in his Περὶ Ὕλης Ἰατρικῆς, he includes in the term pharmacy therapeutics and dietetics. Then the other point upon which I would observe is that of Forensic Medicine, because this is a subject with which I am somewhat familiar, in consequence of having lectured upon it for a period of ten years. When I took up the subject in 1822, it was in this country almost entirely neglected. No board paid any attention to it in its lectures or in its requirements of students. The knowledge of it throughout the country was extremely small, and confined to only a very few individuals, and even with them that knowledge was trifling. But having seen the very high position which it held in France, where I spent some time, I determined to pay some attention to the subject; and –I suppose rather by good fortune—I was appointed to the Professorship of what we call Medical Jurisprudence and Police. I think that is as good a name as any—Medical jurisprudence being confined to courts of law, and Medical police as regards hygiene. Now, Mr. Hawkins has stated to you that the College of Surgeons are not inclined to add to the subjects of study.

Mr. Hawkins: I only said it was undesirable. I did not say they would not do it.

The Chairman: Mr. Hawkins stated his reasons, which went to show that it was not necessary to require this of students or candidates, on the ground that we cannot expect such a large amount of accurate acquaintance on this subject as to enable a Practitioner to give his evidence with ability in a court of law. Now, that is not perhaps the purpose, or, at least, the only purpose of instruction, in the department of Medical jurisprudence, so far as the Medical education of the General Practitioner is concerned. There are views of practice which are never presented to the student unless he looks upon them as points upon which he may be examined in a court of law. That is one part of Medical jurisprudence, which it is the duty of the teacher to bring before them. A great mistake has been made by many in looking upon toxicology as a name for Medical Jurisprudence; but it is not so—it is a very limited branch of the subject—because in courts of law cases of toxicology are far fewer than Surgical cases. These subjects are not taught in Surgical lectures or in clinical Surgery in general; they are not taught in any branch of Medicine with which I am acquainted; and I think, if a Professor of Clinical Surgery went very fully into the Medico-legal relations of injuries, for example, he would go very much out of his way, and add too much to the already very extensive branches of Surgery which he must notice. Now I would speak as one who has paid great attention to Surgery at one time, inasmuch as I passed a twelvemonth as House-Surgeon in the Royal Infirmary, and having also turned my attention very much to it as a branch of Medical jurisprudence, and I will say it is a very important branch, and likewise one which requires to be specifically mentioned, were it only to enable the candidate for a Surgical diploma to know those cases which he ought to look at with a Medico-legal eye—to let him know that there are things he must attend to, and that, if not, the result will be that he will suffer in reputation. (Applause.) I have seen the same thing occur with regard to Medicine. Many points in Medicine require to have the student's attention called to them, which bear a relation to Medical jurisprudence; and if his attention is not turned to them, he will neglect them,

and certainly will regret it afterwards, for he will lose that knowledge which will enable him at least to know when he ought to study the subjects brought before him incidentally with a Medico-legal eye, and so be prepared to give evidence, or at least to know what to say in order to enable more thoroughly educated persons in that particular branch to give their evidence upon them. I am afraid I am wandering from the point, but this subject should be taken into careful consideration in order to get what we are asking from students when we are asking Forensic Medicine—(hear, hear)—because, as it is now taught, I am afraid we are asking a great deal too much from all Practitioners. Now I come to the very important observations of Mr. Rumsey. No one can deny the great importance of his remarks and the soundness of his views; but I think, bringing those views to bear against what we propose to ask here—namely, a certain knowledge of Forensic Medicine—he has confounded the education required of the Practitioner to enable him to know how to deal with the case as presented to him, and to enable him to give evidence to a certain extent of that fact in a court of law, with the education which is required for one thoroughly conversant with one or more branches of Medical jurisprudence such as would enable him to give evidence in courts of law upon the subject. I think he is making a great mistake if he supposes that this education is intended to form the consulting Physician or the consulting Surgeon. That is not our position, and I consider if Mr. Rumsey should go into the inquiry what should be the education of one who may be an expert in Forensic Medicine, Medical jurisprudence, and Medical police, it would be better that we should endeavour to keep ourselves clear of that for the present, and remember that what we are asking under the name of Forensic Medicine requires by no means that amount of knowledge which Mr. Rumsey seems to think is comprehended in it. With regard to the departments of hygiene and Medical police, I do not know it is of very much importance to the gentleman whose education is contemplated, because that is a branch which the general Practitioner can avoid. There are few cases in which he is obliged to go into these matters; but in matters of Medical jurisprudence he cannot help himself, and he ought to be taught how these cases can be applied, and if those cases must occur he ought to know how to study them with a legal eye. That is one of the great objects to be accomplished by a distinct course of instruction on Medical jurisprudence. But with regard to hygiene, I do not think there are many subjects which the Medical Practitioner may not avoid if he likes Remember, I am very far from denying the great importance of that subject and the desirableness of some accomplished members of the Profession acquiring a knowledge of it. That is a totally different question. All I intend to say —I may have said it more obscurely than I should desire, in consequence of my wish to be brief—is that every Medical and Surgical Practitioner must come in contact with these matters, and that, without a knowledge of the proper mode of viewing the matter, he will produce those disagreeable scenes which we have sometimes had to contemplate in courts of justice. (Applause.)

Dr. Acland said that he was only expressing the feeling of many members of the Council when he assured the President that he had touched on one subject on which he had won the greatest reputation in the world, and had expressed what he (Dr. Acland) would like to see in a report on every one of those subjects. Dr. Christison was one of the three members whom he had desired to propose to the Council to draw up such a statement at their leisure -say, in two or three years hence, as they might think proper—and he believed a most valuable service would be rendered if they could have the benefit of their great and mature experience on each one of those subjects.

The Chairman said he had forgotten to mention one point —namely, that, according to his experience as Professor, there was no branch of Medical and Surgical instruction in which he had found the students take a greater interest. They were most attentive in their attendance on the lectures, and in the examinations which he conducted he had a very good class; and that at a time when the thing was not required by any licensing board, showing it was a subject in which students saw there was something to learn.

Dr. Quain: Perhaps it would be satisfactory to the Council if I were to say one or two words on the proposal to adopt this list. In the first place, I do not think it has been objected seriously by any one that the subjects mentioned here were more than should be required for the Medical Profession, and therefore I may dismiss that. A point was referred to particularly by Dr. Acland, that there ought to be under each of these heads some definition of what was comprehended in them. Now, I cannot help thinking that that is a duty which may be left with more advantage to the licensing bodies. You send your visitors to examine how these things are carried out, and you point out what should be the preliminary knowledge. We all remember how much time we spent yesterday in trying to define what English and Latin meant. (A laugh.) If you got up to define what Medicine, Surgery, and botany meant, it is not a week or a fortnight, but years would elapse. (Laughter.) That, therefore, must be left to the licensing boards. You must have confidence in them, and fully rely upon them to define what knowledge on each of these subjects implies. You fix the minimum, but you have left them to decide in what way the four years shall be spent. Again, I say it is not premature, as Dr. Alexander Wood has alleged. This Council has been in existence nine years, and now for the first time they tell the licensing bodies what subjects they should examine upon. I say, we are neither premature, nor are we asking too much; and we shall have no difficulty in pointing out to the licensing bodies what is the reasonable information required from every Practitioner in order to be qualified. With regard to the technical objections—for they have been so in the main—to this report, I have no great difficulty in getting rid of them. In the first place, it has been objected that it is not a committee on the subjects of Professional examinations. Well, I have no objection to substitute the word Professional "acquirements."

The Chairman: "Education."

Dr. Quain: Or "education." Then with regard to botany, it was really the impression on my mind that the question of botany was settled long ago. However, that may be remedied by introducing after the term "chemistry" on the following page "Materia Medica," and saying, "This shall include a botanical knowledge of medicinal plants."

Sir J. D. Corrigan: I could not, as seconder of the amendment, assent to that, because we do not know what course we shall take with regard to the next paragraph.

Dr. Quain then moved the adoption of the report, with the slight alterations which he had accepted.

Mr. Cooper seconded the motion.

Dr. Apjohn's amendment relative to the insertion of "botany" as an additional subject was negatived. After considerable discussion upon the fitness of many of the titles given to the different subjects of examination in the list,

The Chairman put the motion for the adoption of the report down to the words "Forensic Medicine," which was carried without a division.

Dr. Quain then moved that after the word "Medicine" in the next paragraph a new paragraph should be inserted to this effect—"That Materia Medica shall include a botanical knowledge of medicinal plants."

A number of further trifling amendments and alterations were proposed and discussed at some length, and finally the latter portion of the report read thus:—

The Committee appointed to consider and report "what are the subjects without a knowledge of which no candidate should be allowed to obtain a qualification entitling him to be registered?" beg to submit the following list of subjects:—1. Anatomy; 2. General Anatomy; 3. Physiology; 4. Chemistry; 5. Materia Medica; 6. Practical Pharmacy; 7. Medicine; 8. Surgery; 9. Midwifery; 10. Forensic Medicine.

The Committee, in enumerating the subjects a knowledge of which should constitute a minimum of the acquirements possessed by every registered Medical Practitioner, desire to add the following explanatory remarks:—

"Chemistry" should include a knowledge of the principles of chemistry, and of those details of the science which bear on the study of Medicine.

"Medicine and Surgery" should include a knowledge of systematic and Clinical Medicine and Surgery, and also of morbid anatomy.

(Confirmed)—George Burrows, M.D., *President*.

The Chairman then put the motion, "That the report as amended be adopted," which was carried *nem. con.*

Adjourned to the following day.

Tenth Day.—Saturday, June 8.

Present: As before.

The minutes of the previous meeting having, after some discussion, been confirmed,

Returns from the Licensing Bodies.

Dr. Embleton moved the following report should be received and entered on the Minutes:—

1. Report of the Committee on Returns from the Licensing Bodies of Professional Examinations, and their Results, and on the Registration of Students, for the Year 1866.

1. The Committee beg leave to lay before the Council a table, compiled

from the returns, according to Recommendation 6, sect. v. of the Recommendations of the General Medical Council of 1866 (vol. iv. p. 311), viz., "That returns from the licensing bodies in Schedule (A) be made annually, on January 1, to the General Medical Council, stating the number and names of the candidates who have passed their first as well as their second examinations, and the number of those who have been rejected at the first and second examination respectively."

Table.

Licensing Bodies.	Passed.		Rejected.	
	1st Examin. Number.	2nd Examin. Number.	1st Examin. Number.	2nd Examin. Number.
R. Coll. Phys. London	69	60	22	8
R. Coll. Surg. England	373	344	136	76
Soc. Apothecaries, London	202	233	33	10
University of Oxford.	2	2	2	—
,, Cambridge	11	5	2	—
,, Durham	2	2	—	—
,, London	(a) 22	25	15	1
R. Col. Phys. Edinburgh	90	220	35	51
R. Col. Surg. Edinburgh	(b) 75	(b) 119	31	39
Fac. Phys. Surg. Glasg.	31	52	10	22
University of Aberd.	(1st) 48 (2nd) 30	(3rd) 33	(1st) 1 (2nd) 12	(3rd) 6
,, Edinburgh	(1st) 58 (2nd) 92	(3rd) 62	(1st) 18 (2nd) 28	(3rd) 18
,, Glasgow	49	48	(1st & 2nd) 6	(3rd) 1
,, St. Andrews	—	(c) 10	—	—
K. Q. Coll. Phys. Ireland	1	78	—	4
	—	54	in Midwifery	4
R. Coll. Surg. Ireland	113 in Surgery.	98	19	8
	8 in Midwifery	—	—	—
Apothecaries' Hall, Ireland	23	34	3	4
University of Dublin.	12	32	10	3
Queen's University, Ireland	No Returns.			
	1311	1511	383	253

It will be observed that returns have been sent in by all the licensing bodies with the exception of the Queen's University in Ireland, from which no returns have been received since 1864; and the Committee would therefore suggest that the Registrar of the Council be directed to address a letter to the authorities of the Queen's University in Ireland, requesting them to furnish a return of Professional examinations and their results, in accordance with the recommendation of the General Medical Council.

2. The Committee find that of students registered for the year 1866, there were :—

In England	477
,, Scotland	302
,, Ireland	157
Total	936

The Committee are aware that, owing to imperfections in the registration of 1865, a number of students who commenced Professional study in that year were only registered in 1866; but the Committee have not sufficiently accurate information to enable them to state the exact number of such students.

Of the whole number of students registered in 1866, it appears that 580 passed the preliminary examination in that year. Of the remainder, 208 passed the preliminary examination in 1865, and 146 in previous years.

The Committee would suggest that a tabular statement of the number of students registered in the three divisions of the kingdom be appended to the list of Medical students registered during the year.

D. Embleton, *Chairman.*

Dr. Paget, in seconding the motion, took advantage of the opportunity to draw the attention of the Council to the fact, that whereas the number of candidates passed by the different licensing bodies was smaller than in preceding years, the number rejected was proportionately larger, indicating a decided improvement and increased care in the examinations.

Dr. Storrar moved, and Dr. Sharpey seconded, "That this report be adopted." Carried unanimously.

Report of the Committee on the Visitations of Examinations.

Dr. Storrar then moved, "That the report of the Committee on the visitations of examinations be received and read."

Dr. Paget seconded the motion.

Report.

The Committee, in terms of the reference to them by the Council, having read over and carefully considered the whole of the reports of the visitations of examinations for the last two years, beg now to make such suggestions, founded on the various reports of the visitors, as appear calculated—

1. To remedy defects in particular examinations, and

2. To improve generally the examinations for the licence to practise Medicine and Surgery.

The Committee will first make a few comments on the reports of the visitors, under the heads of the several licensing bodies, and will subsequently refer generally to some special matters which have arisen out of the consideration of the reports.

Special Suggestions.

I. The English Licensing Bodies.

The Royal College of Physicians of London.

The Committee observe that this College have discontinued their own preliminary examination in arts, and now require that every candidate, for their licence should produce evidence of his having passed one of the preliminary examinations recognised by the Medical Council. It is probable that their example will be gradually followed by the other licensing bodies, other than Universities; if so, it will be necessary that the Medical Council, in this and in other similar cases, should take care to see that the recognised examinations in arts include all the subjects required by them, and are in other respects deserving of recognition. But this subject belongs rather to the Committee of the Council on preliminary examination than to this Committee.

The Committee observe that, in the Professional examinations at each table, only one examiner, who may have been the teacher of the candidate without any assessor, examines the candidate on each subject, and forms his opinion separately, and not necessarily after consultation with any other examiner. The Committee think it highly desirable on all accounts that there should always be present at each table at least two examiners, who may decide upon the merits of the candidate after consultation. The same remark applies to the examination of some other bodies.

It appears that the anatomical examinations are conducted without the aid of anatomical dissections and preparations. Such an examination cannot be an efficient test of the anatomical knowledge of a candidate, and requires to be amended.

The Committee observe that no separate decisions are given in the written, the oral, and the clinical examinations. They consider it preferable that each should be judged separately.

The Royal College of Surgeons of England.

In the report for last year the visitors stated it as their opinion that the College examinations would be improved were the physiological examinations made more extensive, and were the Surgical examinations to include a practical examination in Surgical appliances, bandaging, etc. This year the Committee are glad to observe that the College have given effect to the recommendations of the visitors. The anatomical and physiological examinations seem now to be very efficient. The same may be said as to the Surgical practical examination, though, perhaps, it is capable of being extended still further by causing the candidate to trace on a living man the lines of incision in amputations, deligation of arteries, etc. It would be desirable, too, were it practicable, to introduce operations on the dead body. It would also be extremely desirable to have clinical Surgical examinations introduced into the College of Surgeons' examinations, as is now the case with many of the licensing boards. A difficulty may be found in the large number of candidates to be examined; but in London, where the Hospitals are large and numerous, some arrangement might possibly be made by which each candidate might be made to show in one or more cases his knowlege of diagnosis. The matter is worthy of the attention of the College of Surgeons, and as they have already introduced clinical examinations into their Fellowship examinations, they will, doubtless, when possible, extend them to the candidates for their licence.

Society of Apothecaries.

In the reports of 1865-6 the visitors made various suggestions, and the Committee find from the reports of 1866-7, that the Society have carried them out almost in their integrity. The Committee trust that the introduction of clinical Medical examinations will be also eventually adopted by the Society.

[The reports concerning the Universities of Oxford, Cambridge, and London require no remarks.]

The University of Durham.

The Professional examinations are satisfactory, and to be noted especially for their practical character. The preliminary examination, as at present conducted, does not seem satisfactory. It does not include the requisite number of subjects, and in some instances the questions are not up to the standard the Council desires to see. Dr. Embleton stated to the Committee that he was sure that the University would improve this examination before next year.

II. The Scottish Licensing Bodies.

University of Edinburgh.

The Committee need only observe that the clinical Medical and Surgical tests, introduced of late years into the examination of the University of Edinburgh, have been carried out without difficulty and with great advantage.

University of Aberdeen.

The reports of this University are satisfactory. The examinations are well carried out, and are highly practical. In certain cases candidates have been exempted from oral examination on account of the excellence of their written answers; but the Committee are of opinion that the recommendation of the General Council in this matter should be adhered to, and that no candidate should in any case be exempted from oral examination.

University of Glasgow.

The Professional examinations are satisfactory. The preliminary examination in arts appears to be defective; the papers are too elementary in some respects, and the candidates appear to have been allowed to pass too easily in some instances. Professor Thomson assured the Commitee that the University would take the matter into immediate consideration, with a view to the improvement of this examination.

The Committee observe that the custom of exempting candidates from parts of the degree examination, on the ground of high merit in class examination, which was commented on by the visitors of last year, has been now discontinued. The reports of the visitors on this University are defective in not including any notice of the examinations in botany and chemistry. The clinical Surgical and Medical examinations lately instituted are highly efficient.

University of St. Andrews.

No report has been made on this University.

Royal College of Physicians of Edinburgh.

The Committee regret that no visitation of the examinations for the single licence has yet been made; but they hope the Scottish Branch Council will arrange that this omission shall not again occur. It is under-

(a) By the regulation, University candidates are allowed, under certain conditions, to postpone their examination in physiology until the first M.B. Examination of a subsequent year.

(b) In this return, those gentlemen having the letter D prefixed to their names in both columns were candidates for the double qualification in Medicine and Surgery of the Royal College of Physicians and Surgeons of Edinburgh.

(c) Final examination for M.D. under old regulation.

stood that there is no practical clinical examination at present. The Committee trust that the College will take into consideration the propriety of following the example set them in this respect by so many other licensing bodies.

Royal College of Surgeons of Edinburgh.

The examination for the single licence was only reported on last year, and even then not completely. Judging from that single report, the number of written questions seems to have been too small; but Dr. Andrew Wood stated to the Committee that since last year the number of questions had been increased. The College have not hitherto instituted practical and clinical Surgical examinations; but the Committee are informed that arrangements have been made for commencing them at the autumn examinations on a plan similar to that pursued at the University of Edinburgh.

Double Qualification of the Royal Colleges of Physicians and Surgeons of Edinburgh.

The preliminary examination and the second Professional examination have been reported on, and are satisfactory so far as they go; but the Professional examination, to be complete, requires that practical examinations in Medicine and Surgery shall be introduced. The first Professional examination has not been reported on.

Faculty of Physicians and Surgeons of Glasgow.

No report has been given of the preliminary examination in arts. The reports on the Professional examination show them to be satisfactory as far as they go; but here, also, there is a want of practical and clinical Medical and Surgical examinations.

III. THE IRISH LICENSING BODIES.

In some respects the reports of the Irish examinations are defective, so that it is difficult for the Committee to make a sufficient report on all of them. They trust the attention of the Irish Branch Council will be seriously directed to this matter.

University of Dublin.

The Committee observe that by Act of Parliament a student may commence his Professional study without a previous examination in arts; the occurrence is rare, but the Committee think attention should be called to it. The mode of carrying on the oral examination is peculiar to this University. It is conducted in class, and the Committee believe cannot be so efficient as the ordinary method of examining each candidate apart. This examination is conducted in public.

The practical and clinical examinations in Surgery are excellent, and the Committee observe that operations on the dead body are required. There are no clinical examinations in Medicine. A chemical laboratory has been recently erected by the Provost and Board of Trinity College, for the instruction of the students in practical chemistry; and Dr. Apjohn has informed the Committee that the examinations in chemistry will henceforward be so conducted as to test the acquirements of the students in the practice as well as the theory of the science.

Queen's University in Ireland.

The Committee are informed that a student may follow his Professional studies for two years before passing his preliminary examination in arts. The attention of the University should be directed to the evil of this, as permitting insufficiently educated persons to enter on Professional studies.

The oral examinations are reported by the visitors to be too short. There are operations on the dead body, but there are no clinical Medical or Surgical examinations.

King's and Queen's College of Physicians.

The preliminary examination in arts is left to other bodies. It would appear that there is no written Professional examination, but from the unavoidable incompleteness of the report, the Committee are unable to form any correct opinion of the examinations of this licensing body. The examinations are open to all the Fellows and Licentiates of the College.

Royal College of Surgeons.

There is no report on the preliminary examination. The number of written questions in the first Professional examination is small; there are only two questions in anatomy, one in physiology, and one in Materia Medica, and one hour only is allowed for the answers. At the oral examination it appears that there is only one examiner at each table; and the decisions are given, without conference, by simple "Yes" or "No." The Committee have learned from Mr. Hargrave that, since the visitation, the decisions are made by marks, and that a member of the Council sits at each table with the examiner. The second Professional examination, in Surgery, Medicine, and Materia Medica, is conducted exactly in the same time and manner. There is no mention of practical and clinical Medical or Surgical examinations. No teacher is allowed to be an examiner.

Apothecaries' Hall of Ireland.

No report has been made on the examinations of this body.

GENERAL SUGGESTIONS.

Combination of Licensing Bodies.

Referring to the number of licences, the Committee are of opinion that the Council should strongly encourage every effort now being made, or about to be made, under Clause 19 of the Medical Act, to combine the examinations of the licensing boards, so as to secure that every Practitioner whose name appears on the Register shall have been tested in all the branches of the Medical Profession. It is of importance that the licensing bodies, at present too numerous, should be concentrated by such combinations. The examinations would thus be more easily supervised, and there would be a better guarantee for efficiency.

Practical Examinations.

The Committee are of opinion that practical examinations are highly desirable in all the subjects in which they can be employed, and that in no other way can the examinations in these subjects be made completely satisfactory.

Under the term "practical" would be included all the examinations in which a candidate performs experiments or operations, or describes dissections or drugs, or performs post-mortem examinations, or examines with the microscope, or points of the like kind. It will be well, however, to illustrate by a table more particularly what is meant.

Subjects.	*Practical Work.*
CHEMISTRY	Actual laboratory work.
MATERIA MEDICA.	Actual compounding of prescriptions; pharmaceutical processes; naming and describing drugs.
BOTANY.	Recognition and description of plants.
ANATOMY	Dissections and preparations.
MEDICINE & CLINICAL MEDICINE	Examination of patients; microscopic and chemical examinations; pathological specimens.
SURGERY & CLINICAL SURGERY	Examination of patients; pathological specimens; bandaging, &c.; operations on the dead body, &c., &c.
MIDWIFERY	Operative midwifery on models.
FORENSIC MEDICINE	Laboratory work, microscopical and chemical examinations.

It is satisfactory to find that less difficulty has been experienced in arranging for such examinations than had been anticipated. The methods employed by different bodies are somewhat different, but the results in each case have been satisfactory. While the Committee express their satisfaction at this improvement, and their hope that progress in this direction may continue, they do not advise that any rule should be laid down, or suggestions as to the mode of conducting these practical Medical and Surgical examinations, or as to the extent to which they should be carried. When the reports of all the visitations have been sent to the licensing bodies, the several methods now followed by some will be considered by all, and the best parts of each plan adopted.

The Written Questions.

The Committee have been impressed with the importance of having the questions put in the most precise manner, so that the candidate may understand exactly what he is required to answer, and may be able to give precise and concise replies. They refer to the mode in which the questions are put by Professor Christison (*vide* the Report on the University of Edinburgh, April, 1866), for examples of the plan which they think might be followed with advantage in many instances.

The attention of the Committee has been called to the necessity of preventing copying. Among other means, the arrangement of candidates by numbers or alphabetically has been found useful in detecting collusion.

The Committee have found it inconvenient not to have the questions attached to all the reports of the visitors, and they advise that this should be done, at any rate for next year, in order to afford data for judging of the amount and quality of the written tests.

The Oral Examination.

The Committee recommend that not less than two examiners should be present at every oral examination of a candidate. A decision should be based on the opinions of both examiners after consultation.

Uniform Standard of Judging the Results of Examination.

In several of the reports—viz., on the Society of Apothecaries, London, on the College of Surgeons, England, and on the University of Aberdeen—reference is made by the visitors to the advantage of some uniform standard. There may be difficulties in framing one which is free from objection; but there is no doubt that even an imperfect rule is better than none at all, and the Committee decided by a large majority that such a standard is desirable.

In making the following suggestions on such a standard, the Committee regard them as merely the means of eliciting the opinions of the licensing bodies on a matter of great importance. In placing a scheme before them, and entering into some detail, the Committee do so merely as a basis for discussion, and in the hope that it will lead, eventually, to a common action on the part of all the licensing bodies.

The numerical method of estimating the results of an examination is the most accurate and the most free from objections; it is now employed in all the Government competitive examinations, and is also used by the majority of the Medical licensing bodies. The mode of using it, however, is different in each case; but, as the principle has been admitted by so many licensing bodies, it is believed that they will raise no objection to making such alterations as may render the results of the examinations comparable. Those licensing bodies which use such expressions as good, moderate, bad, or *optime*, *satis bene*, &c., not resting on a numerical basis, will, we conceive, have no difficulty in fixing a corresponding numerical value.

The method usually followed when a numerical standard is used is to assign to each subject a certain number of marks which represents the total number which a candidate can gain in that subject if he answers the questions as perfectly as is possible in the time.

But there are advantages in another plan—viz, fixing the number of marks according to the time during which the examination is carried on, so that the total number of marks indicates at once the length of time the candidate is under examination, as well as the character of the answers.

The advantages of this, for the purpose of the Medical Council, will be best seen by an example.

Supposing the first plan to be adopted, and on the subject of Surgery, for example, a total of 1000 marks is allowed by all the licensing bodies, no comparison is still possible between the results; for one body may give the whole 1000 marks to an oral examination only; another may distribute them among a written, an oral, and a practical examination. In the record, however, as presented to the Medical Council, the candidates from each body may appear to have gained an equal number of marks although the examinations have been widely different in severity.

This is avoided by the system of marks for time.

Supposing 100 marks are given for every hour of written examination in Surgery, 200 for every hour (or in proportion for less periods) of oral, and 200 for every hour of practical examination; the numerical record of such examination will at once show the nature of the examination, and its different parts will be comparable with each other, no matter what the respective arrangements of the two licensing bodies may be.

For example, one licensing body may choose to give on a particular subject, three hours of written, and fifteen minutes of oral examination. The records of its marks would show 300 for the former and 50 for the latter. Another body might give two hours written, fifteen minutes oral, and half an hour practical examination, the marks being 200, 50, and 100 marks, or the same as in the former case, only differently distributed. The parts of the two examinations are then comparable.

The plan will, in fact, be found to show not only the standard of proficiency, but the differences of the examinations, and it has the advantage of not fettering too much the opinions and methods of examination of the different licensing bodies.

The number of marks to be assigned to a particular time is a matter of importance. They should not be too few, or the wide differences of different candidates will not be properly indicated; they should not be too many, or they become unwieldy. The written examination also ought to have fewer marks assigned to it in a given time than the oral and the practical. The Committee believe that the best plan will be to

assign 100 marks per hour for the written examination on every subject, leaving it to the examiners to fix the number of hours and the number of questions in the hour, and the marks to be given to each question, it being understood that the whole 100 marks must be assigned between the questions, or be given to one question if there be only one in the hour.

In the oral and in the practical examination double the number should be given, or 200 per hour. Thus, if a candidate is under examination for fifteen minutes, he could gain 50 marks as the maximum; if for thirty minutes, he could gain 100. The Committee believe this may afford an approximate expression of the numerical relation between the respective tests of the written and oral methods.

The Committee would recommend, in the event of a numerical plan being approved of, that each licensing body should keep a book with the marks properly arranged in a form such as the following, in which three subjects only are introduced as an illustration:—

Date.	Name.	Anatomy.			Medicine.			Surgery.		
		Written. marks.	Oral. marks.	Practical. marks.	Written. marks.	Oral. marks.	Practical. marks.	Written. marks.	Oral. marks.	Practical. marks.

This record would show at once both the kinds of subjects and the time occupied in each.

With regard to the minimum percentage of marks qualifying for the licence, whatever numerical method may be adopted, the Committee consider it desirable to ascertain the opinion of the licensing bodies.

It may be objected to the plan now submitted for consideration that different examiners will assign different values to answers. This objection is inseparable from the system of examinations, and applies to all modes of expressing results. But the mere fact of an examiner having to keep a fixed numerical value before him will be found to be of the greatest use to himself, and after practice it will be found that the opinions of good examiners are singularly accordant. If also in all cases two examiners examine every candidate and come to independent conclusions before final judgment, the system will soon be found to work with accuracy and to afford trustworthy results.

The Choice of Examiners.

There is a very great diversity in the mode in which the examiners are selected by the different licensing bodies. Sometimes they are persons unconnected with the licensing body, but chosen by it to serve for a specified time from one to five years. In other cases the Professors of a University either examine alone or with the assistance of examiners who are not Professors. In other instances, again, a Corporation appoints examiners from its own body, and these serve for various periods. There is, in fact, a great diversity in the modes of appointment, and the examiners of different bodies are necessarily persons of very varying capacity and experience. To attempt an alteration in one body without altering all would be invidious, and the Committee refrain from offering any suggestion to any particular Corporation. But the Committee believe that, when practicable, the following points should be attended to in the selection of examiners:—

1. There should be some teachers in every examining board.
2. The appointments of those examiners who do not belong to the licensing body should be for a definite period, with power of re-appointment.

The Committee have only, in conclusion, to express the hope that the reports of the visitors for next year, together with those of previous years, will be such as to place before the Council a full view of the system of examination in all its branches pursued by all the licensing boards. That progress has already been made in the improvement of some of the examinations since the commencement of the visitations by the Medical Council is obvious; and it is no less obvious that much still remains to be accomplished, especially in the way of extending practical examinations in all departments.

The Committee recommend that a copy of this report, as submitted to the Council, be sent to each of the licensing bodies, with the request that they will express their opinion regarding the suggestions contained in it on or before January 1, 1868. The Committee further suggest that the answers received from the licensing bodies be thereafter printed and circulated amongst the members of the General Council.

ANDREW WOOD, *Chairman.*

Dr. FLEMING: Of course Dr. Storrar's motion does not imply that this report is to be entered on our Minutes, because there are some things in this admirable report which I should not like to appear standing as a record of our proceedings. I have had some conversation with the Chairman of this Committee, and I think it would be better that the report should be read, printed, and sent down to the various licensing bodies for remarks.

Dr. ALEXANDER WOOD did not think the Council could take any such course as that suggested by Dr. Fleming. To read and discuss a report without entering it on the Minutes was quite irregular.

The PRESIDENT: I have a motion from Dr. Andrew Wood which is different in terms from that of Dr. Storrar. It is to postpone the consideration of this report until next session.

Dr. STORRAR offered to withdraw his motion.

Dr. ANDREW WOOD: It seems to me quite a novel thing that you should appoint ten gentlemen to labour four or five days unceasingly to prepare a most elaborate report, of which I see no reason to be ashamed—(hear, hear)—and then to endeavour to burke that report. I say, whether you enter it on the Minutes or not, this report will go forth to the world in the pages of the Medical journals. (Applause.) Dr. Fleming, I dare say, disapproves of a great deal of it, and so do many round this table——

Mr. HARGRAVE: Indeed, I do for one. (Laughter.)

Dr. ANDREW WOOD: But, recollect, the Council, by having it on the Minutes, do not adopt it. There will be a large amount of discussion, no doubt, upon it next year, and I think the better way will be simply to pass Dr. Storrar's motion, and then I will bring forward mine.

The REGISTRAR then read the report.

Dr. PARKES said the Chairman of the Committee wished to withdraw the tables, as, from the short space of time available for their preparation and revision, they were not as accurate as he could wish.

Mr. SYME: I should be very uneasy indeed if I thought I was considered as subscribing to this report.

Dr. ANDREW WOOD then moved, and Dr. PARKES seconded, "That the consideration of the Report of the Visitation of Examinations be postponed till next session. That, in the meantime (along with the reports of the visitors of examinations), that report be sent to the various licensing bodies, with a statement that it has been drawn up by a committee, but has not yet been considered by the Council, who are desirous, before discussing the suggestions contained in it, to ascertain the opinions of the licensing bodies regarding them."

A considerable amount of conversation then occurred. Mr. Hargrave complained of the way in which the visitation of the King's and Queen's College of Physicians was referred to in the report, which, he said, was "garbled," and refused to retract the word when appealed to by Dr. Andrew Wood. At length the matter was arranged by the introduction of the word "unavoidable" before "incompleteness" in the passage complained of. Other verbal alterations were made to meet the views of various members of the Council. Dr. Bennett especially objected to the report on the mode of conducting the examinations by one examiner at the College of Physicians of London, which report, however, was defended by the visitors, Mr. Cæsar Hawkins and Dr. Storrar. At length the motion for postponement was put and carried *nem. con.*

THE EXECUTIVE COMMITTEE—VOTES OF THANKS—GRATUITIES.

It was then moved by Sir J. D. CORRIGAN, seconded by Mr. Hargrave, and agreed to—"That the powers and duties delegated to the Executive Committee, in accordance with Section 9 of the Medical Act, shall be vested in the Committee until the next meeting of the General Council."

Mr. CÆSAR HAWKINS then moved—"That the Executive Committee be authorised to apply to the licensing bodies for such information as may be necessary for the due execution by the Committee of such business as may be delegated to them."

Dr. AQUILLA SMITH seconded the motion.

Carried unanimously.

Dr. Aquilla Smith was elected in place of Dr. Apjohn, who resigned on the Pharmacopœia Committee.

It was then moved by Dr. AQUILLA SMITH, seconded by Dr. EMBLETON, and agreed to—"That the fifth volume of the Minutes of the General Medical Council, the Executive Committee, and the Branch Councils, with a complete index up to the end of the year 1867, be published without any unnecessary delay."

Dr. A. SMITH then moved, and Dr. ACLAND seconded, a vote of thanks to the Treasurers, Drs. Sharpey and Quain, for their important services, which was unanimously agreed to by the Council.

A vote of thanks, on the motion of Dr. A. SMITH, seconded by Sir J. D. CORRIGAN, was also unanimously awarded to the Royal College of Physicians for their obliging and courteous accommodation during the present session.

It was then moved by Dr. A. SMITH, seconded by Dr. ALEXANDER WOOD, and agreed to *nem. con.*—"That a gratuity of twenty guineas be given to the resident officials of the College of Physicians for services rendered to the Council."

Dr. SHARPEY: The motion which I have the honour to propose is a little different in terms from that which stands upon the programme. After due consideration with my colleague,

Dr. Quain, it has appeared to us that a recognition of the services of Mr. Bull and Mr. Roope, the clerks, had better be deferred until next year. Because, although the sale of the Pharmacopœia has now exceeded 8000 copies—it is nearly 9000—it is not yet complete, and we think it better to offer some recognition to these gentlemen of their great zeal on all occasions. We will consider the matter next year, and I now only move that gratuities of twenty guineas to Mr. Bell and Mr. Roope be made in consideration of the efficient way in which they have discharged all the extra work of carrying on the registration of Medical students.

The motion was seconded by Dr. Quain, and, having been put to the Council, was carried unanimously.

Dr. Sharpey: I see there is another motion put down to my name, and although it was done without previous communication with me, I am very much delighted to have the opportunity of moving it, and most anxious to fulfil my duty in that respect. It is, "That the cordial thanks of this Council are due, and are hereby tendered, to Dr. Andrew Wood for his unwearied and invaluable services as Chairman of the Business Committee during the past session of the Council." Really, I think this needs no comment from me. (Applause.)

Dr. Storrar: I have much pleasure in seconding that.

Dr. Acland: I think we should all be anxious to second that motion, except Dr. Wood.

The motion was carried by acclamation.

Dr. Andrew Wood returned thanks, and then, in suitable terms, proposed that the thanks of the Council are hereby cordially tendered to the President for his kind, courteous, and efficient services during the present session. (Loud and enthusiastic applause.)

Mr. Hargrave: I have great pleasure in seconding that.

Carried amidst loud and long-continued cheering.

The President, after expressing his thanks for the vote, said: Before I conclude my expression of cordial thanks for the motion just passed by the Council, I wish to state to you that it has been suggested to me from high quarters, that it would be a gracious act on the part of this Council if we presented foreign Medical bodies—the representatives of the Profession in the great metropolises of Europe, and perhaps America, with a copy of the British Pharmacopœia. (Hear, hear.) It would make known to them what we are doing in England, and might be the means of bringing about a better understanding between the great bodies of Europe and America and ourselves. Therefore, I hope you will permit me, without any formal motion, to exercise my discretion in requesting the Registrar to send a copy of our new Pharmacopœia to those bodies. (Applause.) I thank you very much indeed for the kind and considerate manner in which you have accepted my services here; and if, either by my manner, or by my words, or by my expression, I may, in endeavouring to keep order and regularity, have hurt the susceptibilities of any gentleman round this table, I hope he will accept my apologies, and feel that what I did was for the purpose of conducting these proceedings with order and dignity. I now wish you farewell, with the hope of meeting you all here next session. (Much cheering.)

Treatment of Phymosis by Compression.—Dr. Elliot Comes, Assistant-Surgeon, U.S A., describes an ingenious mode of overcoming phymosis without a cutting operation. "I introduced," he says, "within the constricting ring the closed points of an ordinary spring forceps. A few minutes' manipulation produced a sensible enlargement of the stricture, encouraged by which I left the instrument *in situ*, where it was retained by the resiliency of the blades, which was to be also a continuous operative force. The patient was directed to occasionally employ a moderate degree of manual force by pulling the blades apart, and to assiduously foment the parts with warm water. The procedure produced no pain or other inconvenience. In three hours the glans could be exposed; and shortly afterwards the whole popped out of its awkward hood, and the prepuce was fully retracted. A relapse of the phymosis was prevented by occasional recourse to the forceps. Taking a hint from this application, I have devised a simple little instrument, by which any degree of dilating force may be employed and graduated to a nicety. It is merely a pair of callipers, about 3 inches long, probe-pointed, the two blades flat, bevelled on their outer edges, divaricating from each other by means of a screw placed near their hinge, running through one blade and shutting against the other."—*Boston Journal*, April 25.

ORIGINAL COMMUNICATIONS.

ON DISGUISED DISEASE OF THE HEART.

By ARTHUR LEARED, M.D., M.R.I.A.,
Senior Physician to the Great Northern Hospital, and Physician to the Royal Infirmary for Diseases of the Chest.

Disturbance of digestion is well known to be a very common complication of disease of the heart. The cardiac distress is too often supplemented by a sense of oppression after meals, flatulence, and other gastric symptoms. But many cases have occurred to me in which the heart affection was so strangely masked by that of the stomach that nothing in the statements of the patients had any bearing on the primary disease. My attention was first drawn to the subject by the following case.

Case 1.—An omnibus driver, of spare habit and about 60 years of age, came under my care at the Royal Infirmary for Diseases of the Chest. He complained chiefly of severe epigastric pain after meals, which was relieved but not removed by treatment. His heart was not examined, as he never in any way referred to it. While one day driving his omnibus in St. Paul's Churchyard, he fell insensible from his seat, and expired before he could be conveyed to St. Bartholomew's Hospital. At the post-mortem examination of the body, in which I assisted, the stomach seemed quite natural, but the aortic orifice was partly blocked up by atheromatous deposit, and the valve was very incompetent.

Case 2.—In August, 1860, soon after the occurrence of the preceding case, I was consulted by an officer in the army, 38 years of age, who had suffered from the Indian climate. He complained of flatulence, a sense of distension after meals, and constipation. On examining the heart, I found a bellows murmur instead of the first sound. It was most distinctly heard over the base. The pulse was slightly intermittent. This patient greatly improved under appropriate treatment, and became heavier than he had been for years. My directions that he should avoid severe exercise were not always adhered to; but, although I saw him frequently, he never complained of his heart. He called to consult me for the last time in May, 1861, but I was not at home. Four days afterwards he was found dead in his bed.

Case 3.—In February, 1861, Mr. S. was brought to me by his Medical attendant on account of aggravated dyspepsia. The chief symptom was severe burning pain in the epigastrium after food. No reference was made to the heart. On his next visit, soon afterwards, a bellows murmur with, but distinct from, the first sound of the heart was discovered; it was most audible $1\frac{1}{2}$ inch to right of the nipple, and on a slightly lower level. I saw this patient occasionally for nearly three months, when he was lost sight of. The stomach symptoms greatly diminished under treatment, but the abnormal cardiac sound increased, and the action of the heart was occasionally intermittent. He complained also of throbbing at the epigastrium, and of giddiness.

Case 4.—In April, 1861, Mr. A., a captain in the merchant service, 39 years of age, was sent to me by Mr. Allison, of Barrow. The patient complained only of severe epigastric pain, and also of pain shooting from the epigastrium to a point between his shoulders. He was not troubled with flatulence, but a good deal by heartburn and acidity. The bowels were constipated, a loud bellows murmur was found to have replaced the second sound of the heart; it was loudest over the base of the organ, and at the top of the sternum. There was visible pulsation of the radial arteries. The diagnosis of aortic valve incompetency was made. Mr. Allison informed me by letter that this patient died suddenly soon afterwards.

Case 5.—In March, 1863, I was consulted by a Polish gentleman for severe gastric pain after food which had existed for years. It was supposed, he said, by the late Dr. Todd to be caused by ulcer of the stomach. He was greatly excited by the ineffectual appeal to arms then being made in Poland, and spoke with intense feeling on the subject. Besides the pain, he had troublesome acidity, but without flatulence. There was obstinate constipation. Bellows murmurs were found to have replaced both sounds of the heart, and were most audible over the base. That which had replaced the first sound was hardly to be heard at the apex. The action of the heart was intermittent, at rather long intervals. No complaint whatever was made about the heart, and on being

questioned he stated that it gave him no inconvenience. The visible pulsation of his arteries, especially in the angle between the left thumb and forefinger, had arrested his attention for about two years. I did not see this patient a second time, and three months afterwards observed his death in the obituary of the *Times*.

Case 6.—Mr. P., a healthy-looking man, aged 65 years, consulted me in March, 1862, for pain after food, with epigastric tenderness. I found a bellows murmur instead of the first sound of the heart, and it was heard most distinctly at top of the sternum. He said he did not feel palpitation; but that he occasionally had a slight pain in the cardiac region. This patient's stomach symptoms improved, and I lost sight of him after some months.

Case 7.—A gentleman of spare habit, 62 years of age, actively engaged as a merchant, consulted me in January, 1864. He had been for some time suffering from severe pain coming on about two hours after food. Commencing in the gastric region, it extended over the lower parts of the chest, and especially towards the heart; the pain was attended by great flatulence, the bowels were regular, and the tongue clean, but unnaturally red at the tip. I found on examination that a loud rasping bellows sound, which was heard most plainly over the base, had replaced the second sound of the heart, the action of which was intermittent. He nevertheless stated positively that he was not conscious of any symptoms directly referable to the heart, and his wife informed me that he had not complained of any. Under the use of the oxide of manganese, this patient greatly improved, although liable to a recurrence of the pain from slight irregularity of diet and other causes. His death was announced some time since, but under what circumstances I am not aware.

Case 8.—In July, 1865, I was consulted by Mrs. C., 44 years of age, on account of pain after food, with great flatulence, frequently accompanied by nausea and heartburn. She was very sleepless at night, owing to the persistent gastric pain. None of the ordinary symptoms of cardiac disease were present. On examination, a murmur was discovered at the base of the heart instead of the first sound, while at the apex the second sound could alone be detected. Under the use of manganese, with great attention to diet, this patient improved considerably, but she has been lost sight of for some time.

Case 9.—In January last, a man, 45 years of age, came under my care as an out-patient, at the Royal Infirmary for Diseases of the Chest, for extreme epigastric pain. He made no complaint of anything else, and stated that the pain was greatly aggravated by taking food. I saw the man only a few times, but as he improved a good deal under the use of manganese, the affection appeared so manifestly gastric, that a long-observed rule of mine to examine the heart in all cases of severe epigastric pain was unfortunately departed from. This patient died quite suddenly, and at the post-mortem examination I discovered the following state of the internal parts:—The left ventricle of the heart was greatly enlarged, while the mitral valve was healthy. The aortic valve was competent, and apparently healthy; but immediately beyond its attachments the aorta was dilated into an enormous pouch, involving the entire arch and a portion of the descending vessel to the length in all of ten inches. This great aneurism, which I exhibited at the Pathological Society, involved all the arterial coats, and had the peculiarity of being so narrowed at a point corresponding with the left subclavian artery as to present an hour-glass appearance. Death resulted from rupture of the sac and hæmorrhage into the posterior mediastinum. The patient's wife has assured me that all through his illness, of several months' duration, he complained only of his stomach.

Dr. Broadbent, who was present at the Medical Society of London when I brought the subject forward, was kind enough to furnish me with the details of a case in point, which, with his permission, is here given:—

"A woman came under my care complaining of pain in the stomach, at times extending to the left shoulder-blade, coming on after meals. There was nothing to call my attention to the heart, and I made no examination. She died suddenly a few days afterwards, after fasting longer than usual. At the post-mortem examination I found all the valves of the heart healthy, but there were numerous patches of atheroma in the aorta, and lower down near the heart there was extensive erosion of the inner coat, the margins of the erosions being irregular, raised, of a bright red colour, and the seat of considerable fibrinous deposit. The lower border had reached the coronary arteries, one of which was almost completely occluded by the fibrin, and to this I attributed the sudden death. My conclusion was that the pain was due to the condition of the aorta, which had simulated gastric pain, not that the stomach was secondarily affected. I have not since had any cases in which heart disease gave rise to pain likely to be mistaken for that attending some forms of dyspepsia, but I have observed that when heart disease is attended with pain in the side it is usually the aortic valve which is affected, and I was much struck with the fact that in all your cases that valve was apparently the seat of disease."

In all the foregoing cases, with one exception, pain in the stomach, increased by taking food, was the prominent symptom. What was the cause of this pain? Was it the result of irritation reflected from the heart by nervous connexions, for which we need be at no loss to account? Or was it due to a defect of digestion, itself secondary to the cardiac disease? One of the commonest and most refractory affections with which the Physician has to do, is infra-mammary pain on the left side. Dr. Martyn describes it as "a reflex neuralgia, expressive of some distress in the heart,"(a) and, in proof of his position, has pointed out the nervous connexion between the heart and the tissues of the sixth, seventh, and eighth intercostal spaces. And if mere functional disturbance of the heart is, as Dr. Martyn supposes, sufficient to cause this pain, probably organic disease of the organ would be a still more efficient cause. Dr. Broadbent, too, has observed that pain in the side is often associated with aortic valve disease. So much, then, for the theory of the production of pain elsewhere than in the heart itself by reflected cardiac irritation. But the nervous relations of the epigastrium do not bear it out, as they do in cases of infra-mammary pain. Moreover, the pain was proved to be really gastric in the present instance, not merely by position, but by its close relation to the process of digestion and by the effect of treatment directed to the stomach. Except in being more severe, it seemed in nowise to differ from ordinary gastralgia—I believe, in fact, that its immediate cause was that which often produces the merely local disease.

If the reducing power of the stomach be impaired from deficiency of its solvent fluid, the contact of food becomes painful. Now, it is well ascertained that congestion greatly interferes with the secreting power of glands. In the cases before us, gastric congestion was very likely to happen mechanically from defective circulation. Occasionally in disease of the heart we see the presence of such congestion proved by the occurrence of hæmatemesis.

There is, indeed, another way in which the congestion may be caused. The dimensions of the capillary vessels of the stomach, in common with those in all parts of the body, are regulated by the vaso-motor nerves. Now, the experiments of Bernard have shown, in an especial manner, that the secretions of glands may be arrested by irritating the ganglionic nerve from which they derive their supply. The connexions of the solar plexus with the cardiac nerves may in this way be the cause of gastric congestion, just as, conversely, the stomach is so often the source of disturbance in the heart. It is quite possible that, either separately or conjointly, both causes of congestion come into play. But, in either case, the result would be imperfect supply of gastric juice, with consequent delay in the reduction of food and accompanying pain.

It is not easy to say why in these cases the ordinary symptoms of heart disease, such as a sense of uneasiness, or even pain, in the cardiac region, palpitation, or intermittent action, &c., were wanting. Perhaps the gastric irritation prevented their development on the principle on which artificial counter-irritation acts beneficially.

By the aid of improved modes of diagnosis it is generally possible in valvular affections to determine whether, in a given case, the mitral or the aortic valve is affected. It is remarkable that in all my nine cases the physical signs pointed to aortic valve disease or to that of the orifice of the vessel; or the valve, or the aorta in its immediate neighbourhood, was found diseased on post-mortem examination. In the first case the semilunar valves were found diseased after death; in the second the gentleman who made the post-mortem examination for the coroner's inquest informed me by letter that although after the lapse of some time he could not speak with absolute certainty, he believed that the semilunar valve was the seat of disease; and this accorded with my observations made during life. In Cases 4 and 5 position of greatest intensity of murmur taken with the visible arterial pulsation, made the diagnosis as nearly absolute as possible; while in Cases 3, 6, and 7

(a) *Brit. Med. Journ.*, Sept. 10, 1864.

position of greatest intensity of sound rendered the same diagnosis most probably correct. The physical signs in Case 8 pointed to obstruction of the aortic orifice. In Case 9, and in Dr. Broadbent's case, the aorta was proved to have been diseased close to its origin. Absolute pain is no necessary accompaniment of disease of the heart; but one of the most usual morbid appearances in that painful affection—angina pectoris—is a disorganised state of the aortic valve, or of the cardiac end of the aorta itself. The violent gastric pain described has therefore a curious relation with angina pectoris.

It is no unfrequent thing to meet with patients unconsciously suffering from diseased heart. Sometimes palpitation itself is singularly passed over. They complain, perhaps, only of breathlessness or other pulmonary symptoms, and of general indisposition; but with the experienced Physician the real malady rarely escapes observation, and the stethoscope soon confirms the diagnosis. Attention was exclusively directed to the stomach in the cases related, and this circumstance characterises them especially. In all cases, therefore, in which epigastric pain after meals is marked, I have, as already said, made it a rule to examine the heart. This led to my discovering cardiac disease in all the cases in which it was detected before death, with one exception, in which Mr. Allison made the diagnosis. There can, indeed, be no doubt but that many cases of supposed simple gastralgia depend on unrecognised disease of the heart or of the root of the aorta. The observations upon which this statement rests have been carefully noted, and, as may be seen, extend over a lengthened period.

Another deduction from the foregoing is this—severe gastralgia associated with disease of the heart indicates disease of the aortic valve or of the adjoining parts.

It is a curious fact that while eight out of the ten cases (Dr. Broadbent's included) have ended fatally, in six, whose final history is known, one death happened suddenly. If this observation is confirmed by further experience, gastralgia in heart disease will form an important element in prognosis.

12, Old Burlington-street.

HEREDITARY SYPHILIS IN RELATION TO SO-CALLED STRUMOUS DISEASES, AND IN RELATION TO ACQUIRED SYPHILIS.

By FURNEAUX JORDAN, F.R.C.S.,

urgeon to the Queen's Hospital, and Professor of Clinical Surgery at the Queen's College, Birmingham.

The propositions I now put forward, with intentional brevity, I advance in a spirit of inquiry. They have been arrived at at the bedside and in the out-patient room. I possess, and I am still observing, illustrative cases which I shall publish hereafter.

I assume that certain now well-known marks of hereditary syphilis are true—namely, the singly notched, or round, or cuspless incisors (also, I believe, early dental caries, especially of front teeth), earthy skin, often with marked pallor, sometimes with more or less of rose colour, thick or flat nasal bridge, cicatrices of lips and angles of mouth; history of infantile syphilitic phenomena, with collateral history of miscarriages, and children born dead, or dying soon after birth, and interstitial keratitis from ten, or earlier, to twenty, or later. I have, however, in numerous cases of so-called struma examined parents and grandparents, where living (for in syphilitic families death is more than usually active), and have satisfied myself of the truth of the above signs, as well as of the following conclusions.

It is an apparently complex inquiry to ascertain the existence of syphilis, acquired or hereditary, or both, in a given individual's parents, and the parents of each parent. It is really not so complex as it seems, because the syphilitic history of the grandparents is seen in the parents, and I believe that, under certain circumstances, the syphilitic history of the grandparents may be read in the grandchild also.

Among the diseases which observation leads me to regard as essentially syphilitic, are caries—of any bone and at any age—and, of course, the results of caries, angular curvature, psoas and lumbar abscesses and others; phthisis in any form or at any age; tubercular disease everywhere—lungs, brain, glands, mesenteric or other—chronic hydrocephalus, fistula in ano with or without phthisis, enlarged glands, eczema, strumous ophthalmia, ophthalmia tarsi, and the great majority of ulcers, on the leg or elsewhere. Rickets, and spinal curvatures generally, are probably due to inherited syphilis. Among diseases not usually regarded as strumous, which I have constantly found associated with hereditary syphilis, is the choroido-sclerotitis so often present in myopia.

In a great number of hereditarily syphilitic persons, particularly where the earthy skin is a prominent feature, dyspepsia and headache, together or separately, are marked and often inveterate complications, often interfering with the treatment of associated Surgical conditions. I suspect that such forms of dyspepsia and headache often present themselves to the Physician. The dyspepsia is often associated with phthisis, the phthisis and the dyspepsia being due to a common cause. It would seem that where the skin is markedly earthy the mucous membranes also appear to deviate from a normal state.

Where so-called strumous diseases are combined, as phthisis and articular caries, or vertebral caries and joint disease, or phthisis and fistula in ano, it will be found that the inherited syphilitic taint is strongly marked.

I am quite sure that the inflammatory process generally is more prone to occur and to be severe and protracted in hereditarily syphilitic persons. I have particularly observed this in cellulitis, pelvic cellulitis, erysipelas, and abscess. Wounds of every kind, from the most trivial to the largest, as in amputations, heal more slowly and with more accidents and complications in hereditary syphilis. The "bad flesh" of popular language has its origin in syphilis.

The diseases to which I now more particularly draw attention as syphilitic diseases are caries and phthisis—diseases which may be considered the most important and the most representative of so-called strumous diseases.

It is admitted that acquired syphilis is capable of giving rise to at least certain kinds of caries and phthisis. Cases, if I have observed them aright, now lead me to ask if the virus transmitted to the second and third generations (or possibly further) is not the sole or almost invariable cause of both.

The cases, which I shall in due time bring forward, appear to me to establish two general rules—(1) that phthisis, caries, enlarged glands, eczema, and probably most other so-called strumous diseases, when they occur in adult life, are due to directly inherited syphilis; and (2) that the same diseases when they occur in infancy are due to the presence of hereditary syphilis in both parents, or to strongly marked hereditary syphilis in one, or to hereditary syphilis and acquired syphilis in one, or to hereditary syphilis in one and acquired syphilis in the other. The diseases due to hereditary syphilis in both parents—and these comprise most of the so-called strumous diseases of children—may be delayed to the ninth or tenth year, and those produced directly by hereditary syphilis may be seen as early as the tenth or ninth. When disease, however, occurs at this intermediate age, it will often be found that there is hereditary disease in one parent and acquired or hereditary and acquired in the other. The more frequently fresh virus is added to the transmitted virus in any of the six proximate parents (if I may use such a term) the more probable will be the manifestation of so-called strumous disease.

Caries is syphilis. The caries of acquired syphilis is mostly superficial; the caries of adults from hereditary syphilis, and also the caries of infancy or early life from syphilis in one of the grandparents on both sides, occurs in the extremity of the diaphysis—namely, on the shaft side of the line of union of the epiphysis with the shaft—and tends to involve the shaft more than the epiphysis. While, however, the anatomical locality is similar in these two classes, the results are widely different. I have already sought to show (*Medical Times and Gazette*, March, 1867), that in hereditary syphilis the caries occurs in the young adult from 10, or a little earlier, to 30, 40, or later; that the disease is osteitis tending to caries, though it may, and frequently does, terminate in resolution or sclerosis; that it originates in the extremity of the diaphysis; that it is extremely slow; that it frequently does not affect the adjacent joint, or does so at a late period; that the smaller joints—wrist, elbow, shoulder, and ankle—are more frequently involved. Although the hip and knee more frequently escape disease when the extremities of the femur are inflamed, yet occasionally joint symptoms in the knee or hip are the first indications of inflamed bone. All joint diseases depending on inflamed bone are of syphilitic origin. Articular disease, moreover, which does not depend on osteal change, is very rare. Most forms of synovitis, excluding the traumatic, pyæmic, and it may be one or two others, are really cases of osteitis in which the synovial symptoms are the most prominent,

and those of osteitis are very slight. This is essentially true of the chronic forms of synovitis of the knee of the adult.

Seeing that the osteitis and caries of the long bones commences in children and adults at the extremity of the shaft or diaphysis (a conclusion based on the examination of cases during life, and of numerous specimens after amputation and after death), why should the disease be limited to the ends of the shaft (of the femur, say), in the adult, and yet give rise to morbus coxæ or knee-joint disease in the child? It would be strange if it were not so. At all ages the epiphyses are small, but in the child they are especially so, and consequently the joint structures are closely adjacent to the inflammatory centre; moreover, the cell-changes in the young epiphysis are active, and active physiological change readily passes into, or participates in, pathological change.

In the caries (and in the phthisis) of the adult we shall find traces, actually present and historical, of hereditary syphilis. Now, it is a curious circumstance, but not at all at variance with previous statements, that the later in life the disease appears the more marked is the hereditary syphilis. In the caries of children, whether of the short or long bones, and in the joint diseases of children, both the parents will show traces of hereditary syphilis (syphilis in the grandparents). The earlier in life the child is affected, the more certainly is the disease hereditary in the parents. Whether syphilis in the more remote parents on both sides may give rise to strumous diseases in the infant, I am unable to say, but I can say that the parents of the child show signs of inherited syphilis.

Phthisis is syphilis. Phthisis from acquired syphilis is not an infrequent disease. In the examination of the subjects of hereditary syphilis, it is common to find that one, and sometimes both parents, died consumptive. The commonest form of phthisis, however, is that of the adult, which is due to directly hereditary syphilis. Phthisis in the child is due to the union of two parents, both being the subjects of hereditary syphilis. In rarer cases (as in caries and other strumous diseases) it possibly happens that the inherited virus, being abundantly present in one parent, is a sufficient cause. It is very common for the hereditary syphilis to be more marked in one parent than the other. It is foreign to my purpose to do more than point to the relation of phthisis to syphilis. I saw, however, so close an association of phthisis with caries and joint disease (the dependence of which on syphilis I could not doubt) that I sought the opportunity of examining and recording, without selection, a large number of cases of phthisis in the Physicians' out-patient rooms. Every case, in the presence of an impartial witness, confirmed the view now put forward. In many cases the evidences of hereditary syphilis were strikingly conspicuous; in others, as might justly be expected, they were less so. There is no cachexia which does not vary in the intensity of its manifestations, and the syphilitic is no exception, but there is no cachexia and no disease which presents so unmistakable phenomena as the hereditarily syphilitic. It is by no means uncommon, it is well to remember, to see adults of varying ages presenting the most distinct traces of hereditary syphilis, and yet in the possession of perfect health. I believe in such cases the infantile phenomena have been strikingly manifested, and that therefore appropriate mercurial treatment has secured immunity from later disease.

I turn now to the influence of hereditary syphilis on acquired syphilis The degree (and it may be in some measure the kind) of hereditary syphilis determines the modes of manifestation of the acquired disease. The examination of a large number of cases convinced me, in opposition to early predilection and before I perceived the relation of hereditary syphilis to acquired syphilis, that there is no line of demarcation between the soft and the hard chancre—they merge into each other by imperceptible gradations The manifestations of constitutional syphilis are also of varying degrees of severity, from single and slight to severe and combined. The chancre will be the softer the greater the intensity of the hereditary taint; with a maximum of hereditary syphilis there will be complete absence of induration; the less there is of hereditary syphilis, the greater will be the induration of the chancre; with the least or no hereditary syphilis, induration will be most marked and defined. Constitutional phenomena will probably manifest themselves proportionately to the degree of induration of the primary sore. It is scarcely necessary to say that acquired constitutional syphilis also controls subsequent local syphilis. I prefer to speak of syphilitic sores as I find them —namely, as varying from the perfectly soft to the perfectly hard—rather than speak of one or two kinds of syphilis; such expressions involve merely metaphysical distinctions, while science recognises nothing but the mutual relations and succession of facts.

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0
Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.
Terms of Subscription for India, £1 15s. per annum.
The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.
Post-office Orders and Drafts on Army or Navy Agents, should be made payable to Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d. | A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d. | A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, JUNE 22, 1867.

GENERAL MEDICAL COUNCIL.

In the course of the debate on Mr. Walpole's letter, on the first day of this year's session of the Medical Council, one of the members made this complaint or remark—"You cannot take up a single number of the Medical journals, which refer to the proceedings of the Medical Council, without seeing us taunted with not having done things which the present Medical Act renders it impossible for us to do." Now, we are not going to undertake the defence of all the Medical journals, nor to admit that they need defending; but, for ourselves, we beg leave to say that, while we have always been eager to give the Council the fullest credit for all the good work they have done (and we cheerfully acknowledge that some of their labours have been of great value), and while we have always admitted and taken into account the many and great difficulties with which they have had to contend, we have never, in criticising what seemed to us to be their faults and shortcomings, gone beyond, or even equalled, the reproaches uttered against them by some of their own body, at their own council-table—nay, more than that, we have even defended them against some of these reproaches. We have not "taunted them with not doing things which the Medical Act rendered it impossible for them to do;" we have never reproached them for not exceeding the powers given them by that Act. But we have pointed out that it would be useless and idle for them to seek greater and larger powers while they had not used powers already granted; and we have especially expostulated against a waste of time and money in lengthy, verbose, and fruitless discussions and disputations. We have ever carefully noted any real progress made in business, every difficulty overcome, and every solid beginning of work; and we have often summed up for the Profession all that the Council have actually achieved, though we have regretted that this summary did not make a larger demand on our space. But, at the same time, undoubtedly we have freely criticised all the proceedings of the Council, and have compared the solid results of their several sessions with the length and the cost of them. It was simply our duty, as Medical journalists, to do so. We fully acknowledge all the ability, the honesty of intention, and the industry of the members of the Council, but we point out their faults and failings as a body, and we say, as the years pass by, "You have been seven, eight, nine years in existence; you cost the Profession so many thousand pounds a year; and such and such few things make up the tale of work you have done. Cannot you take courage to show a little more boldness and

decision, and to move a little faster? Cannot you manage to pull a little more together? Cannot you, in fine, do a little more and talk a little less?" And in the session just concluded, while some good progress has undoubtedly been made, can any one deny that the faults of the Council have also been markedly exemplified? There has been too much talk, and there has now and then been what we must call dispute, if not squabbling, rather than discussion. Some of the members have forgotten at times the hope expressed by their President, that "their discussions would be conducted with calmness and dignity," and their observations "be made with conciseness of diction and courtesy of manner;" and so far was this the case, that one member actually thought it necessary to say to his colleague, "I confess I no not think it is a good plan for the different bodies at this time to bandy reflections one against the other, and to say this one does this thing, and the other one does the other thing, and we are much better than you."

We should fail in our duty if we took no notice of these things, for the only influence that can be brought to bear on the Council from the outside is the influence of the Profession as exerted through the Medical press. The general public and the general press take no notice of the Council; for, while it is a public body, acting, or existing, for the public good, it is paid, not out of the public purse, but entirely by a tax on the Profession: were the opposite the case, we suspect that the general press would now and then treat us to some not very pleasant remarks on the happy family assembled once a year in Pall-mall.

We will turn now to a much more pleasant subject—viz., the real work-produce of the Council this session. And first in order, as in importance, stands the new edition of the British Pharmacopœia; it was prepared and published, indeed, by the Pharmacopœia Committee of the Council during the recess, but its formal recognition and publication in the *Gazette* mark it to the account of this year's session. It is universally acknowledged to be a most successful and valuable work, one that is an honour and credit to the Council. The supervision and amendment of future editions have been wisely provided for by the appointment of a standing Pharmacopœia Committee.

Important reports were prepared and considered on the preliminary examination, on the conduct and the results of the visitations of examinations, and on Professional education. The action of the Council on the last-named subject is very important, and is *the step* in advance made during the session. It may seem strange that in these days the Council should find it necessary to declare that no candidate ought to be able to obtain a qualification to practise without passing an examination in all branches of Professional knowledge; it does sound rather like a severe satire on the licensing bodies. But perhaps it is stranger still that it has taken nine years to draw from the Council any authoritative declaration on the subject, though all that time men have been passing into the Profession after the most incomplete examinations. The most popular of Professional portals is the College of Surgeons of England, where there is no examination in Medicine, or Materia Medica, or Chemistry, or Medical Jurisprudence, or pharmacy, and it is only comparatively of late, and for a separate licence, that there has been there any examination in Midwifery. Again, the examination at the Apothecaries' Hall, London, though very much less incomplete, does not include Surgery. And yet it is well known that there are numbers of men in practice who possess only such incomplete diplomas as those granted by these licensing bodies separately. It is therefore highly satisfactory that the General Medical Council has at last authoritatively declared that no one ought to be allowed to obtain a qualification entitling him to be registered without proof that he possesses a knowledge of Anatomy, General Anatomy, Physiology, Chemistry, Materia Medica, Practical Pharmacy, Medicine, Surgery, Midwifery, and Forensic Medicine. This declaration, and the opinions elicited during the debate on Dr. Acland's motion, of which we spoke last week, will no doubt hasten or induce combinations among existing examining bodies—"a consummation devoutly to be wished."

Of the good effects of the visitations of examinations, and of the valuable reports presented by the visitors, we have already spoken. The Council wisely determined to continue the present system for, at any rate, a year longer.

We do not remember that there is any other special work done to notice. There was, of course, a good deal of routine business, and some progress made in work in hand. That nothing was actually done in getting a Medical Acts Amendment Bill was not the fault of the Council.

In conclusion, we venture to commend the following little anecdote to the notice of the members of the Council:—At the first meeting of the new Board of Guardians of St. Pancras, "Mr. Corbett, Poor-law Inspector, having stated that at Liverpool and Manchester there was a much larger number in the workhouse than in St. Pancras, and fewer guardians, the Rev. R. Littler asked how they got through the business. Mr. Churchwarden Furness undertook to reply—'Why, I'll tell you how it's done; they don't talk so much as we do.'"

THE VACCINATION BILL.

There are some measures which thrive under opposition, and assuredly the success of the Vaccination Bill has been none the less complete because of the objections which have been raised against it within and without the walls of Parliament. Whether the Medical Profession and the public like it or not, it has been decided by the collective wisdom of the nation—to adopt one of the exalted synonyms for the House of Commons—that compulsory vaccination, which has been the law of the land ever since 1853, is to rule henceforth with increased power over the bodies of her Majesty's liege subjects.

The first debate in committee on the Bill occupied almost the whole of the morning sitting on the 14th inst., and, judging from the contest waged over the first eight clauses, one might have reasonably prognosticated a very different result from the "lame and impotent conclusion" of the withdrawal of all further opposition, and the consequent passing of the remaining clauses *sub silentio* through committee at the fag-end of the sitting on Monday night, after honourable members had exhausted their energies over the Reform Bill.

The speech of Lord Robert Montagu was an admirable specimen of that sort of official exposition which is rather the fruit of laborious "cramming" than of a sound, comprehensive knowledge of the subject itself. The object of the Bill, as it was explained by the Vice-President, is to assimilate the law in England to that of Scotland and Ireland, where, by a stringent system of vaccination, registration, and inspection, the deaths from small-pox have greatly diminished. The Act of 1853 had failed to a certain extent because the machinery was imperfect. Through the laxity of Boards of Guardians, the arrangements as to contracts and otherwise had been in many instances defective, and vaccination was not so general as it ought to have been. The Poor-law Commissioners had acted unwisely in 1853 by further subdividing the districts and increasing the number of vaccinators and stations. It was shown by statistics that in proportion as compulsory vaccination was carried out the ravages of small-pox diminished, and *vice versâ*. The failure of vaccination arises mainly from the use of preserved lymph; if the virus were taken fresh from arm to arm, the operation would generally succeed. The example of Scotland showed that, with a complete system of registration and certificate, the deaths from small-pox had been reduced to a minimum. By means of his book the registrar could tell what children had been vaccinated in his district, and what not; what children were liable to small-pox, and what not liable. Small-pox differed from other epidemics in this, that it was *absolutely preventible*. Carried away by

this astounding bit of dogmatism, Lord Robert Montagu concluded:—"If, then, a person who raised his hand against another and killed him was guilty of murder, of what was that man guilty who by voice or vote in that House endeavoured to prevent the passing of a measure which would make it absolutely certain that small-pox should not kill 7000 in that year?"

After this formidable peroration, it was, as Mr. Henley observed, difficult for those who had conscientious objections to the measure to decide whether they ought not to walk out of the House and throw the entire responsibility upon the promoters of the Bill. Nevertheless, a good fight was made. Mr. Bruce and Mr. Lowe, both ex-Vice-Presidents of the Council, urged the absolute perfection of the Bill, because of the careful consideration it had undergone at the Council Office and before a Select Committee; Colonel Barttelot, Mr. Barrow, Mr. Henley, Mr. Kendall, and Mr. Harvey Lewis objected to different parts of the machinery, while Dr. Brady, who thoroughly supported the principle of compulsory vaccination, made a good, but unsuccessful, fight against the injustice which is inflicted upon the Medical Profession by the insufficient remuneration granted for the performance of their duties.

It is clear from this debate that the line which was marked out at the Council Office from the first has been steadfastly adhered to, deputations and representations of objection all notwithstanding. Not the least impression has been made upon the official mind, which was apparently made up on the feminine principle of "when she will she will, and there's an end on't." Of course, there will be difference of opinion as to the propriety of bringing such a principle into play upon a question of great national importance. The whole thing looks very like what Mr. Henley described as "one department going into another pretty strongly." First of all, the failure of the Act is attributed to the errors of those naughty Poor-law Commissioners, and secondly to the inactivity of the subordinate officers of the Registrar-General's department. Not a word, of course, is said about the share of blame attributable to the niggardly spirit in which the Act itself was framed, seeking to get the utmost possible result for the least possible payment. It is much more agreeable to believe one's self always in the right and one's neighbour mostly in the wrong than to undergo a process of fair self-examination for the discovery of the truth. The Privy Council authorities have had it all their own way. "*Le garde meurt, il ne se rend pas,*" has been their motto, and this will be borne in mind if hereafter any blame should arise.

It may be utterly useless to argue against a foregone conclusion, but the fact that Lord Robert Montagu could venture to drag Scotland into his statistical exposition of the law of small-pox mortality, as affected by vaccination, shows how little his audience were competent to discuss such a subject as the laws of zymotic disease. In the last report of the Scotch Registrar-General on vaccination, it is stated that "small-pox, like other epidemics, has its alternate periods of prevalence and decline"—which is the generally received doctrine of epidemics—and therefore, considering that the Act has been in operation in Scotland only for some three or four years, it is unfair to rely upon what may be partly due to fortuitous circumstances. The experience of epidemiologists goes to establish the comparatively rare appearance of two forms of zymotic disease as concurrent epidemics; and as the mortality of Scotland from all causes has increased very appreciably since 1861 and 1862, there may be some connexion between this increase and the diminished fatality of small-pox. We throw this out just by way of showing that the law of epidemics involves too many considerations to be disposed of as glibly as Lord Robert Montagu seems to imagine. That small-pox is "absolutely preventible" will be news to a great many patient and scientific observers of Medical pathology. The proofs by which this new light is established should be published for general information without delay.

Great stress was laid by Lord Robert Montagu on the new principle introduced into the Bill of "payment by results," and he was careful to secure the support of Mr. Lowe by ascribing to him the credit of its discovery and application. Well, of all the inventions for raising a hubbub, this same principle seems to us one of the most perfect. How it will work we cannot, of course, tell; perhaps, like all the rest of the machinery, it may turn out a marvel of quiet, certain, and easy action. But it is quite on the cards that the inspectors will find they have undertaken a task in which it will be next to impossible to give satisfaction or to avoid the suspicion of favouritism.

However, we must say of that, as of the whole measure, "*Nous verrons ce que nous verrons.*" We have, in the exercise of our duty as journalists, pointed out, we trust fairly and impartially, what appear to us defects in the Bill. The registration clauses, especially, have, in our judgment, deserved all we have said of them, and, in this respect, we have had the concurrence of those in our opinion best qualified to determine their value. We appeal from the British Medical Association Committee of this year, which approved the registration clauses, to the Committee of 1866, which unhesitatingly condemned them; and we adhere to the belief that they are a mistake.

It is, perhaps, unlikely that the House of Lords will go into the subject at any length when the Bill comes before them, and therefore we may take it for granted that the measure is to be put upon its trial in actual operation. If it succeed in diminishing the ravages of small-pox, even at considerably increased cost both in money and trouble to all concerned, without at the same time giving rise to any of the evils which have been suggested, we shall be among the first to acknowledge its value and to ascribe praise to its authors. But there can be no question that the advisers of the Privy Council, in securing the passing of an Act which Mr. Henley calls "a measure of pure coercion," have taken upon themselves an amount of responsibility which they cannot hope to evade if the result be unfavourable.

CITY PUMPS.

No one would have believed seventeen years ago, when Snow advised the City of London to close its wells, and gave such cogent reasons for his advice, at a time when its inhabitants still were mourning for those who had so recently fallen untimely victims to cholera, that in 1867 it would be necessary for its Medical Officer of Health to urge upon its Sanitary Committee the dire necessity of performing such a plain duty. Yet such, however, is the incomprehensible fact, for we have before us a letter by Dr. Letheby,(a) who asks the Sanitary Committee of Sewers Commissioners' permission to submit the matter to their "serious consideration," the result of which is that the Commissioners, in their turn, submit to the ward or parochial authorities the propriety of taking steps to prevent the water from being used for drinking purposes! And all this delay in spite of two severe epidemics of cholera within the seventeen years! How would the Romans have acted had they, when they held London, been plainly told by a Galen or a Celsus that the poison of this plague was to be found in their wells? Would they not, long before the expiration of seventeen long years, have destroyed every poison source, and have reared aqueducts and castella in their stead, bringing water from afar pure and undefiled? Geology has taught us long ago that the gravel on which the greater part of London is built lies on a dark tenacious clay, is easily permeable by water, which gravitates to the surface of the clay

(a) "Report to the Sanitary Committee of the Commissioners of Sewers of the City of London on the Necessity for Closing the City Pumps," by H. Letheby, M.B., M.A., Ph.D., Medical Officer of Health for the City of London, etc. London: M. Lownds, Fenchurch-street, City. 1867.

bed, and there forms an underground sheet, from which the thirty-five unclosed City pumps draw their supply. Meteorology teaches us that a rainfall cleanses the air, flushes the drains, and thus has an immediate effect in reducing the amount of existing sickness; but whilst we are comforted by this last fact, chemistry informs us that the organic poisons which are the causes of such dire epidemics are both soluble and volatile; that the rain, whilst percolating the gravel, may meet with them in the neighbourhood of graveyards, sewers, cesspools, etc., and convey them at once to the sources of our drinking water; and that heat may draw them forth from the damp walls of the saturated cellar, and send their invisible but deadly vapours to the chambers above. With these and hundreds of other facts before us, common sense concludes that no city, no town, nor any village, should ever be allowed to have either the drainage, the water supply, the gas-piping, or the cellarage underground, for they all present opportunities for the storage of organic poisons, which the most grateful rain or the most genial sunshine may at any time evoke. As an instance of the mistake committed by having water supply and drainage underground, we may cite the fact that was lately brought to light in New Bond-street, when Messrs. Basil Woodd were constructing their new cellars. The workmen, while excavating, came across the springs which supplied the old conduit in that locality, and which, according to Maitland, was one of the chief sources for the supply of *sweet* (!) water to the city fountains and conduits. Further excavations, however, showed how dangerously close these crystal waters were to six ancient cesspools and the drainage from some extensive stables, the horse urine from which seems to have accumulated for ages, and which, as suggested by Dr. Letheby, "had no doubt, by its oxidation, furnished the saline matters that gave an agreeable coolness to the water." The cesspools, the conduit, and the modern rival of the stables of Augæus, have been swept away, and in their place have been built unexceptionable cellars, if cellars ever can be so, in which a more generous fluid is now stowed away without fear of being contaminated like its predecessor.

We hope to hear no more about the City pumps. They can all be closed in one day, and they should be. If, however, the civic authorities are so attached to these ancient institutions, and do not like altogether to lose sight of them, we would suggest that, as one of them is to be found in Herald's College-yard, perhaps, out of gratitude for its removal, this august body would grant an addition to the City arms, and allow a City pump proper to be introduced as a companion to the less deadly dagger of Wat Tyler.

CANDIDATES FOR THE SCOTTISH UNIVERSITIES.

Our contemporary, the *Scotsman*, is very wroth with the Medical journals because we proceed, as it says, on the hypothesis that the representative of the Universities of Edinburgh and St. Andrews must of necessity be a Medical man, and that that man must be Dr. Lyon Playfair. Neither of these hypotheses represents our feeling in the matter. We are strongly opposed to the principle of class legislation, and we would deprecate the selection of a member to represent the Medical graduates only, as much as we would the election of any one whose interests were solely with the clergy or the bar. But we must not forget that both the Universities of Edinburgh and St. Andrews owe much of their fame to their scientific teaching, and that the Medical Profession contributes a much larger proportion of graduates to the calendar than either law or divinity. On examining the list, we find that out of 3870 graduates who will be entitled to vote by the provisions of the Bill, 1630 are graduates of Medicine, the remainder being made up by a miscellaneous body of lawyers, clergymen, teachers, etc. If, therefore, representation was to be confined to any one class, we should say that Medicine was the best entitled to it. But what we desire is a candidate who has at heart the interests of the large body of his constituents formed by the Medical Profession, and who will not neglect those of the remainder of the graduates. With regard to the selection of any particular candidate, we are entirely unprejudiced. One thing is absolutely certain, that for a Medical man to have the slightest chance of success he must have sufficient *local* interest to secure the votes of a considerable number of the general graduates. Unless he can do this, his candidature would be worse than hopeless; it would destroy all chance of the Medical Profession obtaining the return of a suitable representative by splitting their votes, and thus securing the return of a legal candidate. That this is so, an observation made by the *Scotsman* proves. Talking of the various names that have been suggested, it says:—

"The following, our London friends inform us, have been passed in review:—'Professor Stokes, of Dublin; Dr. C. J. B. Williams; Dr. Markham; and Dr. Richardson.' These, we assume, are great names in Medicine, but they are not names to conjure with among the general body of Scotch graduates—not one of them, indeed, would naturally have occurred to anybody north of the Tweed in connexion with the parliamentary representation of the Scotch Universities."

Our readers, we are sure, will recognise in any of these names gentlemen who would admirably represent Medical science; but they are Englishmen (and our friends on the other side of the border are peculiarly susceptible as to nationality), they can have no local influence, and they certainly would not represent the general graduates of the Universities.

Were any well-known Scotch Medical man prepared to stand, such as Simpson, Syme, or Christison, we would give them our cordial support; but none of these gentlemen are prepared to sacrifice their chairs.

We recommended Dr. Playfair because we recognised in him qualities which would make him a fitting representative for all classes. On this subject, we may observe that Dr. Markham has done Dr. Playfair scant justice in a letter published in a Medical contemporary, in which he somewhat contemptuously puts him aside as having no connexion with Medicine. We believe that Dr. Playfair went through a complete Medical curriculum, although he did not take his M.D. degree. But whether he did or did not is of comparatively little moment, since the labours of a life spent in the advancement of hygienic science and State Medicine of themselves prove how well he will be qualified to legislate on such subjects.

THE WEEK.

TOPICS OF THE DAY.

It is at last settled that the University, or rather "Universities," of London, should return a member to the imperial Parliament. The proposition of the Chancellor of the Exchequer to combine in one constituency "the Universities of London and Durham," succeeded as far as the word "Universities," but broke down on a subsequent division. Hence representation is granted to the Universities of London. This is certainly a clumsy conclusion, but we suppose that the absurdity will be got rid of before the Bill receives the Royal assent. On the whole, we congratulate the Medical Profession that the London University is not unequally yoked with her northern sister. We think, however, that the University of Durham is really to be condoled with, not so much on the loss of representation as on the mire through which it has been dragged by its friends. It is generally nnderstood that the scheme of union was a pet device of Mr. Mowbray's, whose influence induced the Chancellor of the Exchequer to adopt it. Never, however, were the pretensions of a *débutant* so rudely criticised as those of the University of Durham. Mr. Lowe thundered at it for being bankrupt, and Mr. B. Osborne laughed at it for being bucolic, whilst some honourable members protested that they had never

heard of it before. Other speakers argued that the University of Durham was nothing more than a theological College, and completely under ecclesiastical influence, whilst the University of London was too cosmopolitan to be of any religion, and far too intellectual to require any. It would, therefore, clearly be impossible for any man—unless, indeed, he possessed the peculiar talents of Mr. Disraeli—to represent at one and the same time so dissimilar interests. It was in vain that the supporters of the proposal suggested that the University of Durham would impose no religious tests on its graduates, or that the franchise should be given to them whether they were members of Convocation or not. Nothing would do, and the unfortunate little University, after being thus maltreated, succumbed at length to a majority of eight. As far as the Medical Profession is concerned, this is probably a gain, for the University of London has a preponderance of Medical graduates, and we earnestly hope that the majority will return a man who will fitly represent our Profession in the House. But we cannot help thinking that the attack on the University of Durham was not quite fair. We believe that great reforms have been introduced in the management of its finances, and it is utterly untrue to assert that it is a mere theological College. We have the evidence of the visitors of examinations appointed by the General Council that the plan and scope of the Medical examinations are excellent, and it is the first time we have heard that an educational institution was less fitted to have a voice in the State because it recognised the religion of the country.

In the course of the debate, Mr. Gladstone expressed his disapprobation of any scheme which should extend University franchise to the graduates who are not members of Convocation, or of the governing body of the University. He denounced it as subversive of the principle of University representation. This question is sure to be discussed when the Scottish Reform Bill is before Parliament. In the meantime, we may say that, inasmuch as the constitution of the Scottish Universities, and that of those of Oxford and Cambridge, are radically different, we think that a law which may be wholesome in the one case may be most unjust in the other. Neither do we think that a residence qualification can be fairly demanded, when it is a well-known fact that the University of London requires no residence from its graduates. The truth is that these educational bodies are the growth of different periods, and have been instituted to meet different wants; and if the principle of University representation is to be recognised at all, the same hard unyielding line cannot with justice be drawn in each case.

Dr. Bristowe has written a very clear and satisfactory letter to the *Times* on the question of Greenwich Hospital and the *Dreadnought*. It is in answer to the letter of the *Times'* correspondent "Beta," and completely overturns that writer's two positions—first, "that there can be no doubt whatever with any unprejudiced person as to which quarter of Greenwich Hospital is preferable for the purposes of the *Dreadnought*;" and, secondly, that Mr. Holmes and Dr. Bristowe were biassed by the Admiralty in favour of a particular view. The former position is disproved by the fact that Drs. Ward and Barnes (and, we may add, our own reporter) agreed in preferring Queen Mary's to Queen Anne's Quarter; and the second has received the most complete denial from Dr. Bristowe, who, moreover, states that all the papers—even "Beta's" letters—were placed before Mr. Holmes and himself by the Admiralty, and that they were directed to form a thoroughly independent opinion. Dr. Bristowe concludes by stating that neither quarter of Greenwich Hospital is well suited for Hospital purposes, and he recommends the authorities of the Seaman's Hospital Society to devote their energies to building a new Hospital of their own.

We understand that the Court of Examiners of the Society of Apothecaries have already taken steps to carry out the only suggestion offered them by the visitors of examinations in their report this year. On Thursday last some of the candidates for their licence were required to examine a patient in presence of the examiners, and afterwards to write a short commentary on the case presented to them. We commend the loyalty shown by the Court of Examiners in carrying out the recommendations of the Medical Council, as an example which might be followed with advantage by certain of our Colleges and Universities.

THE CHOLERA IN THE EAST OF LONDON.

Beyond the two cases already reported, there has been no recurrence of the disease at the London Hospital; neither does diarrhœa seem to prevail beyond what is usual at this season. Both the cases recorded were distinctly choleraic, with, in the worse case, well-marked premonitory diarrhœa, for which, indeed, the patient was received into the Hospital, the rice-water stools not appearing till some twenty-four hours after. When the purging ceased, vomiting came on and continued for some time; there was decided collapse with reduction of temperature, but without any very great amount of cramp; the reaction was not very severe. Both patients recovered after no very protracted illness.

THE LATE FELLOWSHIP EXAMINATION AT THE COLLEGE OF SURGEONS.

Can we ever hope to see the time when the College of Surgeons will be in every respect a model body, when such things as complaints will have ceased to exist, and when the examinations will be all that can be wished? Such an era, it was thought, would be, to some extent at least, inaugurated at the recent examination for the Fellowship, and yet complaints are more rife than ever, if that be possible. Complaints as to the nature of the papers we will leave to the judgment of our readers, having already made them public; men differ as to what is to be looked upon as a fair paper, and, doubtless, the examiners think that all such posts as they occupy should be filled by grave and reverend *seniors*, notwithstanding many men may not agree with them. But, surely, common courtesy is a cheap commodity, and its dispensation implies no loss in the original stock, rather the reverse; strange, therefore, that it should be so rare at the examinations of the College. It is scarcely an edifying sight for a teacher of anatomy to be snubbed as to the way in which he holds his knife, more especially when the mode is inculcated by the first of our operative Surgeons, or contradicted point-blank in the face of his pupils; and we do not envy the man who can be guilty of such a violation of the rules of common courtesy. Perhaps it is a necessary part of the process that the candidate has to go through, that he should recognise his own insignificance as contrasted with the blaze of brightness which surrounds the great men before whom he stands, and how far he is separated from them in years as well as other things. If not, might we be allowed to suggest that it be permitted to sink into oblivion?

A NEW ALKALOID FROM OPIUM.

Cryptopia is the name which has just been given by Messrs. H. and T. Smith to a new alkaloid which they have found in opium. It is extracted from the weak spirituous washings of crude morphia, but the quantity yielded is extremely small. From five tons of opium experimented on by the discoverers only five ounces of the alkaloid were obtained. It unites readily with acids, Messrs. Smith having produced the following salts:—Acetate, nitrate, sulphate, muriate, and thebolactate. These were all obtained in their peculiar crystalline states, but their geometric forms are not so perfect as that of the alkaloid itself, which may be obtained in beautiful hexaginal prisms by slow crystallisation from a solution in alcohol.

FINE GRAVELLY SOIL.

We have over and over again called attention to the filthy custom pursued by builders of raising the level of ground wherever they propose to build houses by putting in it all sorts of filth, mud, road scrapings, and other stinking rubbish. We could point to pretentious squares and terraces at the West-end built on just the kind of soil which generates fever and ague. Now we may again point to the gradual deterioration of the London soil caused by the excavation of the good natural gravel. When any plot of gravelly ground is let for building purposes, the builder carefully carts away and sells every atom of it, and fills up, so far as need be, with any rubbish that comes to hand. Thus a muddy soil, giving out offensive exhalations under the sun's rays, is substituted for porous gravel, which filters away all moisture and deodorises it as it goes. Slowly, but surely, the same process is going on even in Hyde-park. We cannot in London afford to lose one atom of anything that conduces to purity of air; and we ought to begrudge every load of gravel that is removed from Hyde-park.

REPORT ON THE HYPODERMIC METHOD OF INTRODUCING REMEDIES.

On Tuesday evening an extraordinary meeting of the Royal Medical and Chirurgical Society was called to hear the report of their committee on the subject of the "Hypodermic Injection of Remedies," when, notwithstanding the fact that no notice had been given beyond a simple intimation at the Society, an unusually large assemblage of members took place. The report, of which more hereafter, was one of unusual interest, and did great credit to the committee, who have devoted a very great amount of time and patience to its completion. Suffice it to say, in the meantime, that they spoke highly of the method, of the rapidity with which the effects were produced, of the small quantity of the drug necessary, and, above all, of the certainty with which the desired result followed—rendering this plan of introducing medicines into the system, not only for their local but also for their constitutional effects, of immense value in certain forms of disease, where circumstances might forbid another mode of exhibition. The report will, we are sure, receive at the hands of the Profession the welcome it received from the Society with which the project originated.

THE LOCK HOSPITAL.

As we suggested the other week, it has been determined to appoint an additional Surgeon to the Lock Hospital. Among those who have come forward we are in a position to mention the names of Mr. Alfred Cooper, Assistant-Surgeon to St. Mark's; Mr. Berkeley Hill, Assistant-Surgeon University College Hospital; Mr. T. Norton, Assistant-Surgeon St. Mary's Hospital; and Dr. Colomiati Meredyth. Among such candidates there will be no difficulty in selecting a good man; the difficulty will rather be to select the best. Mr. Berkeley Hill has in an especial manner devoted himself to the study of venereal diseases, and even now his opinion on such matters is looked up to. Mr. Cooper has done good work at the Islington Dispensary, where he was for some years Surgeon. Dr. Meredyth's works on the subject of syphilis are well known, whilst Mr. Norton, with less experience, is a young and promising Surgeon.

THE STRUCTURE OF THE BLADDER.

Dr. J. Bell Pettigrew, the accomplished Sub-curator of the Museum of the Royal College of Surgeons, has just reprinted for private circulation his fine memoir on the Bladder, published in the *Philosophical Transactions* of the present year. Dr. Pettigrew adopted an ingenious mode of dissection. He filled the bladder with liquid plaster of Paris, coloured blue with ultramarine, thus procuring a firm support to work on, and a dark ground to display the fibres. The conclusion he draws from his numerous dissections is that the muscular coat of the bladder is not arranged in the manner usually described. The muscular fibres of the bladder, he says, are curvilinear and spiral, or, more properly speaking, "lemniscate." With few exceptions they form "figure of eight" loops, and these latter are variously shaped, according as they are superficial or deep. Altogether he makes out seven sets of loops, but for further details we must refer our histological readers to the paper itself.

CURE OF OPAQUE CORNEA.

If we are to believe M. de Luca, opacity of the cornea is no longer one of those intractable affections which shame the Doctor in the public mind. In a memoir just presented to the French Academy, the *savant* we have mentioned states that he has found that sulphate of soda has the power of removing corneal spots in an almost incredibly short space of time. M. de Luca was led to experiment with this reagent from the circumstance that it maintains the fibrine of the blood in a state of solution. In his first trials he employed the sulphate dissolved in distilled water. This liquid he allowed to fall drop by drop on the ball of the affected eye, and the result was that after some days' treatment the opacity was to a considerable extent diminished. It then occurred to him to try the sulphate in the state of fine powder. On using it in this condition, and allowing a few particles of the powder to fall upon the eye, a more decided result was obtained—in one instance, a patient who had been previously almost completely blind regained a certain amount of distinct vision. These results are, if true, exceedingly remarkable. We trust English ophthalmic Surgeons will give the new remedy a trial, and we hope that the beneficial effects may not be of an evanescent character.

FROM ABROAD.—M. JULES GUÉRIN ON HIS DEFEAT AT THE ACADEMY.

At the last election into the section of Medicine and Surgery at the Academy of Sciences, Professor Andral was one of the warmest supporters of M. Jules Guérin, believing that his long services in scientific and practical Medicine called for this recognition. The last number of the *Gazette Médicale* contains a letter from M. Guérin in which he thanks the Professor in the warmest and most grateful terms for the efforts he had in vain made in his favour, having for that purpose left a solitude and retirement he has long indulged in on account of a domestic calamity. He says that after forty years consecrated to scientific Surgery, and the decree of no less than four prizes as a reward for his services, he certainly believed that his candidature would have been crowned with success, especially as this makes the fourth time he has been presented by successive sections of Surgery and Medicine as an eligible candidate. Rejection after such repeated recommendations is wholly without precedent in the annals of the Academy, and he therefore deems it necessary to protest against it.

He feels that his position of journalist has been one of the circumstances that have stood most in his way, although he can conscientiously declare that, during the forty years he has had his *Gazette Médicale*, few are the men of note of the present day who have not derived advantage from his notice of their labours. "The recollection of any good that we may do is effaced with time, which is never the case with the harm. The eulogium is forgotten, never the criticism; and yet in my conscience I feel that I have been as prodigal of the one as sparing of the other." Another cause of his failure has been the persevering character of some of the opponents of his views, chief and most influential among whom, though not named by him, stands M. Velpeau, who from first to last has shown himself a severe, almost a rancorous, antagonist to the founder of subcutaneous Surgery.

Speaking of M. Nélaton, the successful candidate, M. Guérin observes :—

"I state nothing not already known in saying that my fortunate competitor has become the great Surgical notoriety of our time, and that he wields, as has been said, the sceptre of contemporary Surgery. He is a great artist and an illustrious Practitioner, since renown has consecrated him such, for the philosopher tells us, 'glory is never wrong.' Prior to the election one might have brought his academical titles into question, discussed the merits of the artist and the Practitioner, and established the pre-eminence of science over art, of the inventor over the applier. At present, however, the Academy has taken care to show that facts must sometimes dominate principles, and its decrees, like those of justice, are to be accepted, not discussed. Nevertheless, as throwing light upon the cause I am pleading, it is not without its use to recollect that the renown which has prevailed before the high court of the Academy has been backed up by a patronage which has placed its mark on all contemporaneous events."

PARLIAMENTARY.—THE NAVAL ESTIMATES—VACCINATION BILL —THE REPRESENTATION OF THE UNIVERSITIES OF LONDON AND DURHAM.

In the House of Commons, on Thursday, June 13, in Committee of Supply on the Naval Estimates, £62,686 were voted for the Medical establishments at home and abroad, and £80,664 for medicines and Medical stores.

On Friday the Vaccination Bill came on for discussion. Before going into Committee on the Bill, Lord Robert Montagu explained that its object was, by assimilating the law in England to that of Scotland and Ireland, to repair the failure of the Act of 1853, under which the deaths from small-pox had increased from nearly 4000 to between 6000 and 7000 a year, while in the sister kingdoms a great decrease in the deaths had followed. The system of vaccination, registration, and inspection was made much more stringent, and by increasing the fees of the vaccinators and registrars it was made their interest to see the Act carried out.

Sir J. C. Jervoise moved to defer the Committee on the Bill until the report of the Medical Officer of the Privy Council for 1866 had been distributed; and he, as well as Mr. Barrow and Colonel Barttelot, who opposed the Bill, disputed the value of vaccination, insisting that the practice often communicated diseases to children.

Mr. H. A. Bruce and Dr. Brady supported the Bill as a considerable amendment on the present system.

Mr. Henley objected to the Bill that its machinery would not secure good vaccination—the importance of which he allowed—that it was too exclusively compulsory, and did nothing to consult the convenience and conciliate the prejudices of the people. In particular, he insisted that the vaccinator ought to be allowed to perform the operation at each child's home rather than at appointed stations, as the Bill proposed. Mr. Kendal took the same view; but Mr. Lowe, who strongly supported the Bill, maintained that the vaccination at stations was more convenient, and that every precaution had been taken to secure the most efficient vaccination.

The amendment was negatived, and in Committee the first seven clauses of the Bill were agreed to.

On Monday, June 17, in Committee on the Reform Bill,

On clause 15, enfranchising the University of London, Mr. Disraeli's amendment, to include the University of Durham, was sharply opposed by Mr. Lowe, who made a trenchant attack on the pretensions of the University of Durham; by Mr. G. Duff, and Mr. Goldsmid; and was supported by Mr. Mowbray, Mr. Liddell, Mr. Headlam, and Mr. Ingham. On a preliminary division, the Government had a majority of 14—183 to 169; and Mr. Lowe then moved to report progress on the ground that the London University had had no time to consider this proposed conjunction, which he characterised as an insult. Mr. Gladstone supported him, but on a division the motion was negatived by the large majority of 82—196 to 114. A similar motion by Mr. G. Duff was negatived without a division; but the Chancellor of the Exchequer ultimately yielded to a fourth.

The Vaccination Bill passed through Committee.

On Tuesday, the debate on the representation of the London and Durham Universities was reopened by Mr. Lowe, who pleaded for further delay on the ground that the Convocation of the London University was about to meet to discuss this proposition, which had come upon them suddenly, lulled as they had been into a false security; and, after dwelling on the diverse character of the two bodies, London being a cosmopolitan institution, and Durham little more than a theological college, and pointing out that a man who represented the one could not represent the other—that no man could be plastic, not to say double-faced, enough to represent both—he strongly denounced this unholy wedlock, and assured the House that the boon clogged with such a condition would not be gratefully appreciated by the London University.

Mr. Bright also vigorously condemned the proposition, which he characterised as preposterous, predicting that in its working it must inevitably disfranchise either Durham or London, and hinting that Mr. Disraeli was the only man of sufficient adaptability to represent both.

The Chancellor of the Exchequer, in defending the enfranchisement of Durham, argued that, though the two Universities might have distinctive characters, they had a common aim. The objections of the London University had no foundation but prejudice, and, considering its youth, it was not altogether becoming that it should be so critical as to the conditions of its enfranchisement.

The claims of Durham were advocated by Sir M. W. Ridley and Mr. Liddell, and opposed by Mr. Cardwell, who, among other diversities between the two Universities, pointed out that at Durham members of the Church of England only would have votes, and by Mr. Osborne, who insinuated that Mr. Disraeli was averse to this conjunction, which had been forced upon him by some of his supporters.

On a division, the Government carried the insertion of the word "Universities" in the clause by a majority of 1.

In answer to Sir G. Bowyer,

Mr. Mowbray said the Government were quite ready to extend the electoral privilege at Durham to all graduates without reference to religious faith, and added his strong impression, from communication with the University authorities, that they were willing to alter the constitution of Convocation in this sense.

This supposed pledge on the part of the Government to give votes to all M.A.'s of Durham without reference to their being members of Convocation gave rise to an animated conversation, Mr. Gladstone maintaining that it amounted to an alteration in the character of the representative bodies of Universities, which hitherto had been identical with Convocation; and Mr. F. Powell protested with much warmth that if they really contemplated this, the Government were betraying the confidence of their party. Ultimately Mr. Disraeli disclaimed altogether the design of altering the present constitution of the Durham Convocation—whatever was done must be done by the authorities of the Universities, and for them the Government, of course, could give no pledge; and Mr. Mowbray explained that he had meant no more than that he had every reason to expect that the authorities would make this alteration.

In the end the Committee refused to insert Durham in the clause by a majority of 8—234 to 226—and this result was received by the Opposition with loud cheering.

Clause 15 was agreed to as well as clause 16, defining the electoral body of the London University.

REVIEWS.

A Treatise on the Deformities and Debilities of the Lower Extremities, and the Mechanical Treatment employed in the Promotion of their Cure. By T. P. Salt, Birmingham, Anatomical and Orthopædic Mechanician. London: John Churchill and Sons. 1866. Pp. 204. Illustrated.

Some time since an eminent London Surgical mechanician published a work on his art, and, from several remarks therein contained, evidently considered the province of the Surgeon in charge of the case decidedly secondary to that of the mechanician, and thereby incurred the somewhat unexpected notice of that most unsparing of reviews, the *Saturday*. He is, however, a standard authority, and one to whom Mr. Salt frequently acknowledges himself indebted. Mr. Salt observes in the introduction to his work that Medical men are frequently at a loss to know the most suitable contrivances to adopt in special cases, owing chiefly to the indistinctness with which all the mechanical apparatus have heretofore been drawn and described, and it is with the object of supplying such wants that this volume has been compiled.

As Mr. Salt very properly considers that an anatomical education is essential to the orthopædic mechanician, he gives us the result of his own in a couple of very long chapters in which the entire osteology and myology of the foot and leg are minutely described. These are followed by a brief outline of the theory and application of the leading principles of applied mechanics, so far as they refer to the instruments described in the work. Since the introduction of tenotomy the orthopædic mechanician has had a far wider field opened for his labours, and from the combination of improved Surgical principles and mechanical contrivances, the result has been most beneficial. The application of apparatus without tendon cutting is, of course, in some few instances successful, but, we imagine, in very few; and when tendons are cut careful personal inspection during after-treatment is of the utmost importance, with the adoption of mechanical and physiological means.

Mr. Salt gives drawings and a very careful and readable description of the construction and application of the several instruments designed for the various forms of club-foot, and also some litho-photographs of cases before and after treatment. Altogether, the book is well worthy the perusal of the Surgeon, and admirably adapted to its object—viz., the delineation and explanation of orthopædic mechanism and its application.

Benedicite; or, the Song of the Three Children: being Illustrations of the Power, Wisdom, and Goodness of God as manifested in His Works. By G. Chaplin Child, M.D. 2 vols. London: 1866.

We learn from the author's preface that the object of this book is to offer a series of illustrations of the beneficence and greatness of God as they are suggested to our minds by the words of the "Benedicite." His selection of illustrations is on the whole judicious, and he has presented us with a series of essays on such subjects as the following:—"The Heavens," "The Sun and the Moon," "The Stars," "Winter and Summer," "Nights and Days," etc., amounting in all to upwards of twenty. These essays are written in a pleasant easy style, and while the author lays no claim to originality, it is obvious that he has profitably studied the works of the Herschels, Whewell, Maury, Guillemin, Lardner, Owen, and Darwin, to whom he acknowledges his obligations. In his "Concluding Reflections" he pleads strongly for the more general study of natural history as a branch of education. "While leading its followers among the 'green things upon the earth,' the pursuit of natural history strengthens both mind and body, and awakens trains of thought that are well calculated to serve as a shield against the temptation of grosser pleasures." We hardly know for what class of readers these agreeable little volumes have been specially compiled. They seem to us to be well suited for a present to a young lady of serious and scientific tendencies, and would form an excellent school prize for advanced classes in schools.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

Paris, May 29.

The hand of death has fallen heavily this year upon our Profession. Several of its leading members, both in France and abroad, have been recently struck down—some of them, like Jobert de Lamballe, at the end of a long and prosperous career; others at an earlier age, and at the very moment when the golden fruits of a well-earned reputation seemed to lie within their grasp. Of these rising men who have been unexpectedly snatched away at the time when the promises of their early life were about to be fulfilled, the most eminent (in this country at least) was Dr. Follin, who breathed his last a few days ago.

From the commencement of his Medical education Follin was marked out, by all the distinctions which a student can obtain, as one of those who must infallibly rise one day to eminence. During the year 1848, when all the youth of France, and more especially of Paris, were in a state of effervescence, he alone, among the Medical students of his time, kept to his books and abstained from politics. The result was that at the end of the year he obtained without difficulty the gold medal which is annually granted to the best pupil of the Paris Hospitals. It would hardly seem worth while to commemorate this early success in the life of a man who was destined to achieve far greater things if the sound sense which he evinced by remaining faithfully attached to science in the midst of such general agitation had not been the characteristic feature of his brilliant, but unfortunately too short career.

Dr. Follin had become, almost immediately after taking his degree, Surgeon to the Paris Hospitals, and Assistant Professor at the Faculty of Medicine. For several years he was, with Professor Lasègue, the editor of the *Archives de Médecine*, one of the scientific periodicals which bear the highest character in France. During a period of two years, he was entrusted with the official Lecture on Ophthalmology, and it was on his resignation that Government expressed a desire to create a special chair, to be filled by Dr. Liebreich—a proposal which incurred the universal reprobation of all the scientific men in France, who were, of course, highly offended at seeing a foreigner put over the heads of the eminent men who, in this country, have devoted their attention to that branch of Surgery.

Of late years the practice of Dr. Follin had become so extensive that it seemed hardly possible for him to continue his scientific labours; he still persevered, however, with unabated energy; and the recent publication of the first volume of a system of Surgery testified to the activity of his mind. But, in this attempt to combine science with practice, his health gave way; the signs of an enlargement of the heart suddenly made their appearance, and, after lingering for several months, he expired on the 21st inst., at the early age of 44. Few men of eminence in the scientific circle have been so universally regretted.

The death of Dr. Follin leaves another vacant seat in the Surgical Section of the Academy of Medicine, which has lately been engaged in the election of two new Medical members. Dr. Hardy, the lately appointed Professor, and Dr. Chauffard have been the successful candidates.

IRELAND.

Dublin, June 4.

I have much pleasure in stating that at the annual meeting yesterday of the Royal College of Surgeons in Ireland, Dr. Robert Adams was, by a large majority, elected President for the ensuing year. It may be well to add, for the information of your readers, that the election on this occasion was more open than usual, in consequence of the recent lamented death of the Vice-President, Dr. Banon, who, had he lived, would, in the ordinary course, have been elected, the real contest for the chair of the College being usually at the election to the Vice-Presidency, to which office Dr. George H. Porter was at the same meeting yesterday unanimously chosen. Two vacancies in the Council were filled by the election of Drs. Butcher and Mapother.

Dr. Adams's election will, it is hoped, give additional *éclat* to the Dublin meeting of the British Medical Association, now so near at hand. With Dr. Stokes as President of the College of Physicians, and also of the Association; with Dr. Adams at the head of the College of Surgeons; with Sir Dominic Corrigan, Bart., as the reader of the Address in Medicine, and with Professor Robert W. Smith as reader of the Address in Surgery—we shall have all the leading offices filled by some of the best of those who, by the labours of long and honoured lives, have largely contributed to raise the Dublin school of Medicine to its present deservedly high position.

I am glad to see that in your last two publications you point out the justice of allowing, in the failure of the first, the second alternative in the will of the late Mr. Thomas Brown, to be carried out exactly in accordance with the testator's wish. It is, indeed, impossible to imagine a wiser, more enlightened, or more useful application of money than would be made in carrying out that alternative. I have learned from very good authority that it is the intention of the governing body of the Dublin University, should the disposal of the fund in question come into their hands, to establish the following Professorships:—1. Of the Welsh and other Celtic languages. In promoting this foundation, the funds at present at the disposal of the University for the teaching of the Irish language would also be available, and the Professorship would be so well endowed that the Board would be enabled to secure for it the services of the philologist in Europe best qualified to fill it, whom, I understand, they already have in view. The importance of this Professorship in a national respect is at

once evident. 2ndly. Of Sanscrit, so important to the student of philology. 3rdly. Of Chinese; the importance of which in a commercial point of view, and therefore not only to Dublin and to Ireland, but to the British Empire at large, can scarcely be overrated, but may be illustrated by the fact that a young man who can write and translate Chinese may at once, without even speaking a word of the language, secure to himself a very handsome income, so extensive are our commercial relations with the Celestial Empire. These relations are, moreover, on the eve of being almost indefinitely increased by the opening of the river navigation throughout China. When such important objects can be carried out by allowing Mr. Brown's beneficence to flow in its natural current, the impolicy, as well as the injustice, of attempting by an Act of Parliament to divert the stream from its appointed course will be at once apparent.

My report of the other annual Medical meetings held, according to custom, on the first Monday in June, I must, recollecting how much of your space will necessarily be occupied with the proceedings of our Medical parliament, make as brief as possible.

The Royal Medical Benevolent Fund Society for Ireland met in the Albert Hall of the College of Surgeons, Dr. Butcher, outgoing President of the College, in the chair. The position of the Society, which has now been a quarter of a century in existence, was, I am happy to say, described as being highly satisfactory. The amount available this year for distribution (£850) is the largest that has yet been at the disposal of the Society. The funded property amounts to £12,000. The number of applicants (85) is also the largest which has yet come forward; of these, ten are Medical men in dire destitution, from age or disease, who are to receive sums varying from £6 to £30 each; on the list are 62 widows, having in all 184 children. The chairman, at the conclusion of his observations, handed in the liberal donation of £100. A resolution was subsequently passed to transfer the funded property of the Society from Three per Cent. Stock to Bank of Ireland Stock, East India Stock, or mortgage upon land. If transferred to Bank of Ireland Stock, the income of the Society would, Mr. Tufnell, in moving the resolution, stated, be increased by £122 per annum.

The Irish Medical Association met, at an earlier hour in the day, in the same place, Dr. Mackesy, of Waterford, President of the Association, in the chair. The report was read by Dr. Quinan, honorary secretary. Among the subjects brought under the consideration of the meeting were:—The necessity of procuring a retiring allowance, or a compensation, for poor-law and dispensary Medical officers, when incapacitated by old age or loss of health for the performance of their public duties; the paramount importance, to those about to enter the Medical Profession, of an adequate preliminary education; the abuses respecting the issue of tickets for Medical relief, it having been stated especially that "red" or visiting tickets had been placed in the hands of "policemen, ladies, and railway officials for distribution;" the necessity of the adoption of a fixed principle, in the navy and army Medical services, of retirement on liberal allowances, and of promotion after a certain amount of service; the necessity of parliamentary representation of the Medical Profession, and the unsatisfactory state of the law with regard to the remuneration of Medical witnesses summoned by the Crown. On the motion of Dr. Morrogh, seconded by Dr. Armstrong, a vote of thanks was passed to the Poor-law Commissioners for securing to the Medical officers a fair remuneration for their services during the cholera epidemic.

In the evening the members of the Association dined together at the Gresham Hotel, Dr. Mackesy presiding, supported on the right by the newly-elected President of the College of Surgeons, and on the left by Dr. Croker, in the absence of the President and Vice-President, as the senior Fellow of the College of Physicians present.

CATTLE PLAGUE INQUIRY.—For the week ending June 8, no fresh outbreaks have been reported from any part of England, Wales, or Scotland. In the metropolis during the week, 2 cases of cattle plague have occurred, being a decrease of 9 on last week's return. Both of the diseased animals were killed. There were 36 cattle slaughtered healthy to prevent the spread of the disease. The total number of cattle reported to have been attacked in Great Britain since the commencement of the plague is 278,691, and 56,833 healthy cattle have been slaughtered to prevent the spread of the disease.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, June 13, 1867:—

Henry Robert Glover Rust, Weathersfield, Braintree; George William Barroll, Bedford; Robert Walter Cecly, Bow-lane, Poplar, E.; William Edward Soffe, East Harling, Norfolk; Anthony Bell, Newcastle-on-Tyne.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.—Names of candidates who passed the Major Examination as Pharmaceutical Chemists on June 19:—

Joseph Bemrose, Liverpool; Charles Eve, London; George Harrison, Sheffield: Edward Jackson Ireland, Egremont, Cumberland; Henry Rayson, Lincoln; Joseph Severs, Leeds; Ralph Walton, Sunderland; Hermann Woolley, Manchester; John Robert Wretts, Ipswich.

APPOINTMENTS.

***** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.**

FIELD, G. P., M.R.C.S., has been appointed House-Surgeon to St. Mary's Hospital.

MOORE, W., M.R.C.S.E., has been appointed House-Surgeon to the West Herts Infirmary.

OKELL, G., M.R.C.S., L.S.A., has been appointed Certifying Factory Surgeon for the Over and Winsford District, Cheshire.

SIMPSON, P. J., M.R.C.S.E, has been appointed Surgeon-Apothecary to the Dispensary, Worksop.

TURNER, ROBERT S., M.A., L.R.C.S.Ed., has been appointed Resident Medical Officer to the Royal Hospital for Sick Children, Edinburgh.

WOLTON, C., M.D., has been appointed one of the Surgeons to the West Herts Infirmary.

BIRTHS.

BULLOCK.—On the 13th inst., at Spring-grove, Isleworth, the wife of H. Bullock, F.R.C.S., of a daughter.

GLEN.—On the 13th inst., at Iver, Bucks, the wife of Surgeon James Glen, Bombay Medical Staff, of a son.

SKUES.—On the 15th inst., at 4, Alfred-road, Upper Holloway, the wife of Dr. W. M. Skues, Surgeon, 109th Regiment, of a son.

MARRIAGES.

MACNAB–SMITH.—On the 13th inst., at St. Mary's, Bury St. Edmunds, R. Macnab, M.D., F.R.C.S. (Edin.), to Frances Ann, second daughter of C. C. Smith, Esq.

TURNBULL—CLAPP.—On the 12th inst., at the Church of Charles the Martyr, Plymouth, Dr. A. Turnbull, Assistant-Surgeon Royal Naval Hospital, Plymouth, to Ellen Petronel, only daughter of the late W. Clapp, Esq., Commander, R.N.

DEATHS.

CRABTREE, J., M.D., of Springfield, Newchurch, Lancashire, on the 6th inst., aged 62.

FFOLLIOTT, F., M.D., F.R.C.S.I., at Kilworth, County Cork, on the 6th inst.

JOHNSTON, T. G., M.D., Surgeon-Major Madras Army, at 80, Westbourne-park-road, on the 11th inst., aged 55.

KIRKWOOD, J. G., L.R.C.S. Edin., of Partick, Glasgow, on the 4th inst.

MOORE, J. F., M.R.C.S.E., at Bradford, Yorkshire, on the 6th inst., aged 30.

PERRY, G., F.R.C.S.I., of Kilmeague, County Kildare, on the 5th inst.

WHITE, B. (late Inspector-General of Hospitals, Bombay Army), at the Warrens, Feering, Essex, on the 18th inst., aged 65.

VACANCIES.

CITY OF LONDON LUNATIC ASYLUM.—Assistant Medical Officer.

BIRMINGHAM GENERAL DISPENSARY.—Junior Resident Surgeon.

HOSPITAL FOR CONSUMPTION, BROMPTON.—Resident Clinical Assistants.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—House-Surgeon.

ROYAL FREE HOSPITAL.—House-Surgeon.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Fylde Union.—The Lytham District is vacant; area 10,220; population 4076; salary £25 per annum.

Rye Union.—The First District is vacant; area 16,786; population 6398; salary £112 per annum. Also the Workhouse; salary £40 per annum.

South Stoneham Union.—Mr. John C. Harris has resigned the First District; area 7468; population 4930; salary £60 per annum. Also the Workhouse; salary £40 per annum.

APPOINTMENTS.

Clun Union.—Henry M. Lemon, M.R.C.S.E., L.S.A., M.D. St. And., to the Norbury and Second Bishop's Castle Districts.

Frome Union.—Henry F. Parsons, M.R.C.S.E., L.S.A., to the Second and Third Districts.

Kingston Union.—Edwin Child, M.R.C.S.E., L.S.A., to the New Malden District.

Newcastle-under-Lyme Union.—William Walsh, F.R.C.S.I., M.K.Q.C.P.I., L.M., to the Whitmore District.

Scarborough Union.—Archibald Meggett, M.R.C.S.E., L.S.A., to the Scarborough District. James J. Rablah, M.R.C.S.E., L.F.P. & S. Glas., L.S.A., to the Workhouse.

EXAMINATION IN ARTS.—During the present week the authorities of the Royal College of Preceptors have been busily engaged conducting the preliminary examinations in Arts, etc., at the College of Surgeons for the Fellowship and Membership of the latter body, and it is stated that nearly 140 candidates have offered themselves.

NEW BRITISH PHARMACOPŒIA.—The *Gazette* of Friday, June 14, contains an announcement of the official publication of this work, by which all the Pharmacopœias that have been hitherto in use in these kingdoms are superseded.

LONDON INFIRMARY FOR EPILEPSY AND PARALYSIS.—On Friday, June 7, an amateur concert for the benefit of this institution took place at Willis's Rooms. The concert was well attended, and realised somewhat over £120.

FEMALE MUNIFICENCE.—The late Miss Mary Gregory, of Canterbury, has bequeathed £16,000, in sums of £5000 each to the Middlesex Hospital, the Deaf and Dumb Asylum, and the Blind Asylum, and £1000 to the Kent and Canterbury Hospital.

THE King's College Hospital old students' dinner takes place on Wednesday, the 26th. Gentlemen must let the Honorary Secretaries know if they mean to attend, on or before Monday, June 24.

THE ATKINSON-MORLEY SCHOLARSHIP, UNIVERSITY COLLEGE.—This Surgical Scholarship was awarded, on Saturday last, to Mr. George Vivian Poore, of Andover. The examiners were Professors Erichsen, Marshall, and Wharton Jones, and Mr. Berkeley Hill. The Scholarship is worth £45 per annum, and is tenable for three years.

DOWNING COLLEGE.—The Natural Science Scholarship at this College, of £50 per annum, with rooms and commons, tenable for three years, and open to all members of Oxford and Cambridge who had not resided more than six terms, has been awarded to Mr. Clement Higgins, of Sidney College. Mr. Norman Moore, of St. Catherine's College, greatly distinguished himself in the examination in comparative anatomy and physiology.

THE presentation of the testimonial to the proprietors of the *Pall-mall Gazette*, which was arranged to come off at Mr. Hill's, 45, Queen Anne-street, Cavendish-square, has been postponed from Tuesday, June 25, to Wednesday, June 26, at 5 o'clock.

A VACANCY for an Assistant-Physician at the Consumption Hospital, Brompton, is about to occur. The election is in the hands of the Committee of Management, and the office may be held in conjunction with another Hospital appointment.

DEATH OF M. CIVIALE.—This celebrated French Surgeon died on the 13th instant, almost suddenly, in the 75th year of his age. His writings on the diseases of the urinary organs are universally known, especially on lithotrity, which he was the first to perform on the living person. All his celebrity was due to hard work, and he continued working until the last, for he was just printing a "Guide for the Operations of Lithotrity and Lithotomy."

NOVEL MODE OF TREATING INFLAMMATION OF THE KNEE-JOINT.—Some days after the knee-joint of a man aged 33 had been opened by a lacerated wound, he was brought into the London Hospital, where Mr. Little (at the suggestion of his colleague Mr. Maunder) tied the femoral artery to stop acute inflammatory action which had now attacked the limb both within and without the joint. Twenty-three days have elapsed since the operation was performed, and the case has progressed uninterruptedly well. The ligature came away on the 19th day.

CONVALESCENT HOSPITAL.—The Liverpool Committee for obtaining subscriptions for the relief of the sufferers by the cotton famine, finding they have a balance in hand of £40,679 5s. 1d., propose to devote this sum to the building of a Convalescent Hospital, in a healthy position near the town, to act as a supplement to the existing Infirmaries and Hospitals. The proposal has met with general approval, and a committee has been appointed to carry it out, consisting of, amongst others, the chairman and treasurer of each of the principal Hospitals in Liverpool.

REPRESENTATION OF LONDON UNIVERSITY.—At a meeting of graduates held in the Marylebone Institution on Tuesday night, a resolution for the appointment of a committee to find a candidate of moderate views, and, if practicable, a graduate of scientific and especially Medical knowledge, was after some debate adopted. A long discussion took place for and against the calling of the committee by the name "Liberal-Conservative;" but in order to avoid an absolute division on that point it was agreed to leave the nomenclature to the committee itself. At the same time it was agreed that Lord Stanley should be requested to act as president of the committee. Dr. Tyler Smith proposed that Mr. Cardwell and Mr. Robert Lowe should be asked to stand as vice-presidents, but it was objected that the former would decline to act as a Liberal-Conservative, and that the latter, though an able, was not a practical man. It was ultimately agreed that all senators should be asked to join the committee.—*Globe.*

THE NORTH OF ENGLAND OBSTETRICAL SOCIETY held its June meeting in the library of the Infirmary, Newcastle-on-Tyne, on May 12, Dr. Gibson (President) in the chair. There was a large attendance of members and visitors. Dr. J. Mathews Duncan, of Edinburgh, Hon. Fellow of the Society, read a paper "On the Amount of Expulsive Power exerted in Parturition as measured in pounds." Dr. Heath detailed particulars of operations for the removal of four ovarian cysts. Dr. Sheraton exhibited a newly invented *tire-tête*, or combined perforator and extractor. Dr. J. Mathews Duncan exhibited a preparation illustrating injury to sacro-vertebral articulation in difficult labour, and a preparation illustrating the pathology of uterine hæmatocele. At the conclusion of the discussions a cordial vote of thanks was carried by acclamation to Dr. J. M. Duncan for his visit and contributions.

JUAREZ AND THE EMPEROR MAXIMILIAN.—Juarez, who for a time wields the supreme power in Mexico, is described by the correspondent of the *Times* as a "stout and heavily built man, about 60 years of age, with short straight black hair and black eyes, a clean-shaven broad and coarse-featured face, expressive of much determination and general intelligence, and a large and well-set head. He is a *full-blooded Mexican Indians.*" Thus is accomplished one part of Dr. Knox's prophecy regarding the future of Mexico—the dying down of the Latin races, the gradual decay of the half-breeds, and the restoration of native Indian blood to its original supremacy. The next part is coming—the introduction of the Anglo-Saxon.

HEALTH OF THE EMPRESS CHARLOTTE.—We learn from recent advices that the health of this unhappy lady has slightly improved. Until quite lately she was kept uninformed of the serious position of the Emperor Maximilian. However, her Medical adviser, Dr. Illek, considering that the knowledge of her husband's captivity and threatened execution might arouse her from the state of utter prostration into which she has latterly fallen, determined to inform the Empress on these points. The result has equalled the highest anticipations. From having been in a condition of complete lethargy, the knowledge of the Emperor's position has aroused her mental faculties, and restored all her clearness of intellect. It is to be hoped that the good effect may be lasting, and that the decision of Juarez may not mar a result so happily brought about.

POISONOUS PILGRIMS.—It was recently stated by one of our contemporaries that the Hurdwar pilgrims, notwithstanding all the efforts to prevent them, entered the bazaar at Umballa, in India, and had not only infected some of the native population with cholera, but had actually communicated the disease to some of the men of H.M.'s 94th Regiment. A Trieste telegram confirms this intelligence. The cholera still prevails at Umballa, and is, we regret to say, on the increase. The 94th Regiment has lost twenty-one men, and the native population in the surrounding villages is being cut down in large numbers. Surely there is neither principle, policy, nor prudence in the religious toleration which brings us such results as these!

SERIOUS, IF TRUE.—A telegram, published in the *Levant Herald*, conveys the grave intelligence of an outbreak of what is believed to be Asiatic plague at Kerbilah, on the Euphrates. The symptoms seem to point to a modified typhus, but whether this be so or not the malady is certainly a grave one, since it has already carried off 20 per cent. of the population. It has been ascertained to be in part the consequence of the foul miasma following the late floods, and partly the result of the condition of filth and squalor in which the people live. The authorities at Bagdad have taken

every precaution to prevent the extension of the pest, and the Galata Board of Health have addressed an urgent request to the Porte that the strictest measures of quarantine may be put in force.

DR. JORDAN.—This notorious individual has withdrawn the notice of appeal, and paid the penalties inflicted on him by the magistrate at Marlborough-street, amounting to £20 and costs, in the case of the London College of Surgeons and also in that of the Edinburgh College of Physicians. The penalties will go to the General Medical Council, but no doubt will be returned to the respective institutions which so successfully prosecuted the delinquent who so outrages public decency. A writer in the *Pall-mall Gazette* on "How to Deal with Indecent Quacks," states that on receiving one of Jordan's productions, he called on the fellow, returned him his pamphlet, remained with him for a few minutes, and left him apparently suffering from "nervous exhaustion," and recommends other men who are "annoyed by his abominations to pay him a visit after the receipt of the next pamphlet, and leave him in the same abject state."

THE QUEEN'S UNIVERSITY IN IRELAND.—The vexed question as to the validity of the Supplemental Charter, whereby the institution known as the Catholic University, the Magee College, and other educational establishments were affiliated to the Queen's University in Ireland, seems to have been practically set at rest. The original petition filed by certain graduates of the University to nullify the Supplemental Charter was dismissed by the Master of the Rolls on a point of form—viz., that it should have been brought forward as an information by the Attorney-General. His Honour intimated that he agreed with the petitioners on the main question. They were, therefore, encouraged to ask the Attorney-General for his assent to the petition, which having been granted, the case came again before the Rolls Court on the 13th instant. Dr. Ball, counsel for the petitioners, applied for the usual *ad interim* injunction to restrain the Senate of the University from acting upon the Supplemental Charter until the hearing of the suit. Mr. Lawson then rose, and stated that although not instructed to appear on that motion, he had authority to say that the Vice-Chancellor and the members of the Senate would not oppose the suit, as it had been instituted by the Attorney-General in the discharge of his public duty. Under these circumstances, the Court did not consider that it was necessary to issue an injunction, and ordered the motion to stand over until the hearing of the cause. When the matter comes before the Court for final decision, we presume the Master of the Rolls will adhere to the opinion he has already expressed, and decide against the validity of the Charter. The original character of the Queen's University will, therefore, be preserved intact unless Parliament should think fit to alter it, which is a contingency not to be anticipated. —*Saunders's Newsletter.*

COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN MAY, 1867.—The following are the returns of the Metropolitan Association of Medical Officers of Health :—

Names of Water Companies.	Total Solid Matter per Gallon.	Loss by Ignition.(a)	Oxidisable Organic Matter.(b)	Hardness.	
				Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction	21·17	1·00	0·68	12·0	4·5
West Middlesex	19·00	0·45	0·40	11·5	3·5
Southwark and Vauxhall.	18·43	0·50	0·46	12·0	4·0
Chelsea	20·83	0·75	0·69	12·0	4 0
Lambeth	20·77	0·50	0·64	12·0	4·0
Other Companies.					
Kent	26·62	0·20	0·18	15·0	8·0
New River	16·80	0·50	0·21	11·0	4·0
East London	18·74	0·51	0·39	11·0	4·0

(a) The loss by ignition represents a variety of volatile matters as well as organic matter, as ammoniacal salts, moisture, and the volatile constituents of nitrates and nitrites.

(b) The oxidisable organic matter is determined by a standard solution of permanganate of potash, the available oxygen of which is to the organic matter as 1 is to 8; and the results are controlled by the examination of the colour of the water when seen through a glass tube two feet in length and two inches in diameter.

LADY LEECHES.—If we accept the vulgar opinion as to the phlegmatic character of the Dutch, we can fancy with what surprise the male population will receive a decree just issued by the Minister of the Interior in Holland. Hitherto the profession of assistant-apothecary has been exclusively restricted to men. By the new decree, however, the ladies have gained a point, for they are admitted to this position on equal terms with men. By this change in the regulations, Surgeons' wives will be entitled, if found properly qualified, to dispense their husbands' medicines—both a convenience and a saving to the thrifty Dutch.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

An Old Subscriber, Brighton.—The result of the recent examinations in arts, etc., at the College of Surgeons will not be made known for at least a fortnight.

De Candolle.—The late Dr. Pereira lectured at the Aldersgate School, and subsequently the London Hospital.

An Indian Surgeon.—Not having signed the by-laws, you could not be permitted to record your votes at the ensuing collegiate elections. On application to the Honorary Secretary, Mr. Hulme, of Gower-street, you could obtain admission to the annual festival.

Bibliopole.—The library of the College of Surgeons will not be closed until September.

Dr. Macintosh.—The annual meeting of the Medical Association will take place in Dublin about the middle of August.

A Member.—The fines inflicted on the notorious Jordan will go to the Medical Council. The expenses of the College to insure conviction were considerable.

THE MEDICAL CLUB.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Your correspondent "M.R.C.S.E.," in the *Medical Times and Gazette* of June 8, is justly indignant that Medical candidates are denied admission into the Senior United Service Club, and, by virtue of the practice of blackballing, are excluded from the Army and Navy and the Junior United Service Clubs. Allow me to suggest to "M.R.C.S.E.," and all his Medical brethren in the army and navy, the desirability of their joining the "Medical Club," which, I am happy to say, already includes many of the leading members of both services.

The club now numbers 600 members, and, should its progress continue at the rate it has done since the opening, we shall be able before long to afford our members a building and accommodation equal to the other clubs, and thus save our brethren from the snubs and slights to which, as Doctors, they are too often subjected in seeking admission into general clubs.

It only wants, on the part of the Profession, a long pull, a strong pull, and a pull altogether, and we shall have a club, strong, united, and harmonious, numbering among its members some of the most enlightened scholars and accomplished gentlemen it is in the power of any profession or class of society to supply.

I am, &c.

Medical Club, 53, Pall-mall, S.W. LORY MARSH, Hon. Sec.

"NOTES ON PRESCRIBING."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Believing you will fully agree with us in considering the following manner of prescribing most unprofessional and calculated to bring disrepute upon the Medical Profession generally, we trust you will give publicity to the following, and by your influential pen defend the character of the Profession against the stigma which, if allowed to remain unnoticed, will be brought upon more honourable Practitioners by an M.D. of this town. We copy from our prescription book :—

No. 1. "Ruspini 4s. 6d. Take a dessertspoonful in water three times daily.—Mrs. ——, July 4, 1866."

No. 2. "℞ Mist. taraxaci comp. ʒiv. In a sealed bottle. A dessertspoonful to be taken at 11 and 4 o'clock. Mrs. ——."

No. 3. "℞ Pil. saponis comp. grs. v.; nervine sedative pill. The last thing at bedtime. ℞ Baume tranquille, Pharmacopée Française, ʒij. To be rubbed whenever and wherever there is pain. 15/4/67."

Knowing as we do that these are to be found in no British Pharmacopœia—excepting, indeed, the unpublished one of the writer—they have been undoubtedly written for the express purpose of sending the patient to a particular chemist to get them dispensed, from which fact may it not be inferred that the Medical man is in some way pecuniarily interested in the profit of the said medicine?

We are, &c.

Cheltenham, May 30. A FIRM OF PHARMACEUTISTS.

THE TREATMENT OF CHOLERA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Having read with much interest the accounts recently published by you of the Medico-Chirurgical Society's meeting, where the valuable papers on cholera by Dr. G. Johnson, of London, and Drs. Wilson McCloy and Robert Robertson, of Liverpool, were read and afterwards discussed, I must say that the theory advanced by Dr. Johnson of the nature and treatment of Asiatic cholera appears to be a very rational one, and will, I think, be very likely to become generally accepted by the Medical Profession when it has been put to the test by a larger number of careful Professional observers of that disease. In support of the opinion that "cholera poison destroys life by arresting the pulmonary circulation," I would here mention the fact that, in the cholera epidemic of 1849, I observed that on applying flannels wrung out in hot water over the region of the heart, the oppressed state of the breathing was quickly relieved, and now on further reflection I believe that that relief so obtained was due to the relaxing of the spasmodic condition of the pulmonary arteries; and in support of this view I would refer to the practice of employing cold applications to the surface in cases of hæmoptysis for the purpose of effecting contraction of the vessels, or the known fact that if we put one hand into very cold water the vessels of the other hand will contract, and its temperature become lowered, these effects being brought about through the medium of the nervous system. Now, if we admit that Dr. Johnson has indicated the true seat and nature of cholera, as Practitioners, when called to a case our duty will be simplified by keeping our attention directed primarily to the region of the heart and lungs—not that we can afford to disregard the digestive organs, but if death be really produced by the congested state of the organs within the chest we may hope, by

directing more especial attention to them, by the employment of local as well as constitutional means, to arrest the fatal course and termination of the disease. Why should not bleeding, either general or local, or both, be resorted to more frequently than it has been? I am aware that a strong prejudice now prevails against bleeding, but having witnessed its good effect in cholera, and having considered that the pathology of the disease indicates depletion for the removal of physical obstruction to the pulmonary circulation, I shall be glad if some of your readers would favour me with their views on this subject. I may add that for the last fifteen years I have frequently observed the greatest relief to oppressed breathing obtained by local bleeding at the epigastrium; and it seems probable that the great distress which attends the sickness and vomiting in cholera cases would be abated at the same time and by the same means which alleviated the oppressed breathing. It may be well for me to state that I relied on liberal doses of calomel principally throughout the epidemic, and was much pleased with its good effects on the circulation; but my fatal cases told me that something more was required to enable me to combat the worst cases, and I now believe that that was a further power to promote the circulation through the lungs; and I ask the question, Will bleeding, general or local, be likely to contribute that valuable aid? If the effect of bloodletting in cholera were as thoroughly ascertained as that of calomel, I cannot avoid the conclusion that we might become possessed of an additional agent of great remedial power, and all the more valuable because it would always be at the command of the Medical Practitioner. Of course it would only be resorted to when the symptoms assumed an aggravated form.

I am, &c.

Pontefract, May 27. GEO. P. ATKINSON, M.R.C.S.

"CEREBRO-SPINAL TYPHUS"?

By EDWARD CLAPHAM, M.D. Edin.

A few days ago a case occurred in my practice which appeared to have some points in common with the disease described under the above head in the *Medical Times and Gazette* of May 25, 1867.

J. W., aged 22, a carter, tall and muscular, fell ill on May 24, with rigors, drowsiness, pain in head and back, vomiting; an eruption appeared on the morning of the 25th. First saw him at 7 p.m. on the 25th. He was then unconscious; pupils dilated, although contracting under the stimulus of light; pulse 60, of moderate strength. All over the body there was an eruption exactly resembling that of purpura; the spots varied in size from a pin's head to a sixpence, and were chiefly distributed over the legs and arms. I ordered him a tablespoonful of brandy immediately, to be repeated in one hour. 11 p.m.: Consciousness slightly improved; he can be roused by loud talking, &c. To have 1 oz. castor-oil; blister to nape of neck; cold applications to head, viz., pounded ice in a bladder laid over the head.

May 26.—9 a.m.: Consciousness still improved; complains of intense pain in the head, which causes him to toss about in the bed; his cries disturb the house. He became conscious about 2 a.m., when the bowels were freely opened; face and eyes suffused; pulse 110; tongue coated with thick white fur. To have a mixture containing magnes. sulph. and vin. ant. tart. 9 p.m.: Feels much better. Rash has nearly disappeared.

May 27.—Return of intense headache, which lasted seven or eight hours, and then ceased; pulse 80.

May 28.—With exception of slight headache, says he feels well. On the following day he was removed to his home, and I have since heard that he continued to mend steadily.

The rapidity with which the eruption appeared and vanished is to me remarkable. There was no dietetic error to account for the illness, as the man had previously been in perfect health.

Devizes, June 4.

COMMUNICATIONS have been received from—

Mr. DOBBIN; Mr. GREEN; Dr. HUNTER; Mr. PENNEY; M. A. B.; Dr. MERCER; Dr. ELLIS; Dr. LORY MARSH; Mr. G. OKELL; Dr. LATHAM; Dr. RICHARDSON; Mr. BREMRIDGE; Mr. ATKINSON; Mr. SPENCER WELLS; Mr. J. CHATTO; Mr. FURNEAUX JORDAN; Dr. A. LEARED.

BOOKS RECEIVED—

Teevan on Lithotomy—Scoffern on the London Surgical Home—Statistics of Patients under Treatment in St. Bartholomew's Hospital—Hovell on Pain—Vacher's Seduction in Edinburgh—Fourth Annual Report of the Argyll District Asylum for the Insane—Dewar on Sulphurous Acid Gas.

NEWSPAPERS RECEIVED—

Medical Press and Circular.

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 15, 1867.

BIRTHS.

Births of Boys, 1121; Girls, 1041; Total, 2162.
Average of 10 corresponding weeks, 1857-66, 1789·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	596	498	1094
Average of the ten years 1857-66	612·7	529·0	1142·0
Average corrected to increased population..	..	..	1256
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,388	..	5	..	1	7	3	2	..
North ..	618,210	6	3	6	3	6	15	11	..
Central	378,058	4	5	1	1	3	2	4	..
East ..	571,158	4	6	2	..	10	6	7	..
South ..	773,175	12	1	7	1	7	7	7	..
Total ..	2,803,989	26	19	16	5	33	33	31	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·941 in.
Mean temperature	59·9
Highest point of thermometer	82·1
Lowest point of thermometer	44·4
Mean dew-point temperature	50·4
General direction of wind	W.S.W. & N.W.
Whole amount of rain in the week	0·06

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, June 15, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending June 15.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending June 15.	Temperature of Air (Fahr.). Highest during the Week.	Temperature of Air (Fahr.). Lowest during the Week.	Temperature of Air (Fahr.). Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	2162	1421	1094	82·1	44·4	59·9	0·06	6
Bristol (City) .	165572	35·3	108	74	‡66	80·7	46·0	57·4	0·15	15
Birmingham (Boro')	343948	43·9	255	167	126	79·6	45·4	59·2	0·20	20
Liverpool (Borough)	492439	96·4	382	285	245	79·5	48·4	57·9	0·02	2
Manchester (City) .	362823	80·9	206	205	‡186	82·0	45·0	58·0	0·21	21
Salford (Borough) .	115013	22·2	71	58	53	78·5	42·9	55·8	0·25	25
Sheffield (Borough).	225199	9·9	155	119	100	78·5	44·1	56·4	0·39	39
Leeds (Borough) .	232428	10·8	225	118	113	80·3	42·0	57·6	0·23	23
Hull (Borough) .	106740	30·0	85	49	51	..	..	..	..	..
Nwcstl-on-Tyne, do.	124960	23·4	119	66	67	72·0	45·0	55·2	0·30	30
Edinburgh (City) .	176081	39·8	118	85	93	75·7	45·0	56·5	0·10	10
Glasgow (City) .	440979	87·1	411	257	204	74·4	44·2	56·6	0·18	18
Dublin (City and some suburbs) .	319210	32·8	173	‡157	169	79·4	43·8	58·8	0·03	3
Total of 13 large Towns . . .	6187764	34·8	4470	3061	2567	82·1	42·0	57·4	0·18	18
					Week ending	Week ending		June 8.		
Vienna (City) . .	(1863) 560000	..	..	..	June 8. 329	..	..	§ 68·5	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·941 in. The barometrical reading decreased from 30·14 in. on Tuesday, June 11, to 29·66 in. on Friday, June 14.

The general direction of the wind was W.S.W. and N.W.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 56·8°.

APPOINTMENTS FOR THE WEEK.

June 22. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

24. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

25. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ETHNOLOGICAL SOCIETY OF LONDON, 8 p.m. Sir Arthur Phayre, "On the Tenure and Distribution of Landed Property in Burmah." Mrs. Lynn Linton, "On Ethnography as illustrated by the Arts in the Paris Exhibition." J. Crawfurd, Esq., F.R.S., President, "On the Antiquity of Man."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Papers by Dr. Ryan, Mr. Squarey, Dr. Waring, Mr. Cooper Forster, Mr. Jonathan Hutchinson, Dr. Buchanan (of Glasgow), Mr. J. Birkett, Dr. Marcet, Dr. Cockle, Dr. Hillier, Dr. Beale and Mr. H. Lee, Mr. Lockhart Clarke and Dr. H. Jackson, Mr. Spencer Wells, and Dr. Bastian.

26. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 2 p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.

27. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

28. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.

HOOPER'S
WATER BEDS AND CUSHIONS,
(obtained the only Prize Medal, 1862).

USED BY
THE ROYAL FAMILY
AND ALL
CLASSES OF INVALIDS.

ALSO IN
H.M. ARMY AND NAVY,
AND THE
INDIAN PRESIDENCIES.

Full Length Water Mattress.
In sending an order the Width of the Bedstead should be stated.

Three-quarter Size Water Mattress.

Half Size Water Mattress.

HOOPER, Operative and Manufacturing Chemist, 7, Pall-mall East, and 55, Grosvenor-street, London

PANCREATIC EMULSION.—A NEW REMEDY.
PALATABLE AND MORE PERMANENT IN ITS EFFECTS THAN COD-LIVER OIL.

Originated by Dr. DOBELL,

PHYSICIAN TO THE ROYAL INFIRMARY FOR DISEASES OF THE CHEST.

Reports of "Cases of Consumption treated with Pancreatic Emulsion," in "The Lancet," Nov. 11 and 18, 1865, and Nov. 17, 1866.

N.B.—"Up to the present time I have not seen any Pancreatic preparations that can be relied upon, except Messrs. Savory and Moore's."—*Dr. Dobell, "On First Stage of Consumption."*

Sold by them and Chemists generally in Bottles (retail), 2s. 6d., 4s. 6d., and 8s.

THE FOOD FOR INFANTS AND INVALIDS.
Ready for Use without BOILING or STRAINING.

SPECIALLY PREPARED BY SAVORY & MOORE,

Chemists to the Queen, H.R.H. the Prince of Wales, the Emperor Napoleon III.

PRIZE MEDAL—EXHIBITION 1862.

A REAL IMPROVEMENT ("Lancet") on the ordinary kinds of Liebig's Food.

This Food contains an extra proportion of the Wheat Phosphates, so essential to the healthy growth of Infants and the restoration of Invalids. Tins, 1s., 2s., 5s., and 10s.

JEREMIE'S SOLUTION OF OPIUM.
This preparation has long enjoyed a high repute as a narcotic and anodyne, allaying pain and producing sleep, without causing the excitement and cerebral disturbance which often follow the use of opiates. Bottles, 2s. 9d., 4s. 6d., and 11s.

SAVORY & MOORE, 143, NEW BOND-STREET.

ORIGINAL LECTURES.

CLINICAL LECTURE ON RHINOPLASTY,

DELIVERED AT

King's College Hospital,

By JOHN WOOD, F.R.C.S., Assistant-Surgeon.

I TAKE this opportunity, gentlemen, of bringing before you a case which has excited a considerable amount of interest among the frequenters of the Hospital wards during the present session. It is a case of restoration of the nose after a very extensive loss of substance, both bones and soft parts, by syphilitic ulceration. Extreme cases of this kind, producing as they do a most ghastly death's-head likeness by the exposure of the deep facial cavities to open view, constitute such appalling objects, and rouse such a loathing aversion, as to modify, in unaccustomed minds, that sympathy which is the right of, and often in some measure a solace to, the unfortunate sufferer. From the earliest times efforts have been made to remove the deformity resulting from the loss of the nose by disease, accident, or wilful injury. Celsus is said to have followed the practice of replacing the organ from the adjacent cheeks. In the period immediately after the darkness of the middle ages, when the atrocities of the Asiatic practice of mutilation of prisoners filled Europe with grievous witnesses of man's cruelty to man, Gaspar Tagliacozzi, a doctor and professor in the then celebrated University of Bologna (better known under his Latin synonym of Taliacotius), achieved a famous reputation by his success in replacing the lost parts of the face, such as the nose and lips, by remote transplantation from the skin of the patient's upper arm. His method, as described in his quaint old book ("Chirurgia Nova," published in Venice in 1597), was, however, tedious, prolonged, and uncertain, as well as encumbered with the use of complicated apparatus, each portion bearing, after the pedantic manner of the age, its special and learned appellation. Some of his results, however, were then considered so wonderful that all civilised nations heard of his fame. His followers advanced so far even as to remove the necessary skin from the body of another person, and though the success of this ingenious practice does not seem to have become established, yet the very attempt was so daring, even in that enterprising age, and the idea so startling, pregnant, and suggestive, that its reputed odd consequences have been indelibly recorded in the literature of our English tongue, and wedded to immortal Hudibrastic verse. Since that time, experiments of engrafting portions of skin, and even bones and teeth, have been successfully made by various physiologists, of whom Hunter, in this, as in many other paths, stands foremost. He succeeded, as you have most likely learned from your text-books, in transplanting a freshly-drawn human tooth into the comb of a cock. Many other experiments of the same kind upon the lower animals have of late years been successfully performed, among which the most striking are those of M. Ollier, of Lyons, who transplanted, in rabbits, portions of the periosteum to abnormal positions, and found them still to retain their bone-producing powers. Most of you will, I dare say, be acquainted with a case in which, some years ago, I was myself successful in transplanting a considerable patch of skin from the abdomen to the forearm to remedy a disabling deformity resulting from the cicatrix of a severe burn, in a patient in this Hospital. All such instances of transplantation may be classed under the name of *remote* transplantation—*i.e.*, from one part to another at a distance, necessitating a complete ultimate severance of the transplanted portion of skin, whether in the same person, or from some part of the same or a different species.

The rhinoplastic operation, however, which has obtained the most favour and success in modern times is one in which the transplantation of integuments is from *adjacent* parts. The chief of these is called the Indian method, from its having been practised for many centuries in the East Indies, to remedy the mutilations often purposely inflicted by tyranny or revenge among a semi-barbarous people. Such cases are usually better adapted for plastic reparation than those consequent upon disease of any kind, because of the healthy character and the extent of the remains accidentally left by the executioner. The method was first introduced into English and European Surgery by Mr. Carpue in 1814, and was afterwards followed with much success by C. von Graefe, Dieffenbach, Larrey, Lizars, and Liston. Various modifications of it have been practised of later years with distinguished success by Sir W. Fergusson and Mr. Skey in London, and by Messrs. Hamilton, Stokes, and Colles in Dublin. The main features of this operation consist of the abstraction of skin for the new organ from the forehead, cut out after a pattern previously prepared in paper or plaster, leaving the flap temporarily connected with its original source of vascular supply by a root placed between the eyebrows. The edges of the gap to be covered are then made raw by the knife, and the flap turned down into its place by twisting the root laterally. It is then secured by sutures. After vascular union at the edges, the twisted root of the flap is usually divided and readjusted. In most cases the partition between the nostrils, or "columna naris," is shaped out in connexion with the rest of the new nose from the skin of the forehead, and united by a suture to the middle of the upper lip. In some instances the columna was formed by subsequent operation from the middle of the upper lip. This plan was followed by Liston in one or two cases with good results. Tagliacozzi had previously done pretty much the same thing. The ancient Celsian operation of shifting the skin from the cheeks to the nose has been revived in modern days in certain cases of redundancy in the former, by Graefe, Dieffenbach, and Hamilton, of Dublin. And here again I have to mention our honoured Professor of Surgery, Sir W. Fergusson, as having pursued this, and, I might say, almost every possible modification of the original plan with distinguished success.

In 1859, Langenbeck, of Berlin, with a view to obviate the soft and flaccid condition of the new nose in cases where the nasal bones had been removed by disease, transplanted, in connexion with the root of the flap, the *periosteum* of the frontal bone immediately subjacent. His expectation was to obtain the development of a bony arch in the site of the bridge of the new nose. You will find an account of this in the *Deutsche Klinik* for 1859. The before-mentioned M. Ollier has attempted even more than this—viz., to transplant a part of the *bone tissue* itself into the new site. In one of his three cases in which this was attempted, the part of the nasal bone so removed afterwards necrosed (*Gazette des Hôpitaux*, November, 1861).

The subject of the case under our immediate notice—a strong well-made man, J. R., aged 32, single, in railway employment—was admitted into No. 2 Ward, November 7, 1866. The history is, that fourteen years ago he contracted a chancre, and two years after that a second, both which got well without any secondary eruption. He remained well until about four years ago, when he began to be affected with a stoppage and snuffling in the nose, and with a small sore on the inside of the left ala. This slowly spread, with little or no discharge, and, after an application of caustic, portions of dead tissue came away. Six months afterwards, a considerable piece of bone came away from the nostril, and this was followed, at various intervals during eleven months, by other pieces, some of large size, both from the nose and the roof of the mouth. The ulcer, in the meanwhile, continued to spread, the whole of the nose gradually ulcerating and sloughing away in pieces, with a very fœtid discharge. During this time he had been under treatment at Guy's and King's College Hospitals, and had taken mercury on various occasions, but never to a very extreme degree. When he first came under my care his appearance was so forbidding that the poor fellow never went out without his face tied up. A large gap opened in the middle of his face, extending from the nasal bones above to the upper lip below. On the left side, the nasal process of the superior maxilla was entire, with a firm inverted cicatrix, including, at its lower part, a small portion of the left ala nasi. On the right side, the incisor and canine teeth, with their alveolar sockets, were entirely gone, with about three-fourths of an inch in breadth of the nasal process. The cicatrix

FIG. 1

here was much puckered and irregular. Sticking in the outer wall of the chasm thus opened into the mouth were seen the ends of the fangs of two bicuspid teeth, and a small exfoliation of bone, with some superficial ulceration in the soft parts around. The whole extent of the septum narium, the right side of the hard palate, the middle and inferior turbinated bones, and the whole of the soft palate were gone. The openings into the frontal and sphenoidal sinuses, the nasal duct, and the antrum of Highmore, were quite apparent, as also was the roof of the nasal fossa. The cheeks were limited in lateral extent, but the upper lip, although narrowed considerably in its vertical measurement by the ulcerative process on the right side, appeared loose and redundant in width from the extensive removal of the alveolar arch behind it. The man was otherwise in good health, with no cicatrices on the skin or damage to the eyes. He was put on a course of iodide of potassium and cinchona. The exposed teeth and a small piece of necrosed bone were extracted, and the sore touched from time to time with nitrate of silver.

When this had been healed for some time, the medicine was left off, and for a month or two the parts were watched to see if there would be any recurrence of the disease after cessation of the remedy. Such a recurrence, not uncommonly happening in the treatment of secondary syphilis, would probably have been fatal to the success of any plastic operation; and I therefore felt it incumbent upon me to guard by every means against the possibility of its occurrence at the critical period of the operation. The case, as it now stood, could not be considered as at all a promising one for rhinoplasty. The want of foundation for the superimposed structures brought down from the forehead, except that afforded by the remains of the nasal bones and the left superior maxilla, the loss of the right half of the alveolar arch, and the opening of a large gap into the mouth, were all unfavourable conditions. But the one which I thought to be the most unfavourable of all was the position of the gap towards the right of the median line of the face, which endangered a one-sided and wry position of the newly made organ—a result which would certainly mar the artistic effect of the most prominent feature of the countenance.

To place the opening in a more favourable situation, and to provide a more substantial foundation for the superstructure, seemed to be the first desideratum. I therefore determined first to dissect off the right cheek freely from the bones, and bring it nearer to the median line, and at the same preliminary operation to prepare a thick, firm basis for the columna from the middle of the superabundant upper lip. Accordingly on November 17, under chloroform, I divided the upper lip by two vertical through incisions, about half an inch on each side of the median line, leaving the intervening portion attached by its base to the left alveolar arch. The knife was then freely applied to the surface of the right superior maxilla, shaving off all the structures close to the bone, as far outwards as the malar articulation. To a less extent the knife was also applied in the same manner on the left side of the gap. A long and strong harelip pin was then pushed through the centre of the left cheek, brought across the nasal opening, and passed out through the middle of the right cheek. A twisted suture of thick silk was then applied over it, with the effect of bringing the cheeks towards each other, and reducing the nasal aperture to about an inch in width. The central flap of the upper lip was then raised, turned upwards, and the cut edges of the lateral portions drawn together by three harelip sutures. The ends of the pins were then cut off, and the cheeks and lip supported in their new position by pads of lint and long straps of adhesive plaster placed across the face. On the 19th the lip had united by the first intention, and on the 22nd all the pins were removed. Some swelling had occurred in the right cheek, and a purulent discharge issued from beneath it, but after some days these had subsided, and the cheeks firmly retained the desired attachments. The nasal opening maintained its median position, and a broad and prominent projection of the transplanted portion of the lip afforded a satisfactory basis for the destined columna.

I had thus prepared for this important accessory of the new organ before, instead of after, the success of transplantation from the forehead had been accomplished, reversing the order which had been followed in such cases by Liston and others.

On December 8, I cut out the new nose from the forehead, following the usual method respecting the use of a paper pattern, taking abundant material, and sloping the edge of the cut, &c. At the site of the columna, instead of an angular projecting portion, I shaped out a prominent convex curve, passing on each side by a flowing line into the concave bend of the nostrils, and avoiding all angular lines, with the view of obtaining a broader surface of union, and of covering entirely the mucous membrane presented by the everted portion of lip. In another respect also I departed from the usual course. Being convinced that in plastic operations of every kind, the shrivelling of the transplanted structures which so often converts them ultimately into mere nodular projections stuck on like putty, results mainly from the practice of dividing entirely the original vascular connexions (as I have shown on former occasions in this theatre in reference to plastic operations for covering an extroverted bladder), I determined so to arrange the root of the flap as to leave it permanently undivided opposite to the inner canthus of the right eye. By this means I should obtain the benefit of the retention in the flap of the superior nasal, as well as the frontal branch of the ophthalmic artery of that side, as an enduring and enlarging source of blood supply to the new organ. To accomplish this I carried the incision on the left side of the root of the new nose straight down and quite into the nasal gap, raising at the same time the skin over the nasal bones; but, on the right side, the incision was continued only to the level of the eyebrow. I did not attempt to take up the periosteum with the root of the flap, for the reason that it was less needed in the presence of the greater part of the nasal bones, and that, in a syphilitic taint of the constitution, the bones are apt to take on diseased action after injury, and might thus add to the unpromising features of the case. Laving the flap to stop bleeding under the application of a gentle stream of cold water, I next proceeded to make raw the edges where adhesion was required, at the lateral borders of the opening, and at the everted mucous lining of the columnar lip flap. This done, the new nose was turned down by a half twist to the left, and fastened in its place by numerous fine wire sutures, two of which were placed in the columna. The fragment of the left wing remaining in the cicatrix was carefully adjusted *in situ*. The right side of the organ, being made by the twist a little wrinkled from redundancy, was so folded near the nostril as to imitate very fairly a right ala. The flap sat easily in the median line, with a very slight twist at the root, and a prominent curve over the nasal bones. Into each nostril a roll of adhesive plaster, covered by oiled lint, was inserted obliquely. No other dressing or pressure of any kind was applied.

On the 12th, a regular, even, and almost unobservable line of union had become established along the left side of the new nose, and the columnar portion had become broadly and firmly adherent. At the lower part of the right side the adhesive process had failed to establish itself, apparently from imperfect action in the tissues most recently affected with the syphilitic taint. On the 15th, the whole of the sutures were removed. On January 5th, 1867, the ununited edges on the right side were pared with the knife and again brought together by wire sutures, a tolerably free separation of the cheek from the bones being again accomplished to give pliability to the margin. From this part the patient had, on the day following, a pretty smart hæmorrhage, attended by some slight constitutional disturbance. The bleeding was stopped by the House-Surgeon by the application of cold and pressure with the finger upon the infraorbital foramen, whence the artery which supplies the part emerges. After this the edges united by coalescence of granulations, and the patient, whose health soon resumed its usual standard, was discharged in the beginning of February, with instructions to show himself from time to time, so that any changes from consolidation or contraction, etc., could be noticed. At this time he wore constantly a plug of lint in each nostril to keep it patulous. An ingenious wire spring clip, with the ends covered by a wash-leather pad at the point of impact, was devised and made for him by Mr. Matthews of Portugal-street. (See Fig. 2.) This was worn with benefit to pinch up the middle of the nose into a classical Roman type.

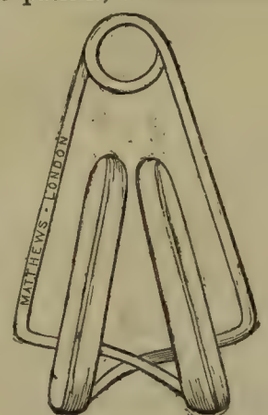


Fig. 2.

In the progress of the next three months, the right nostril gradually contracted in spite of the plug, the margin becoming depressed so much as materially to depreciate the horizontal symmetry of the nostrils. This had evidently arisen from the

contraction of the newly-formed tissues about and under the right cheek and side of the upper lip. The transverse fold or chink in the site of the right alar groove performed its artistic duty very satisfactorily. On the left side hardly any change had taken place. The colour of the cicatrix both here and on the forehead was gradually becoming paler and less visible; the small portion of the left wing, which had been here utilised, had re-established much of its original effectiveness. The everted lip flap or sub-columnar portion remained firmly adherent to, and was completely covered by, the skin brought down from the forehead, except in the right nostril, towards which it has become twisted by the contraction of the tissues. This had the advantage of filling up almost entirely the gap left by the removal of the alveolar arch, and the nasal portion of the upper lip in this situation, the absence of the support of which has mainly caused it. To render this a permanent advantage, and to open up and restore the symmetry of the right nostril, the patient was lately again admitted into the Hospital in the beginning of April. On the first Saturday in that month, I shaped out of the depressed and depending tissues of the right ala, with a small narrow-bladed knife, a new nostril, curved so as to correspond as near as possible with that of the opposite side. I then pared off the surface of the mucous membrane of the labial part of the columna, and placed it by a suture in apposition with the deficient upper margin of the right side of the lip, and with the incurved termination of the right ala nasi, so as to fill up the gap which still showed into the mouth in this situation. A stout silver wire, bent at a double right angle, and the ends covered by a roll of plaster and oiled lint, so as to hold the nostrils in their proper relative situation, was inserted into them immediately after the operation. This operation succeeded perfectly, and much improved the appearance of the organ. A small chink, which had remained ununited between the columna and right upper lip, was afterwards made raw and united by a wire suture. Subsequently the union was completed by a touch of the heated wire.

The total result of these persevering attempts at artistic Surgery in a case decidedly not favourable for brilliant success is seen in the facial elevation of the physiognomy before you. (The annexed woodcut, Fig. 3, is copied from a photograph recently taken.) It must be acknowledged that it is, upon the whole, an improvement of the most decided character, and one far preferable to the most approved specimen of artificial make, even of the most elaborate kind in gutta percha or india-rubber, notwithstanding the opinion expressed to the contrary by a very high Surgical authority in Edinburgh.

FIG. 3

One of the most important advantages possessed by the natural structure is the vital power it possesses to assimilate its colour to the varying hues of the complexion. Another is its fixed, immovable, and enduring character under the accidents of daily life. The man has perfect sensation over all parts of the organ, and with his eyes closed refers any touch upon it to the right situation. On the left side he has considerable power of compressing or wrinkling up the organ by the joint action, apparently, of the compressor naris with those fibres of the occipito-frontalis which have been brought down unimpaired from the forehead and united with it in the cicatrix. A small pucker on the right side of the bridge, resulting from the less ready union at this point, has diminished considerably in prominence by the contraction of cicatrisation over the deep surface, and will, in all probability, become in time quite obliterated. The nostrils are now fairly regular and symmetrical, and the scars on the upper lip are almost covered by the moustache. The point of the nose is more prominent than is usual in these cases, and presents a very fair profile. This I attribute in great measure to the thickness and solidity of the double columna, and to the growth of stiff hairs from the deep or skin surface of the everted lip flap, pushing out and steadying the otherwise yielding knob at the point of the new feature.

The patient is now ready for the application of an india-rubber obturator to supply the deficiency of the hard and soft palates and arch of the upper jaw. This it is intended to provide with a projecting saddle-shaped rostrum, to support and make still more prominent the salient part of the replaced nose.

ORIGINAL COMMUNICATIONS.

A SCIENTIFIC INQUIRY INTO SOME OF THE CAUSES ALLEGED TO PRODUCE ASIATIC CHOLERA.

By the Rev. SAMUEL HAUGHTON, M.D., F.R.S.,
Fellow of Trinity College, Dublin, and of the College of Physicians, Ireland.

(Concluded from page 491.)

Mortality Curves of Cholera.

I shall conclude this series of papers by an investigation of the laws that regulated the cholera mortality curves of Dublin, Liverpool, and London, in 1866, as I believe that those curves throw light upon the cause of cholera, and show that its principal reason for propagating its influence is to be found in the explanation afforded by the "*contact theory.*"

In the accompanying diagram (p. 714) I have reduced the mortalities of Liverpool and London to the scale of the population of Dublin; so that, if all three towns were of the size of Dublin, they would have suffered from cholera, in 1866, in the proportion:—

I.	Dublin . . .	1193 deaths.
II.	Liverpool . . .	1176 „
III.	London . . .	556 „

The deaths from cholera in London were so trifling in 1866, as compared with Dublin and Liverpool, as hardly to be worthy of consideration in a scientific inquiry into the causes that propagated the disease, were it not that they were confined to a small district of the metropolis, which was devastated by cholera to an extent unknown in Dublin, and to be paralleled only by the worst parts of Liverpool.

The cholera curves of mortality, taken week by week, in Dublin and Liverpool, are made to commence together, although there was a difference of four weeks, for Dublin received its cholera from Liverpool, and "hung fire" for four weeks.

It will be observed that the Dublin curve reached its maximum four and a half weeks or thirty-one days later than the Liverpool curve, and also that its ascent and descent are both more gradual than those of the Liverpool curve, showing, like the Liverpool and London curves, a tendency to symmetry at both sides of the maximum.

The total areas of the Dublin and Liverpool curves are represented by the numbers—

Liverpool.	1176
Dublin	1193

The London curve, although insignificant in its total area, as compared with those of Dublin or Liverpool, being only—

London	556

nevertheless frightened the metropolitan public, because it reached for a short time a maximum greater than that of Dublin.

I have made the maxima of the London and Liverpool curves to coincide, for the purpose of comparison, although the interval between their maxima was greater than in the case of Dublin and Liverpool.

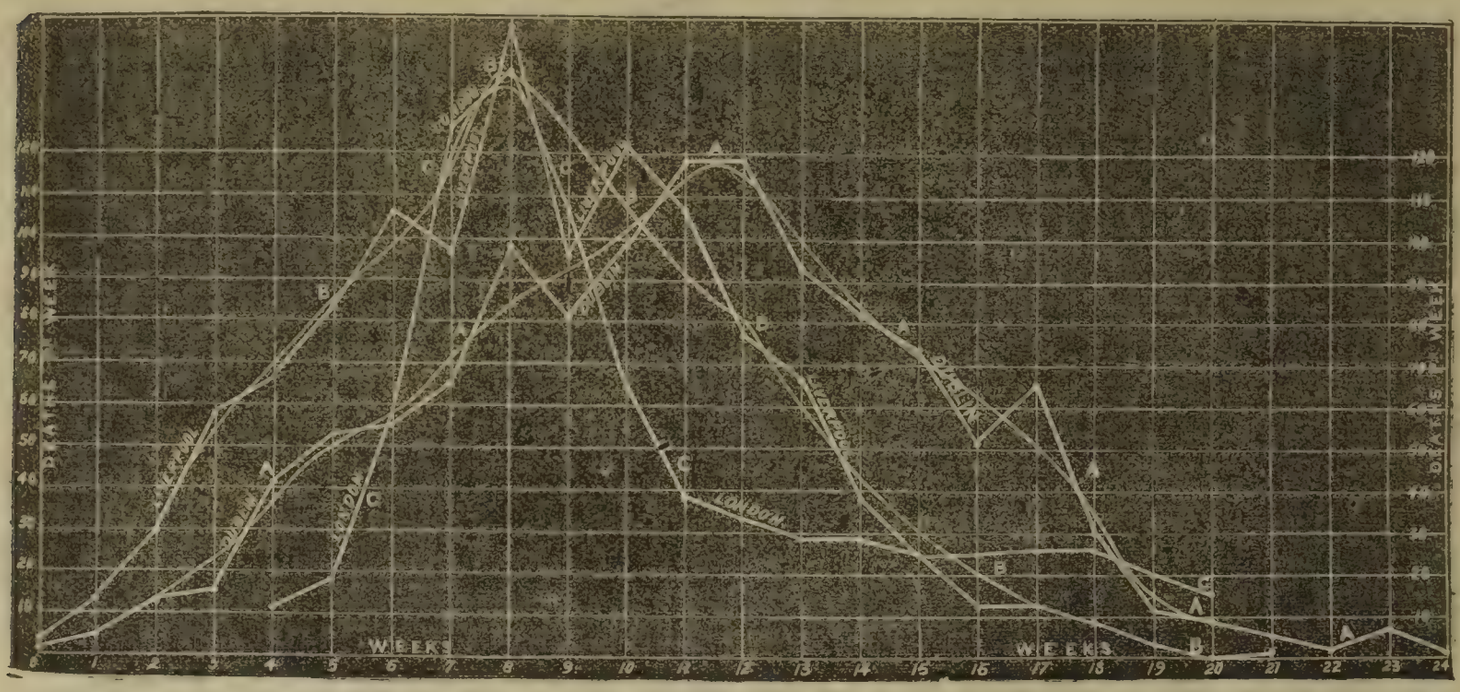
I. All three curves show a certain symmetry in their ascent and descent, which points to some general law.

II. The curves of Liverpool and London show a more rapid law of ascent and descent than that of Dublin.

If cholera be assumed to be a disease propagating itself from person to person, *cæteris paribus*, with equal facility, when external conditions are the same, it can be shown, from the most elementary principles of mathematics, that its curve will be symmetrical in its ascent and in its descent.

If the district attacked by cholera, and in which cholera can propagate itself from person to person, be limited in extent, as it was in London and Liverpool, it can be shown from the same principles that its mortality curve will have a steeper ascent and a steeper descent than if the persons liable

to invasion were scattered over a wide surface, as was the case in Dublin, where the distance of the victims from each other was between two and three times greater than in London or Liverpool.



My limits do not permit me to do more than throw out the foregoing hint for the consideration of future observers; and I feel satisfied that the forms of the mortality curves of each district, compared with those of other districts, with reference to the sparsity and density of population, and other hygienic conditions, will prove capable, not only of showing that cholera requires contact for its propagation, but will also throw light on the special laws of that propagation, which is by contact, and by contact only.

The following table contains the actual deaths per week in Liverpool and Dublin, together with the calculated deaths of Liverpool reduced to the standard of Dublin.

Deaths from Cholera, 1866, *in Liverpool* (*population in* 1866, 484,337) *and in Dublin* (*population in* 1866, 318,437).

	Liverpool. 1866.	Liverpool (observed).	Liverpool (reduced).	1866.	Dublin (observed).
1.	July 7	4	3	Aug. 4	2
2.	,, 14	19	13	,, 11	5
3.	,, 21	45	30	,, 18	13
4.	,, 28	87	58	,, 25	15
5.	Aug. 4	101	67	Sept. 1	41
6.	,, 11	126	84	,, 8	52
7.	,, 18	157	105	,, 15	55
8.	,, 25	146	97	,, 22	65
9.	Sept. 1	225	150	,, 29	98
10.	,, 8	145	97	Oct. 6	81
11.	,, 15	182	121	,, 13	98
12.	,, 22	159	106	,, 20	118
13.	,, 29	116	77	,, 27	118
14.	Oct. 6	99	66	Nov. 3	93
15.	,, 13	53	38	,, 10	82
16.	,, 20	38	25	,, 17	73
17.	,, 27	19	13	,, 24	53
18.	Nov. 3	17	13	Dec. 1	65
19.	,, 10	14	9	,, 8	31
20.	,, 17	5	3	,, 15	12
21.	,, 24	1	0	,, 22	9
22.	Dec. 1	2	1	,, 29	5
				1867.	
23.	,, 8	0	0	Jan. 5	2
24.	,, 15	0	0	,, 12	6
25.	,, 22	0	0	,, 19	1 (a)
		1760	1176		1193

Dr. W. H. Stone has been appointed Secretary and Superintending Inspector under the General Board of Health, Vaccinator-General, and Health Officer, in Trinidad. We understand that the appointment is a temporary one, for the purpose of remodelling the Medical and sanitary organisation of the island.

(a) Died December 26, 1866.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

LITHOTOMY, WITH THE CELSIAN INCISION.

At King's College Hospital Sir William Fergusson has lately practised a revival, somewhat modified, of the old Celsian method of lithotomy, or, rather, the Celsian external incision. The patient being placed in the usual position, and a staff introduced into the bladder, a lunated incision, with its cornua pointing downwards, was made through the integuments. The rest of the operation was, however, we understood, similar to the ordinary lateral, as the left side of the urethra and prostate only were divided. Sir William remarked that the method gave great facility in extracting the stone, as so much more of the hand could be introduced during manipulation, and that there was less danger of wounding the rectum.

That this method has not been practised by any Surgeon since the time of Celsus, is, we imagine, an error, as a study of the bibliography of lithotomy will afford us several similar. We are glad, however, to see its revival in the hands of so able a lithotomist; but, until we had attained great dexterity in lithotomy, we should be inclined to adhere to the lateral method, and this, indeed, was Sir William's advice. The patients operated on by this method, a man and a child, have both recovered without a bad symptom.

SAMARITAN HOSPITAL.

CASES OF OVARIOTOMY.

(Under the care of Mr. SPENCER WELLS.)

(Continued from Vol. II. of 1866, page 583.)

In our remarks (December 1, 1866) upon Mr. Spencer Wells's eighty-fourth case of ovariotomy in the Samaritan Hospital, we stated that the patient's condition would be observed with interest on account of the suspicious appearances of the peritoneum, which was dotted over with hard white granules, like uncooked sago. We are now able to state that, although the patient was much longer than usual in gaining strength, she called at the Hospital last month in excellent health. We continue our reports of these operations in the order of their performance.

Case 85.—Pseudo-colloid Ovarian Tumour — Ascites — Six Tappings — Ovariotomy — Death Thirty-two Hours after.

In July, 1866, Mr. Wells saw a married nurse, 31 years of age, with Dr. Gream. She had been married five years and

had two children, four and two years old. In January, 1866, she had a two months' abortion. In February she noticed a small lump in the abdomen, not painful. In March, at the time of the catamenia, it felt larger, and so on at each succeeding monthly period. At her period in the first week in July she felt pains for the first time, and had dysuria. A hard tumour was found on July 9 in the centre of the abdomen, extending 3 inches above the umbilicus. Above and on each side it was bounded by tympanitic intestine, and a wave of ascitic fluid could be detected. The uterus was high, its cavity 3½ inches long. Looking to the rapid growth of the tumour, the early formation of ascitic fluid, and the rapid emaciation which had been observed, although the tumour was not of great size, Mr. Wells feared that the tumour might be malignant, and it was decided to give steel and watch the progress. After two attacks of severe abdominal pain, she was tapped by Dr. Junker on August 25 and September 17, 1866. On October 2 she was admitted to the Samaritan Hospital. On the 5th and 22nd she was tapped for the third and fourth times. The fluid was about twenty-two pints at each tapping; turbid yellow in colour, and slightly viscid. She continued taking three grains of the perchloride of iron three times a day. The fifth tapping was on November 18, quantity twenty-five pints; the sixth on December 3, twenty-nine pints; on both occasions the fluid was quite clear. As the patient and her husband became extremely anxious to have some attempt at cure made at any risk, although the very unfavourable nature of the case had been fully explained to them, Mr. Wells operated on December 6, 1866, three days after the last tapping. He wished to lessen the shock of the operation by tapping, and gain some relief to the heart and lungs, while allowing any immediate effect of the tapping to subside. Owing to the suspicious character of the tumour, he decided to remove it entire, and accordingly made an incision between nine and ten inches long, extending from about three inches above to six or seven below the umbilicus. Some parietal adhesions and a large piece of omentum were separated, and the tumour pressed out unbroken, with several pints of ascitic fluid and flakes of lymph. The tumour was held by a short pedicle, hardly more than an inch from the right side of the uterus. This was enclosed in a clamp, and the tumour was cut away. Some blood, ascitic fluid, and flocculi of lymph, were sponged from the peritoneal cavity. A large artery behind the clamp was then found to be bleeding. This was tied, and the ends of the ligature were fastened to the clamp. Several vessels in the separated omentum were also tied, and the ligatures were all cut off short. The left ovary and the uterus were healthy. The wound was closed as usual. The solid tumour weighed nine pounds five ounces. The fluid surrounding it measured thirteen pints.

Little need be said of the state after operation, except that there was very little pain, and no opium was given. The patient was cheerful, but weak, and the pulse was very rapid and feeble. There was no sickness, very free transudation by the skin, and scanty secretion of urine. On the evening of the day after operation she became faint and restless, and died thirty-two hours after operation.

On examination of the body all the organs appeared anæmic, but the wound was well united. There was half a pint of red serum in the peritoneal cavity; the intestines were loosely glued together by lymph; the lungs were œdematous; the right cavities of the heart contained fluid blood; the left, fibrinous clots. A clot was also found in the right internal carotid.

Dr. Junker described the tumour as follows:—"It was of irregular oval shape, and had an uneven surface, roughened by broken adhesions, and covered by coagulated lymph. It was composed of a thick, firm, rather vascular fibrous stroma, forming irregular trabeculated interspaces, which contained a whitish-yellow, opaque, semi-solid substance. On microscopic examination (x. 335) this substance was found to be composed of molecular granules and oil globules mixed with colloid globules, $\frac{1}{300}$th of an inch, containing one or two nuclei—of epithelial cells, and of a variety of cells of irregular outline, some caudate, some spindle-shaped, but the majority oblong, containing a nucleus and several nucleoli; no cholesterine. Towards the base of the tumour the stroma increased in thickness, and about an inch from the insertion of the short pedicle a whitish-yellow body was found, which in size, shape, and consistence much resembled an ovary. Under the microscope, however, it showed the same morphological elements as the above-described contents of the tumour."

Some histologists may regard the above description as proof of the malignant nature of the tumour. Others may say that it corresponds only with the glandular or pseudo-colloid ovarian tumours which do not infiltrate neighbouring parts, and do not return after removal. Without entering into this discussion, it is quite clear that the clinical history was rather that of malignant than of innocent disease of the ovaries. Rapid growth of tumour, rapid emaciation of patient, and early occurrence of ascites, are all suspicious symptoms, and led in this case to an unfavourable prognosis from the first. Mr. Wells observed that these cases placed the Surgeon in a position of great difficulty. Feeling it right to express a guarded opinion in the early stages of the disease, the patient naturally shrinks from a hazardous operation. While the tumour is of moderate size and suffering not great, she and her friends are unwilling to submit to anything beyond palliative measures; but at last, when suffering is great and all hope is lost, the Surgeon is entreated to do something, and is almost compelled to do it against his judgment. His justification for yielding is that if he fails the patient's life is scarcely shortened, while she is spared a lingering painful death; and even a rare exceptional success in such a desperate case is a great triumph of Surgery.

(To be continued.)

TERMS OF SUBSCRIPTION.

Twelve Months stamped for post £1 10 0
Six Months 0 15 0

Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

Terms of Subscription for India, £1 15s. per annum.

The Journal can be obtained of all Booksellers and Newsmen, Unstamped, for £1 6s. per Annum.

Post-office Orders and Drafts on Army or Navy Agents, should be made payable to Mr. James Lucas, 11, *New Burlington-street, W.*

CHARGE FOR ADVERTISEMENTS.

Seven lines, or less . . 4s. 6d.	A Column . . . . £2 12s. 0d.
Every additional line . 0s. 6d.	A Page . . . . 5 0s. 0d.

Medical Times and Gazette.

SATURDAY, JUNE 29, 1867.

RAIN AND DISEASE.

In the whole range of natural phenomena which constitute what we call weather, none receives such peculiar treatment as rain; it is acknowledged to be *the* element in weather, upon which so much depends, yet all persist in regarding it in opposite lights, and not unfrequently, even at the same time, in the most extraordinarily ubiquitous manner; but the mind is ubiquitous, therefore much of the paradoxical character of this fact vanishes. Most of our ideas respecting weather are simply conventional: if rain be absent, and the sun shine, we call it splendid, fine, and beautiful; when, however, it is present, we use strong words, such as wretched, bad, or dirty, and upon the greatest cleanser we know the whole blame is laid.

In times of drought we long for, pray for, and anxiously look for rain; and yet, when it does arrive, we soon weary of it, and before one-hundredth part has been accomplished of what we know is required of it, our minds, so intolerant of inconvenience, get tired of it, and its welcome is worn out before it has been our guest many hours. We think much of rain's immediate effects, for they interfere with our pleasures and sometimes our business; but whilst doing so, however, we are apt to forget those remote consequences to health and prosperity, which are of such deep interest as well to the Physician as to the political economist, to the agriculturist as to the manufacturer, and all the intermediate grades of practical workers in the busy world of life.

In the old war times the State saw that light was a necessary

good, and therefore taxed it; in our own times it has been forced to acknowledge that windstorms are evils, made unnecessarily greater by the want of means to carry out what the limited knowledge of their laws had suggested to practical men for forewarning the sailor by foretelling their advent; and it appointed the late lamented Admiral Fitzroy to undertake the duties of this responsible office. Under his auspices the money grant of the State was the means of saving valuable life and property, although the system was, and is, in its infancy.

The effects of windstorms are immediate, those of rain more remote; but some of them are not less disastrous to life and property. Happily, they are, to a certain extent, counterbalanced by blessings, which are more evident than the beneficial results of a hurricane.

The rainfall of our country has not engaged the attention of the State to the extent that its importance demands. The expense of acquiring our present knowledge of it has been very great, and supplied from private sources. This should not be; a great inquiry, having for its object the improvement of the health and wealth of a nation, ought to be provided for out of the public money ungrudgingly. Rain, unlike light, however, has escaped taxation, although only narrowly; for during the long war, and when Pitt was puzzled what next to tax, he wrote, whilst staying at Burton-Pinsent in Somersetshire, to a friend and neighbour in that county, asking him to suggest something that might be taxed, as he had exhausted his stock, and was at his wits' ends. The reply was: "Tax umbrellas, and make the bishops order the prayer for rain to be read in all the churches till the end of the war." Pitt, however, had already taxed everything the umbrella was made of, and, having a conscience, the contrivance to keep the rain off did not share the same fate as the one to let the light in, although in exactly the same category. The Church has considered the subject of rain, and has recommended a prayer to be offered up in time of drought for "*moderate rain and showers*," seemingly afraid lest her prayers be answered by a "*plague of rain and water.*" Her anxiety, however, is only in reference to eating and drinking.

We have been led to these remarks by the perusal of Mr. G. J. Symons's publications on British Rainfall. This gentleman has been a most indefatigable and accurate student of this interesting subject for many years, and, by dint of great perseverance and immense labour, has collected a mass of facts which will prove valuable both for present and future use. Mr. Symons has collected records of British rainfall from the year 1677 to 1867, the number of which in each decennial period from the first date to 1864 ranges from *ten* in the first to *five thousand eight hundred and seventy-four* in the last, or, taking the number of records for each year during the last two centuries, Mr. Symons has collected nearly *twelve thousand records* of rainfall, which he has arranged, tabulated, corrected, corresponded about, travelled and searched for, besides organising a system throughout the British Isles for observation on its distribution, entailing a vast amount of letter-writing and expense. Mr. Symons has done all this, and more; he has not kept his knowledge to himself, but has, out of his own private means, assisted only slightly by what may be almost termed private subscriptions, and by a small present from the British Association, published the results of his labour of love in the form of annual tables and pamphlets, which are proofs in themselves, to those who can appreciate toil of the kind, how ardent his zeal is to obtain correct information on his favourite subject, and how commensurate with his zeal is his ability. Yet in spite of all this we know that, in all ranks of society, and, unfortunately, even among our own brethren, there are a set of short-sighted and narrow-minded utilitarians (?)—they call themselves so—who would long to chalk up *cui bono* upon Mr. Symons's rain-gauge. Having long ago, however, learnt to despise the cui-bonist, we simply will not reply to him, although for the sake of others we will give one or two illustrations how this investigation may affect the public health. Dr. Richardson proves to us, in his valuable and practical lecture on the poisons of spreading diseases, how a certain amount of dilution by water renders the most virulent organic poisons innocuous, and Dr. Edward Ballard, to a most elaborate paper lately read before the Royal Medical and Chirurgical Society, on the influence of temperature in the production of disease, has appended a diagram which well illustrates the effects of a downfall of rain in diminishing the amount of sickness. Whilst Dr. Richardson shows, however, that much dilution may destroy organic poison, he draws our serious attention to the fact that a sufficient rainfall over an area bespread with animal excreta for the purposes of agriculture may have a most injurious effect upon the health of the neighbouring community; and, whilst on this subject, we cannot do better than refer to a fact which has lately come under our observation, and of which an article in Mr. Symons's *Meteorological Magazine*, on the influence of the rainfall on the depth of well-water, has reminded us. Last year, a town in the western part of England, at all times subject in its eastern district, which is on a lower level than, and separated from, the western by a deep river, to a prevalence of low fever and diarrhœa, owing to its impure water supply, became suddenly the seat of cholera: the whole town had suffered fearfully in 1849. On examining the geological character of the strata of the district, we found immediately below the soil-crust a stratum of brick-clay, varying from twelve to twenty-five feet in thickness, resting on a bed of sea-sand from eight to ten feet thick, below which were strata of gravel, marl, and, lastly, red sandstone of undefined depth. In the construction of the wells the clay would necessarily be pierced, and water would then be found in abundance immediately on reaching the sand. The water thus obtained had from time immemorial been considered bad, but every now and then it was observed to have its evil qualities intensified, and this apparently in a most eccentric manner, until it was found that the rainfall influenced both its quantity and quality. On our being consulted, we had little difficulty in solving the problem, for we very well knew that within four miles of the town this water-bearing stratum cropped out on the surface, having at some remote geological period been elevated through the clay over an area of many hundred acres, where vast quantities of potatoes are cultivated, the haulms of which, after the tubers have been collected, being allowed to rot on the ground for the sake of manure, in addition to animal excreta, which are plentifully scattered over the fields. Thus an extensive superstratum of decomposed and decomposing vegetable and animal matter overspread at times the natural soil, and lay as it were in the mouth of this sand outcrop; thus the rain that falls thereon, after saturation with organic poison, readily and quickly finds its way through the loose texture of the continuous sand-bed beneath the clay to the low level of the wells of the infected town. Whilst the cholera lasted the municipal and Poor-law authorities seemed to appreciate the meteorological and geological causes of the unhealthy state of an important district of their borough, and were aroused for a short time to a sense of their duties, and actually began to think of obtaining water from the pure and uncontaminated sources in their neighbouring red sandstone hills. The immediate cause of their alarm, however, passed away, and their good resolutions were all bound up in red tape and strangled; so that now there is no time to avert a similar calamity to those of 1849 and 1866, should it recur this autumn in our country. Let other towns take warning from the folly of this one.

We feel convinced that meteorology and geology are not sufficiently studied in connexion with disease, especially epidemics. We should like to see published a good map of the British Isles, showing distinctly their rainfall, watershed, and geology, for the use of independent observers, who would then be enabled to superadd their own facts relating to the

appearance of diseases, and thus afford a valuable aid to the registration of disease, which Dr. Richardson proposed as a means of studying the laws of the distribution of epidemics in his *Journal of Health* for 1855. The best map of the kind we know is the one published by Stanford, showing the watershed by Petermann, and rainfall as ascertained by Mr. Symons.

Again, the flooding of large tracts of land by excessive rains might in many instances be arrested if the rainfall of the district were studied, and the outlets for the superabundant water made adequate for its removal. We all know how malarious diseases follow in the wake of rain floods, and how frequently they leave an indelible stamp upon the *physique* of their victims.

We hope the band of observers under Mr. Symons will continue their labours, and that their director, who was co-labourer for some time with the lamented Admiral Fitzroy, will have his self-imposed public services recognised in the proper quarter.

THE WEEK.

TOPICS OF THE DAY.

It will not be a matter of surprise that a legal candidate for the representation of the University of London has already appeared, in the person of Mr. Quain, the barrister. Not as we hoped, but as we feared, the representation of the University seems destined to become a mere political prize, and the best opportunity which has occurred in our time of giving the Profession of Medicine a voice in the House of Commons will probably be lost. Mr. Quain comes forward as a Liberal. His answer to the Liberal Committee, who have applied to him, is full of the ordinary subjects of a political address, but contains not a word which can be considered to express any sense of the peculiar position which we think the representative of the University of London should hold in the House of Commons. The University of London is chiefly a Medical university. Its success in other branches of education has been by no means extraordinary. There can be no doubt that the Medical graduates could, if they pleased, carry the election, and secure to science and their own Profession at least one fitting representative in Parliament. If they prefer to return a mere Liberal or a mere Conservative—in other words, a mere party man—their University will sink into the political insignificance of a small and unimportant constituency.

The retirement of Sir William Lawrence from the Council of the College of Surgeons will make no difference at the coming election. Had his resignation been received earlier, it would have given Mr. Kiernan a further extension of office. Sir William's seat will, we understand, remain vacant until the election of next year. Opinions vary as to the result of this year's election. When such candidates are in the field, it is certain that the choice of the Fellows, whatever it be, cannot but be good. We have, however, already expressed an opinion that the retiring members have accomplished all the purposes, whether of public good or personal honour, for which a seat in the Council is desirable, and that they should now make way for others. We adhere to this opinion, and we also think that the time has arrived when the Fellows by examination should at least have one representative in the Council Chamber.

The principle of giving extra fees for good workmanship affirmed by the Vaccination Bill is entirely a new one, as far as regards Professional remuneration. A Professional man is no doubt to a certain extent recompensed according to the skill of which he is supposed to be possessed, but he is never recompensed according to the skill shown in the individual case. The extra gratuities for successful vaccination are to be paid by the Treasury, on the recommendation of inspectors; but as it is intended that only a percentage of children should be inspected, a very accurate apportionment of reward is out of the question. The inspectors will consequently have to perform a most invidious task, and will be constantly exposed to charges of favouritism. We look upon the whole machinery of the Bill as a mistake. A proper fee for each successful vaccination would obviate, in a great measure, the necessity for salaried inspectors, and registration of vaccination with that of birth, according to Dr. W. Farr's proposal, would save the clumsy and irritating process apparently in store for parents and vaccinators.

The old complaint that calves are bled to death for the purpose of blanching their flesh has lately been revived under Medical auspices. We cannot say that such practices are unknown in English slaughter-houses, but we do not believe that they are universal, and it is not true that bleeding is "slow torture." No patient ever complained of pain when being bled to syncope, although many have found great relief from pain during the operation. Moreover, it is a mistake to suppose that bleeding to death would produce the required effect. A butcher, who writes a sensible letter to the *Times* on the subject, states that all animals are kept without food during the day before killing—calves undergo, instead or in addition, a moderate bleeding, which induces faintness incompatible with appetite. Whether sharp hunger or faintness be the greater evil of the two, the humanitarians must be left to decide.

A case has lately been decided in the Court of Queen's Bench, which points a moral often urged in our columns. The plaintiff received in a railway collision a severe concussion, of which the only external sign was a slight bruise on the temple. Dr. Robertson, of Nottingham, attended the man on the part of the railway company, and soon after the accident settled his claim for compensation by giving him a cheque for thirty guineas. However, the man got worse, and after an interval of four years, being incapacitated for physical or mental work, brought an action for further damages. Dr. Robertson frankly acknowledged that he had been mistaken in prognosis, and moreover stated that he had discontinued the practice of settling claims since the judges had expressed their disapproval of it. The jury found for the plaintiff, with £1500 damages.

Convalescent Hospitals are just now affording the most fashionable outlet for the spasmodic charity of the day. Although the story about the Royal Bounty had the extremely narrow foundation of truth which we recently stated, it is a fact that a sum of £400,000 has been given to the authorities of St. Bartholomew's Hospital for the purpose of founding a convalescent branch. The name of the donor is at present a secret. One report, for the truth of which, however, we by no means vouch, states that it is conscience money sent by a notorious quack. The surplus of £40,000 in the hands of the Liverpool Lancashire Distress Committee is to be expended, if the Court of Chancery consent, in founding a similar institution in the neighbourhood of that town in connexion with the Royal Infirmary and the Northern and Southern Hospitals. Considering the object for which the money was originally raised, it is to be hoped that, should the Court of Chancery accede to the proposal of the promoters of this Hospital, it will be on condition that the patients of the other Liverpool Medical charities are admitted to a fair share of its benefits.

It would appear, judging from the last honour list, that natural science is not attracting many votaries at Oxford, notwithstanding all the advantages for its cultivation offered by the University. In the four classes in the list of the natural science school just issued by the examiners, there are no names in the first and second classes, only two in the third, and none in the fourth. Medicine is unrepresented in the list of honorary D.C.L.'s for this year. Last week the Vice-Chancellor and Proctors issued an address to the undergraduates, begging them to behave in a more seemly manner than heretofore during the celebration of the Encænia. The

appeal was so far successful that it obtained a hearing for the opening speech of the Vice-Chancellor and courteous treatment for the candidates for honorary degrees.

The House of Lords have shown their usual good sense and love of justice in throwing out the Bill embodying the proposal of the Charity Commissioners that the Brown Bequest Fund of £30,000 should be employed in founding a Professorship of Veterinary Medicine in connexion with the University of London. The money was left by Mr. Brown, who was a Dublin man, to found a Hospital for cats, dogs, poultry, and other domestic animals. Afterthought, however, seems to have given him a glimpse of the absurdity of what he was doing, and he added that if the University neglected to found the Hospital within a certain time the funds were to go to Trinity College, Dublin, for the purpose of establishing a Professorship of certain languages. The Bill introduced into the House of Lords proposed to set aside both clauses of the will, and to appropriate the money for founding a Professorship of Veterinary Medicine. A more wanton departure from a testator's wishes could scarcely have been imagined, and we are heartily glad that the efforts made by Trinity College to obtain what is due to their institution by every principle of right, have been thus far successful.

The case of Tully *v.* Corrie, which was decided on Tuesday last in the Court of Queen's Bench, furnishes an instance of the small effect which the most lucid charge from the Bench may produce on the stubborn intellects of a British jury. The case was one in which a cook brought an action to recover damages for false imprisonment from a master who had given her in charge on the suspicion of having poisoned his family. Certainly the circumstances were sufficient to warrant any amount of suspicion. The plaintiff, at the time of the supposed poisoning, had received notice to leave her situation. She undoubtedly prepared a dish of veal with made gravy for her master's family. All the persons who partook of the gravy, to the number of fourteen, were seized with the symptoms of irritant poisoning—vomiting, purging, and burning in the throat—and one person died, in whom, on post-mortem examination, ulceration of the stomach was discovered. Traces of antimony were found on the outside of the meat by Dr. Letheby, but unfortunately none of the gravy could be obtained for analysis. On this evidence the master gave the cook into custody, and we suppose that any other head of a family under the same circumstances would have acted in the same way. The magistrate, however, before whom she was taken thought that the evidence was not sufficient, and dismissed the case. In the present trial the summing up of the Lord Chief Justice was clearly exculpatory of the defendant; but as the law (24 and 25 Victoria) draws a distinction between the administration of a noxious drug for the purpose of injuring and annoying, and the administration of a noxious drug for the purpose of killing or doing grievous bodily harm—the former being only a misdemeanour, the latter felony—the jury chose to consider the case as belonging to the former category, and gave the plaintiff £80 damages for her imprisonment, stating in their verdict that a noxious drug had been administered, but not with intent to do grievous bodily harm, and as to the question whether there were an intent to injure they could not agree. We should think this verdict would not be allowed to stand unchallenged. To give a servant who is acknowledged to have administered a noxious agent to her master's family, producing thereby the injury of many and the death of one, a large sum of that master's money because he handed her over to the police, appears to us a decision as repugnant to justice and common sense as it is dangerous to the safety of society.

THE ALKALI ACT, 1863.

The third annual report by the Inspector, Dr. Angus Smith, shows that the amount of muriatic acid gas which is prevented escaping into the atmosphere is satisfactorily increased, and is now only ·73 per cent., whereas last year it was ·88. The amount produced, however, is largely on the increase. In the first year 288,000 tons of salt were decomposed, in the second 310,000, and in the third 371,950. In the Tyne district alone nearly two millions' worth of chemical products were produced last year, including every form of soda, sulphate, carbonate, and sulphuric and muriatic acids. There is a good appendix on the speed of air in flues.

THE SICK POOR IN THE METROPOLIS.

The new Board of Managers appointed under the recent Metropolitan Poor Act held their first meeting on Saturday last. They are to be entrusted with the erection and management of Asylums for the reception of patients suffering from small-pox, fever, or insanity. When these Asylums have drafted off from the present London Workhouses cases of the above kind, much available space will be left free in the existing Infirmaries, and it will then be possible to carry out many of the improvements in the condition of the sick poor recommended in the report of Dr. Smith, Medical officer to the Poor-law Board.

It will be recollected that by the provisions of the Act some of the managers were to be elected by the guardians of the metropolitan Unions and parishes, the remainder to be nominated by the Poor-law Board. The guardians have, for the most part, sent to represent them their chairman or vice-chairman, and, from a glance over the names, they seem to have made, on the whole, a judicious selection. The list comprises the names of Drs. Brewer (St. George, Hanover-square), Griffith (Camberwell), and Cortis (Newington). There are also amongst the elected managers four magistrates—viz., Mr. William Turner (Hackney), Mr. William Bird (Fulham), Mr. William Stutfield (St. George-in-the-East), and Mr. James Marshall (Hampstead).

In addition to the elected managers, fifteen have been nominated by the Poor-law Board. The following is a list of the nominees:—

John Ashton Bostock, 54, Chester-square, Pimlico.
Edward North Buxton, Brick-lane, Spitalfields.
John Charrington, Bell Wharf, Shadwell.
Walter Carew Cocks, 1, Chester-place, Regent's-park.
Sir James John Hamilton, Bart., 6, Portman-square.
William Harvey, 48, Lonsdale-square, Islington.
Francis Haygarth, 49, Chester-square, Pimlico.
Timothy Holmes, 31, Clarges-street.
Jonathan Rashleigh, 3, Cumberland-terrace, Regent's-park.
Francis Sibson, M.D., 40, Lower Brook-street.
John Archibald Shaw Stewart, 13, Queen's-gate, Kensington-gore.
John Gilbert Talbot, 10, Great George-street, Westminster.
Robert Wigram, Blackwall-yard, Blackwall.
William Henry Wyatt, 88, Regent's-park-road.
John Young, junior, 47, Mark-lane.

Upon the whole this new board of management appears to be much above the average of the material of which the old boards of guardians were composed. The managers have before them a vast field of usefulness, and will doubtless make good use of it. They are not, however, entirely unfettered, as it rests with the Poor-law Board to lay down the regulations for the management of the Asylums which have yet to be built or acquired. The new Board at its first meeting elected Dr. Brewer as chairman. The appointment of clerk was deferred.

THE CHOLERA IN PARIS.

We learn from Paris that a few cases of cholera have again made their appearance in that city, but as yet there is no epidemic, in spite of the great number of strangers. It may also be noticed that the town is not quite so full as might be supposed, for if strangers are abundant, all the indigenous Parisians who can escape to the country have done so already.

THE IRISH FEVER.

Dr. Mapother's report of the health of Dublin has just appeared. He says :—

"The mortality during the past month has been moderate, 574 deaths having been recorded by the Registrar-General, against 592 during the preceding month, and 528 during the corresponding period last year. The death-rate was therefore 1 in 443."

Dr. Mapother's report contains the following reference to the new disease :—

"Seven deaths were attributed to the disease named 'black typhus' and cerebro-spinal arachnitis, but of which 'malignant purpuric fever' is the most appropriate description. It is satisfactory to know that this disease did not become widespread or clearly contagious in those places where it has hitherto appeared—namely, the United States, West Prussia, and this city and county in 1846. Measles caused 58 deaths, while it proved fatal in but one instance during the corresponding month."

During the week ending June 14 there were three deaths among the troops at the Curragh Camp, but we have not heard of any since that time. There will be a meeting of the Epidemiological Society on the 1st proximo, when this outbreak will doubtless meet with full consideration and discussion.

THE FEVER AT THE MAURITIUS.

The Medical men have been worked to death, and have had no time, apparently, to furnish a full and detailed Medical account of the fearful epidemic which has been prevailing there. The disease appears to be a pernicious type of bilious remittent fever, presenting in some instances a remarkable analogy to yellow fever. It is sufficiently obvious that in the teeth of an epidemic of this kind medicine is powerless. One thing, and one thing only, can be done—viz., the removal, as far as practicable, of every individual from the climate during its prevalence. This is by far the most economical plan, and we are very glad to learn, therefore, that the War-office has determined on the removal of the troops at once. Those troops which have embarked in the *Himalaya* for the Mauritius, we understand, on the authority of the *Pall-mall Gazette*, are to be detained at the Cape until the island is reported healthy.

We learn with deep regret that Dr. George Taylor, the late Senior Medical Officer at the Mauritius, who was on his passage home by the last mail, died during the voyage of some hepatic affection, the result of climatic disease.

MR. POLLOCK AND MR. KNOX ON THE TREATMENT OF THE IRISH CONVICTS UNDER PENAL SERVITUDE.

These gentlemen were directed by Mr. Secretary Walpole on May 8 to inquire into the treatment of certain treason-felony convicts in certain English prisons. Their report, dated June 8, seems to be most minute and conscientious, and gives a most favourable picture of the humanity with which the vigilant discipline of the convict prisons is tempered. As for food, lodging, clothing, and general treatment, we may re-echo the wish of the reporters that "all the labouring population of these islands had as good and wholesome a diet as the 1500 convicts now kept to labour at Portland." Of the convicts they say :—

"We are satisfied that they have been treated with exceptional kindness and forbearance. There is not the smallest foundation for the charges of severity and cruelty which have been brought against the convict authorities. The very reverse of this is the truth. Save in the case of a very few who are labouring under chronic infirmities, for which they are receiving the most careful treatment, the treason-felony convicts are men in rude robust health, and this after a confinement of one year and a half in English convict prisons. We have no hesitation in saying that the stories which have been running the round of the papers have no foundation in fact, but are the mere contrivances of five or six amongst the most turbulent of the convicts."

They add :—

"A convict's bread is bitter food at the best. Place him under the best sanitary conditions, treat him with what humanity you will, the privation of liberty, the enforced seclusion, and equally compulsory labour; the terrible monotony of the life; the stern order, and the instant obedience, constitute a very terrible punishment. We know that these men have a better diet, sleep in better beds, are more cared for in sickness, have lighter labour than the bulk of the labouring classes in the three kingdoms, and that the stories of their ill-treatment are simple falsehoods; but the meanest and poorest labourer in the empire would scarcely change places with them. Penal servitude, we repeat it, is a terrible punishment; it is intended to be so, and so it is."

FROM ABROAD.—M. GUÉRIN ON THE POPULATION QUESTION IN FRANCE—PROFESSOR BOULEY ON THE CATTLE PLAGUE IN GERMANY.

M. Guérin, on the occasion of the discussion at the Academy of Medicine on nurse children, suggested that the mischievous course pursued with regard to these in France might be one of the causes of the greater number of rejections in the recruiting service, and the slow increase of population in France. M. Broca challenged these statements as devoid of fact, and a discussion ensued on the population question in France, concerning which M. Broca (*Medical Times and Gazette*, April 6, p. 362) delivered some very optimist views. These have been since contested in various quarters, and M. Guérin, in a continuation of the discussion at the Academy, states his views upon the subject, which he has formed after a diligent study of the statistical facts. He observes that although it is true enough that France has increased her population by more than 10,000,000 since 1800, an analysis of this statement shows that it is not so satisfactory as it at first seems—at least as regards her present position. For such a statement to be justly estimated there have to be considered the rate of this increase, the elements composing it, how far it is as large as it might be, and its comparison with the increase observed in other countries.

If we examine the rate of increase, we find that this has notably diminished for the period 1845-65, compared with the period 1800-45, the mean annual increase having been for the former 129,643, and for the latter 176,481. In a satisfactory condition of things the annual increase should be always augmented for the proportion to remain the same; for every annual increase supplies a new element of production which should have its influence upon a succeeding year. The same result ought to be brought about by the amelioration of the hygienic conditions amidst which the people exist, and the amelioration of the stocks whence they are derived; for, by reason of the wars of the Revolution and the Empire, the cream of the population had been abstracted, and those upon whom reproduction depended were not of the first quality.

In other tables M. Guérin exhibits the increase of population by excess of births over deaths for two periods—viz., for 1800-45, and 1846-64. The general mean annual increase of births over deaths during 1800-45 was 178,653, and during 1846-64, 108,252, being respectively 0·57 and 0·29 per cent. in relation to the initial population. The periods of doubling were also 124 years in the first period, and 249 in the second. M. Guérin's final table relates to the proportion of increase observed in other countries, and from this results, among other facts, that the population of Saxony increases at the rate of 1·53 per cent. per annum, England 1·43 per cent., and Prussia and Russia 1·30 and 1·24 per cent., while the increase of France is only 0·35. The immigrants into France are reckoned by M. Guérin at 2,337,060, and the emigrants at only 1,550,001; and every person domiciled in France for six months is comprised in the census, without the indication of any distinction of nationality and origin.

A new example of the vigilance of the French Government in relation to the cattle plague has just occurred. Towards the middle of May the Minister of Agriculture

and Commerce, having heard from a source which he believed to be authentic that the cattle plague had appeared in Rhenish Prussia, Wurtemberg, Bavaria, Baden, etc., immediately gave orders that the entire eastern frontier, from Lauterbourg to Savoy, should be closed, not only to beasts coming from Germany, but also to the choice dead meat brought hence. But Paris derives a large portion of its meat supplies from Germany—so much so, that one merchant alone is said to import between 500 and 600 kilos. of *filet* daily. As the public needs were so much interfered with by his decree, the Minister determined it should be continued in force no longer than essential to the protection of French cattle, and instructed Professor Bouley, who had already been sent on like missions to this country and Holland, to repair to the spot and report on the exact state of affairs. He soon found that the statements on which the decree had been founded were exaggerated, or even falsified intentionally, for the sake of lowering the price of the cattle by the agency of panic. The disease did not prevail in Baden, Cassel, the Saxe Duchies, and other places in which it was said to exist, and moreover as these Duchies, although not united to Prussia, form part of the confederation of the north for military purposes, and as Prussia employs soldiers for the purpose of opposing the ravages of the cattle plague, they were all under military occupation. The Prussian Government had sent a general with an army of fourteen battalions, together with a royal councillor and a Berlin veterinary professor to act as an administrative council. The infected localities were at once occupied, and a *cordon sanitaire* established by soldiers armed with loaded muskets. How real the occupation was may be judged of by the fact that a peasant who had entered a village in the morning before communication was interrupted, and, having got drunk, tried to return in the evening, was shot dead for neglecting the injunctions of the sentinel. The Prussian measures were indeed energetic, and thus, in a little place in Saxe Meiningen, 160 beasts, whether infected or not, were surrounded, and all fell victims to the needle gun, their bodies being buried immediately in graves previously dug. So expeditious were these measures that M. Bouley in vain sought for cases of cattle plague in North Germany. As soon as the news of the plague arrived the Bavarian Government assembled a convention of Veterinary Surgeons from every province to be ready for action in the event of any cases presenting themselves. Indeed, in that country precautions are carried to even an exaggerated extent. No person can enter Bavaria without a previous fumigation. Gendarmes await the trains at the frontier, and every passenger is forced to enter a wooden box, through which the head only is allowed (and that is not always possible for the short) to pass out by an aperture. The passengers thus disposed of, the gendarme pours out *larga manu* the sulphuric acid on the chloride of lime, to the great danger of asphyxiating those of short stature. All the luggage and the carriages themselves are in like manner fumigated. With precautions like these taken by the Prussians and their other German neighbours, Professor Bouley reported no danger existed of the disease passing the frontier into France, especially as all animals imported are at once slaughtered and cut up for sale. On this report the Minister at once removed the interdiction.

PARLIAMENTARY.—THE BROWN BEQUEST—THE CASE OF WILLIAM WATSON.

On Thursday, June 20, in the House of Commons.

General Dunne asked the Vice-President of the Committee of Council on Education whether the Charity Commissioners had introduced in the Lords a Bill already abandoned by him in the Commons, for the purpose of defeating the legal rights of Trinity College, Dublin, to the reversion of a bequest made by a certain Mr. Brown.

Lord R. Montagu said that the right hon. and gallant general was aware that, after in vain endeavouring to agree with Trinity College, Dublin, he postponed the Bill until June 17, to suit the convenience of Irish members who opposed it. He was not at that time aware of the rule of the other House that no Charity Bill would be received after June 21. He therefore stated openly in the House, and in the presence of the gallant general, that he would move to discharge the order, so that the Bill might be received in the other House, and then come down to the House of Commons at a later period.

On Monday,

Mr. C. Gilpin asked the Attorney-General whether his attention had been called to a case recently reported in the public papers of the violent removal of a debtor, William Watson, aged 72 years, from his residence for debt, when in the last stage of consumption, and when the certificate of a Physician was shown to the sheriff's officer stating that Watson could only be removed at the risk of his life; to the fact that the said Watson was forcibly taken to Horsemonger-lane Gaol, and died almost immediately after his admission; and whether the law of England authorised a sheriff's officer thus to remove a dying man in the face of such a protest on the part of a duly qualified Physician.

The Attorney-General said that the law of England did not, in his opinion, justify the sheriff's officer in removing the debtor under the circumstances stated in the question. The sheriff, no doubt, was placed in a situation of great difficulty, for if the debtor recovered and made his escape the sheriff would be liable to an action at law. He might be permitted to add that, if the Bill on the subject of bankruptcy were permitted to pass, a question of that nature could no longer arise.

On Tuesday, in the House of Lords,

The Bill promoted by the Charity Commissioners for the disposal of a fund of £30,000 left by Mr. Brown gave rise to considerable discussion, and being warmly opposed by Lords Cairns, Rosse, and other Peers, was eventually lost upon a division of 16 against 48.

THE JOURNALS.

The *American Journal of the Medical Sciences* for April contains, as usual, much valuable matter. Gross continues his remarks in favour of the deligation of the internal jugular in cases requiring operative procedure, and Liddell communicates a paper on Rupture of the Abdominal and Pelvic Viscera. Dr. McClellan reports very favourably on the influence of chloroform given internally (dose 60 minims) in the cold stage of intermittent, thus most frequently breaking off the attack. Compound tincture of iodine completed a cure in many cases of great obstinacy. The ophthalmoscope as an aid to the diagnosis of cerebral diseases is the subject of a valuable communication from Dr. Noyes; whilst Roosa and Beard write on the condition of the membrana tympani and fauces in 296 cases of deaf-mutism; calcareous degeneration was usually observed in the membrane.

The *New York Medical Journal* for March contains a most valuable monograph on the subject of osteo-myelitis from the pen of Dr. Liddell. After sketching the history of the disease, he proceeds to discuss its causes, having previously distinguished two varieties of it—an acute and a chronic. The causes he gives are contusions and contused wounds of bone, especially those caused by projectiles, compound fractures effected in the same manner, resections, amputations, foreign bodies, the transport of the wounded, and badly ventilated Hospitals, being most common in military Surgery; whilst in private life the disease may be induced by the scrofulous dyscrasia, constitutional syphilis, the rheumatic diathesis, idiopathic fever, and sometimes by no apparent cause. It is further pre-eminently a disease of youth and of the male sex, and constitutes one of the greatest scourges of armies when on actual service. As to its pathological anatomy, Dr. Liddell treats first of the carnification or hepatisation of the marrow, produced by the effusion of plastic material in the bone, and subsequently of suppuration; or if the inflammatory process go very far, the affection may end in gangrene. One very peculiar condition sometimes observed is liquefaction of the marrow, which may sometimes be seen to flow in the form of oil from the end of a stump. As to diagnosis, osteo-myelitis may be confounded with acute periosteal abscess, but in the latter fluctuation precedes puffiness of the swelling, and the swelling itself does not terminate by a hard well-defined rim, whilst incisions yield almost complete relief; not so with osteo-myelitis. So with phlegmonous erysipelas, the pain is not of the aching character noticed in osteo-myelitis, the

swelling is more puffy, and the pus never contains oil globules. Of the terminations of the disease, by far the commonest and most to be dreaded is pyæmia, with or without pyarthrosis, and Dr. Liddell is inclined to suppose that in almost every Surgical case where pyæmia supervenes the bone is affected. As a means of warding off attacks, Dr. Liddell speaks greatly in favour of treating wounded men as near the scene of action as possible, and in tents rather than in Hospitals. Of all operative procedures, Dr. Liddell speaks most highly of disarticulation at the joint immediately above the affected spot, and entirely repudiates amputation by cutting through the bone. Altogether this paper, of which we have been able to give but an imperfect summary, is one of the most valuable contributions to military Surgery which have appeared of late. In the April number this journal, having changed publishers, appears in an improved form, with its editors' names (Dr. Hammond and Dr. Dunster) on its title-page.

The *Journal of Anatomy and Physiology* (No. 2) is quite equal to the former number. The present one begins with an account of the dissection of a Bushwoman by Mr. Flower and Dr. Murie, which shows how much the anatomy of one race of men may differ from that of another. Dr. Cleland opposes the ordinarily received views as to the functions of the intercostal muscles, maintaining that both external and internal intercostals are muscles of inspiration. Dr. Norris writes on muscular irritability, and Dr. Ransom on the protoplasmic movements in the eggs of osseous fishes. Mr. Turner writes on the existence of a sternal muscle in man, and Professor Humphry on the distinctions between the lower limbs of men and chimpanzees. M'Donell speaks of Ranke's experiments on tetanised muscle, which show that in such muscles the quantity of sugar is always increased apart from any action of the liver. The longest paper is by Mr. Mivart on the osteology of the Insectivora, another very elaborate and valuable one on the Calabar bean is contributed by Dr. Frazer, of Edinburgh. There are other contributions of no less value, but too numerous for mention. Altogether, we are proud of this journal, as at last showing our Continental neighbours that English science is not so backward as the lack of proper means for making it public might have led them to suppose.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

Paris, June 23.

One of the great lights of Medical science was extinguished to-day. Professor Trousseau breathed his last this morning, at the age of 66. His death leaves, in the field of practice as well as in that of science, a void which for a long time it will be difficult to fill.

This eminent man, who was the son of a schoolmaster, commenced his Medical studies at the Hospital of Tours, under the celebrated Bretonneau, one of the very few provincial Physicians who, in this land of centralisation, have succeeded in establishing a first-rate reputation.

Among Trousseau's fellow-students at Tours there was one whose future eminence few would then have ventured to predict, and when, in later years, Trousseau and Velpeau found themselves at the head of the Profession in Paris, the one in Medicine, the other in Surgery, they both remembered with pleasure the common starting-point from which they set forth in their brilliant careers, and the master who first initiated them into the mysteries of the healing art. When, a few months before his death, the old Physician of Tours came for a short time to Paris, I remember meeting him near the *Charité*, moving slowly along, and supported under each arm by his two illustrious pupils; and surely the sight was a suggestive one.

After leaving Tours, Trousseau was for some years House-Surgeon in the Lunatic Asylum of Charenton; he then became a teacher of classical literature in one of our public schools; but soon afterwards he entered the field of competition, and carried everything before him. In 1840 he was nominated to the Chair of Therapeutics, and soon took his stand as the most eloquent speaker who ever lectured on that branch of Medicine. After a long and successful course of teaching, he gave up the Chair of Therapeutics for that of Clinical Medicine, and in this new situation he fully realised all the expectations which his well-known capacities had raised.

It may well be asserted, in fact, that as a teacher of science Trousseau was altogether unrivalled. The vividness of his descriptions, the Attic elegance of his diction, the unexpected turn which the most tedious and uninteresting subjects suddenly took when he proceeded to discuss them, cannot be realised by those who never heard him speak. Nor was there anything of the pompous classical orator about him. His chief strength lay in the brilliancy of his colouring, in the singular felicity of his expressions, and in the extraordinary skill with which he brought prominently forward the really striking points of any particular question. He may be said, in this sense, to have enjoyed the power of fertilising the wilderness and making flowers spring up in a desert of sand. His very defects as a man he turned to account as a Professor. He has often been blamed for the versatility of his opinions. But the ablest lecturers seldom have much novelty to exhibit to the assiduous hearers who for many a term have attended their class. Who, indeed, can flatter himself with the hope that his stock of ideas will never be exhausted? After a certain lapse of time, the ungrateful student gets tired of his old teacher, and longs for a new one. Such, however, was not the case with Trousseau. His ever-changing opinions saved him at least from the reproach of monotony; and those who had heard him discuss some important problem and solve it, in a given sense, were often astonished, at a later period, to find him pleading on the opposite side, *e sempre bene*.

With such powers of eloquence, it may seem at first sight astonishing that in the political field Trousseau should never have met with any success. For nearly two years he sat in the Assemblée Constituante (1848-49), but never rose to any reputation as an orator. It is strange enough that a Profession, which numbers so many powerful speakers amongst its members, should never have produced (in France at least) any politician of eminence. Neither Bouillaud nor Malgaigne, neither Gerdy nor Lélut, ever made any figure in our representative bodies; and Trousseau was no exception to the common rule. This failure may in some measure be explained by the tumultuous habits of French assemblies, in which no speaker can expect a patient hearing; the member who is on his legs is perpetually assailed by a host of interrogators, who must at once be put down by a smart reply, or the game is lost. For this reason, men accustomed to be listened to in silence—pulpit orators, like the Père Lacordaire—teachers of science, like our own Medical Professors—are apt to break down in political debate; while barristers, on the contrary, find an immense advantage in the habits of their profession. Besides, a certain knowledge of the world, which is readily acquired by intelligent soldiers, statesmen, and capitalists, is often wanting in men of science; and people can only be listened to with pleasure when they talk about what they fully understand themselves. However brilliant Malgaigne might have been in a discussion on the subject of hernia, he was evidently no match for M. Thiers on the Sonderbund.

Trousseau was not re-elected after the dissolution of the Assembly, and if he had been, the rapidly increasing pressure of professional employment would scarcely have allowed him to attend to his political duties. For more than fifteen years he held the sceptre of Medical practice in Paris, and with unwearied activity he still continued to fulfil his official duties. It was only of late that symptoms of declining health became visible, and last year, after having repeatedly announced his intention of retiring, he successively resigned his chair at the Faculty and his Hospital appointment at the Hôtel-Dieu. The motive soon became apparent. The dyspepsia, which he had been long suffering from, was ascertained to be the result of a cancer of the stomach; and the gradual but certain progress of this fatal affection was slowly urging him on to the grave. He fully appreciated the danger of his situation, and acted accordingly. He underwent with stoical firmness the lingering tortures of starvation, and met his inevitable fate with philosophical resignation.

Although Trousseau has written largely upon various subjects, he will chiefly be remembered by his two great works, "The Treatise of Therapeutics," the authorship of which he shared with Dr. Pidoux, and the "Clinical Lectures," of which an analysis lately appeared in the *Medical Times and Gazette*.

The manners and conversation of Trousseau were of a most engaging character. But, although a delightful companion, he was scarcely to be relied on as a firm friend; and, in this respect, he closely resembled that celebrated king of Mace-

donia who was nicknamed Δώσων by his irreverent subjects, because his promises were always readier than his performances.

But it is an ungrateful task to dwell upon the weak points of a master mind. Let us remember his brilliant wit, his powerful eloquence, his clinical sagacity, and let the memory of his failings be buried with him in the grave.

ITALY.

FLORENCE, May 31.

PROFESSOR PACINI has recently proposed a new method of inducing artificial respiration in cases of apparent death by drowning or asphyxia, which deserves to be made more generally known than it is at present. It consists of imparting to the shoulders of the patient such upward movements as he himself would make if he could shrug the shoulders. The mechanism of the proceeding is the following:—By lifting the extremities of the clavicle, the ribs are raised; thus the angle which they form with the spine gains in extent, and the thorax is made to expand, while at the same time a slight additional increase is obtained in the antero-posterior diameter of the thorax, from the forward movement of the sternum. Much will no doubt depend on the mode of grasping the shoulders—that is, on the strength of the operator's hands—and the posture of the patient. Contrary to the routine practice, Prof. Pacini recommends the supine posture as the one most favourable for the passage of a large quantity of air through the larynx, provided the head be neither bent forward nor backward, but kept as much as possible in the same relative position in which it would naturally rest on the trunk if the patient were standing upright. The attendant should then put four fingers of each hand under the patient's arms, fixing the thumb against the head of the humerus; and, supporting the patient's head with his thighs or abdomen, he should begin traction movements as described above, vigorously, but not too quickly, and imitating as much as possible the rhythm of natural respiration. If unassisted, he should tie the patient's feet and legs to the bedpost, or the nearest tree, or some other immovable object. Otherwise an assistant might easily enhance the effect of the traction by grasping the lower part of the body, and making isochronous countertractions.

Of course none of these manœuvres can supply the great desideratum in artificial respiration—viz., depression of the diaphragm; but Prof. Pacini thinks that, notwithstanding this defect, his method is preferable to any of those hitherto in use, inasmuch as it begins with the act of *inspiration*, leaving the expiration to be performed by the natural elasticity of the tissues concerned, whereas both Marshall Hall's and Leroy d'Etiolle's methods consist of artificial *expiration*, as it were, leaving the more essential act of inspiration to the elasticity of the tissues. The latter method has the additional drawback of requiring a special apparatus, which cannot be always at hand in accidents, apt to happen in odd places and at odd times. Certainly none of these objections could be raised against Dr. Sylvester's method, the superiority of which over the "ready method" was at once recognised by the Royal Humane Society, as well as by the life-boat officials. This method does indeed begin with the inspiratory act, the uplifted arms producing dilatation of the chest through the pectorals; but such dilatation, being due to the mechanical action of the pectoral muscles alone, can hardly be a considerable one, unless these muscles were in their maximum of contractile power or rigidity, in which they notoriously never are in cases of apparent death. Prof. Pacini very naturally lays great stress on this circumstance. He induces inspiration by lifting the clavicle—that is, a perfectly hard and unyielding body, whose movements must of necessity be responded to by the walls of the thorax; whereas the dilatation of the chest, as proposed by Dr. Sylvester, depends on the contractility or rigidity of a pair of muscles, which experience has shown to be generally in a state of flaccidity. And it is on the strength of these considerations that Prof. Pacini proclaims his new method as the "readiest, the most innocuous, and most efficacious" of all the methods hitherto proposed. It is not known whether these assertions have as yet been put to a practical test. All we know is that the experiments made on dead bodies have in so far been successful, that Prof. Pacini's tractions were invariably followed by a kind of snoring sound, indicating the passage of air through the fauces, and a respiratory, almost vesicular bruit, perceptible by auscultation.

It is to be feared that the merits of this most plausible method will have to be tested and examined on the stormy coasts of England, long before the Florentine cockneys shall have found time and courage for taking their first dip into the Arno or the sea, and for doffing their "poor-man's shirt," which it has taken them ten months to weave.

A most useful institution, and one that ought to have existed ere this in Florence, is Dr. C. Conti's new private Ophthalmic Dispensary. The prevalence of ophthalmia in the old capital of Tuscany is well known, yet, until the arrival of this sub-alpine gentleman, Florence did without an ophthalmic dispensary, just as London did without omnibuses until the arrival of that immortal Frenchman who drove his first 'bus through Lombard-street. Why the advent of such blessings should have to be waited for with such Hebrew patience, it would be difficult to say. It is certain that the public never fail to hail them with grateful eagerness, as soon as they are vouchsafed to the community. During the first two years of its existence, 1648 patients applied at Dr. Conti's Dispensary for advice; amongst these there were 82 cases not strictly belonging to ophthalmic Surgery, so that the actual number of cases is 1566. Of these, 602 were cases of granular ophthalmia, 288 of scrofulous ophthalmia, 110 of catarrhal inflammation, 91 of ciliary blepharitis, 37 of keratitis, 19 of purulent conjunctivitis, 17 of cataract, 29 of amblyopia, 16 of glaucoma, 8 of amaurosis, 2 of astigmatism, and 1 of hypermetropia (due to insufficiency of the ciliary muscle); the rest being cases of the various secondary lesions of the eye, such as leucoma, staphyloma, etc. These statistics, limited though they are, show the extraordinary prevalence of ophthalmia, nearly four-fifths being cases of inflammatory eye complaints, more than one-half of which belong to the special order of ophthalmia granulosa, or trachoma. Whether Dr. Conti is justified in making these punctilious distinctions between trachoma and catarrhal ophthalmia, I will not discuss here. But any correction in this sense would rather strengthen than weaken the conclusion which we are compelled to draw from these numbers. The very small proportion of purely functional diseases of the organs of sight is likewise curious enough. But it should be borne in mind that the large majority of Dr. Conti's patients belong to the lower classes, and that asthenopia and the various diseases of accommodation are, as a rule, far more frequent in the better classes of society. Dr. Conti denies altogether the specific nature of granular ophthalmia; and if it is apparently endemic in Florence, where the climate is eminently healthy, its efficient causes must be sought for in accidental hygienic circumstances, which could easily be corrected by the *mobile vulgus*, as well as by the municipal authorities, if both were not (to use Dr. Conti's expression) equally ignorant of hygiene.

According to my opinion, the authorities are anything but ignorant, but rather afraid of enforcing the laws or imposing their will; and the sovereign people of Italy, the most noisy, filthy, and ignorant mob that ever desecrated the temple of liberty, knows full well how to defy the gendarmes, or the policeman, who is far more afraid of the stiletto than of his superiors or his own conscience. In well-swept, well-ventilated streets, these worthies feel as uncomfortable as a duchess would in a pig-sty. They crowd together in certain quarters which they may call their own. From these they issue every Saturday for their *questura*, or begging tour, from shop to shop (a time-honoured institution, which the Italians cherish as the Londoners do the Lord Mayor's show), and it is on these occasions that the infecting matter is spread and propagated from eye to eye. Besides these circumstances, Dr. Conti is inclined to look upon the pavement of Florence as one of the possible causes of ophthalmia. The compactness and whiteness of this magnificent pavement are well known; and that the glare and heat reflected by it must in the long run be prejudicial to the eyes, seems to him a matter of course. At the same time, considering how narrow and shady the streets of Florence are, how studiously the few wide ones are eschewed on sunny days, and how many other towns of Italy have the same kind of pavement, with wider streets, and no trace of endemic ophthalmia, we may fairly doubt the correctness of this last supposition.

YELLOW FEVER IN JAMAICA.—The *Kingston Gleaner* of June 8 reports that several cases of yellow fever have occurred in that city.

LIVERPOOL.

June 24.

I am able to record another eminently successful case of ovariotomy, occurring in the practice of Dr. Graham, of this town, the particulars of which present many points of interest. A patient, on whom a similar operation was performed by the same gentleman, the history of which I sent, has been, ever since her recovery, pursuing her avocation as a schoolmistress, in the enjoyment of complete health. The present patient, A. N., is 52 years of age, has been twice married, and borne five children, the youngest of whom is 18 years of age. The disease was first observed five years ago, ever since which time it had been slowly advancing up to the date of the operation (June 3, 1867), when the tumour had attained a very great size, seriously interfering with the performance of the most ordinary duties. Though so large it had never been tapped, and the patient's general health was, and, with few temporary exceptions, had always been, on the whole, pretty good. The girth at the umbilicus was 40 inches; over the front of the tumour the abdominal parietes were freely movable, but doubts were felt as to the existence of posterior adhesions. An incision three inches long having been made in the middle line, the cyst at once came into view, and, on its being punctured by Wells's trocar, yielded three gallons of fluid. An attempt was then made to withdraw it from the cavity of the abdomen, but such extensive adhesions were found to exist as to render a considerable increase in the original incision necessary, making it, when thus completed, six inches long. One by one these adhesions, uniting the tumour with the uterus, bladder, transverse colon, and posterior part of the left side of the abdominal wall, were carefully divided by means of Smith's hæmorrhoidal clamp and a hot cutting iron. The advantage of this method was strikingly manifested by the very small quantity of blood that was lost. It should be stated, however, that care was taken not to include within the bite of the clamp any one of the large veins, several of which passed from the cyst to contiguous parts. Each of these was secured by a ligature of fine silver wire, and returned, ligature and all, into the abdominal cavity. When the adhesions were all divided, the tumour came away, there being no distinct pedicle. Warm sponges were then gently passed among the viscera, the external wound closed by eight points of silver suture, and the patient removed to bed. The cyst was unilocular, and had sprung from the left ovary. On the first night, as the patient complained of some pain, half a drachm of Battley's sedative solution was given, beyond which there has been no medication. Three hours' sleep was obtained from it. Once only, and that but for a few hours during this first night, did the pulse reach 100. Since that time it has kept constantly at about 80. For the two succeeding days nothing whatever was given but milk and lime-water with ice. On the next day a little beef-tea was allowed, and on the second day afterwards mutton chop minced very fine. The wound healed entirely by the first intention, and there has not been the slightest untoward symptom throughout—a matter of no little surprise when the extent and position of the adhesions are considered. So extensive were they, indeed, that an hour and a half was consumed in little else than overcoming them. It is worth mentioning, perhaps, as such circumstances doubtless have an important bearing on the success of operations of this kind, that the patient entertained a most unconquerable dread of being operated on in a Hospital, so that the mere fact of her being in her own home contributed its share to her recovery. Three weeks have now elapsed since the operation. On the thirteenth day after its performance the patient was out of doors, and she is now in the enjoyment of most excellent health.

Death of a Medical Baronet.—Sir Stephen Love Hammick died at Plymouth on Saturday week, aged 91. Deceased was a naval Surgeon, and many years ago was at the head of the Medical Department of the Naval Hospital at Stonehouse, near Devonport. While holding that office he happened to render important Medical services to the Duke of Bedford and the Earl Grey of that day, which, owing to his official position, were of necessity gratuitous. On the latter resigning the Premiership he gracefully remembered his obligations, and the sole honour that he asked for was a title for his old Doctor. Sir Stephen for several years held the office of Examiner in Surgery in the University of London. The deceased's only son, the Rev. St. Vincent L. Hammick, vicar of Milton Abbot, in the gift of the Duke of Bedford, succeeds to the baronetcy.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, May 28, 1867.

Mr. Samuel Solly, F.R.S., President, in the Chair.

Mr. Charles H. Moore read a paper on

THE INFLUENCE OF INADEQUATE OPERATIONS ON THE THEORY OF CANCER.

The object of the author was to ascertain the method of the recurrence of cancer after Surgical operations for its removal; to discover if the disease broke out afresh with prominent indications of its dependence on a general cause, or in a manner which showed it to be subject to local conditions. Such an inquiry appeared likely to contribute to the distinction between the constitutional and local theories of the disease, and between different theories which might be severally described as local. It might also tend to establish the proper method of conducting operations in cancer. Choosing, as most under general observation, the instance of the mamma, he described various defective methods of operating. In former times the breast was taken off with all the skin covering it. But now, in some cases, the skin being simply incised, the tumour only was taken out; or the skin being raised, and the mamma removed, the flap with the nipple was laid down again; or various proportions of the breast were removed with the cancerous tumour. Sometimes the whole breast was taken out, but an adjoining diseased tissue was left. These various modern methods of operating the author deemed inadequate, inasmuch as the entire disease appeared not to be removed. He gave cases, with diagrams, which illustrated the consequences of the faulty operations, and which demonstrated a connexion between the original and the recurrent disease, as well as the precise order of its dissemination. Taken together with the fact that after other and more complete operations cancer sometimes never returned in its first site, the cases appeared to the author to show:—That the recurrence of cancer is due to local conditions; that these conditions are not organic, so as to be transferable to the second breast after the removal of that first affected; that neither are they regional, so as to belong to structures out of continuity with the first tumour; that centrifugal dispersion, not organic origin, determines the recurrence of cancer; that recurrent cancer does not indiscriminately involve a residue of the mamma operated on, but commences near the scar; that, when free in both directions, it tends towards the axilla earlier than to the residue of the breast; that cancer of the breast requires the careful extirpation of the entire organ; that the situation in which this operation is most likely to be incomplete is at the edge of the mamma next the sternum; that, besides the breast, unsound adjoining textures, especially skin, should be removed in the same mass with the principal disease.

The President remarked that it was preferable not to approximate the skin too closely after operating for cancer, not only on account of the pain when a large tumour had been removed, but also because, by leaving the wound open, there was greater probability of the disease not returning in the same spot.

Mr. Birkett said he could not touch upon all the many points of interest referred to in the paper, and would therefore limit himself to one or two of unusual importance. It was a favourite theory of Mr. Moore's that the disease extended from the primary point affected; his experience was not so, even in the case of the mammary gland. He had removed a breast a year or two ago; the patient died from a return of the disease in the calvarium. In a child the fibula was cancerous, and the limb was amputated above the knee; yet the child died of cancerous disease in the opposite sphenoid bone. There was no trace of cancer in the glands, and no continuous line could be made out. He would also ask an explanation of the position taken up by Messrs. Moore and De Morgan as to the way chloride of zinc would destroy any seeds of disease left behind in fat subjects, its application lasting only an instant. He thought there could not be much reliance placed on it, except with regard to the cells which had escaped from the mass. He also thought that the possibility of these cells existing after their escape was very problematical. The paper contained many practical points of value, such as free and complete excision with the removal of much skin, but the

importance of an early operation had been overlooked. Most cases were neglected or tampered with, and only came to Hospital at the last moment; had they come earlier, many might have been greatly relieved. There are cases in which no operation should be performed, but when cases are in their earliest stage, and where the mass can be well removed, this removal is likely to be highly beneficial.

Mr. HULKE remarked that it did not matter whether it was cancer juice or cells that were left behind, for it was quite certain by Langenbeck's experiments that animals can be inoculated by these.

Mr. ALEXANDER BRUCE had repeatedly tried inoculations, and had always failed.

Mr. SAVORY said this question was doubtful, and required confirmation. As to the question whether cancer was developed in all organs from the primary centre, he would say that cancer was capable of sending out something capable of inoculating the surrounding tissues, as the glands. If cancer grows in other places after the primary mass has been completely removed, does it take its origin directly from this, or may not the system have been infected before removal? The question should not be discussed with regard to the breast only, but also as connected with the extremities. After many operations a considerable time elapsed before any return, and it was not likely that germs would exist two, three, or four years inactive, yet capable of action. Would it not be better at once to call the disease constitutional, as we are fully justified in doing?

Mr. H. LEE said that most striking results followed the injection of cancerous matter into the veins. Practically, he suggested that it was best to leave the wound open, that cells might be thrown off; this would also relieve considerable distress. One case of his had healed without a drop of pus.

Dr. WYNN WILLIAMS had demonstrated the inutility of operation at all; he now treated his cases medically, and the patients lived longer. Mr. Paget, he said, took this view. He did not speak of individual cases; he spoke generally. The knife had been a bane, as one could revert to it too easily, where other remedies might have been found sufficient. He thought the disease allied to scrofula, and as iodine did good in the latter, so bromine was useful for checking cancer. One case was too far gone for operation, yet bromine kept it in check, and the patient improved; there was now little or no pain. He used it most frequently in uterine cancer.

Mr. J. HUTCHINSON had read a paper on the subject some years ago, and, on the whole, agreed with Mr. Moore, although there were exceptional cases, like those of Mr. Birkett, which should not be permitted to lead men astray. Mr. Birkett's cases were in young people, and cancer was in certain cases hereditary; but this fact did not militate against its local origin. He was glad to hear Mr. Birkett's notions as to the importance of early operation, but our notions should not be limited to cancer of the breast; epithelioma was, in many respects, a better example, as being frequently the result of local irritation. In reality, the triumphs of the knife were more numerous than was supposed, and in all cases he would give the patient the benefit of a doubt, and remove the tumour, as well as every lymphatic enlarged in the slightest degree.

Mr. MOORE was gratified at the reception his paper had received. He also was for early operation, although the subject was not mentioned in the abstract of the paper read. He was in great perplexity on many points, but definite conclusions could only be attained by studying each detail separately. He could not answer all the questions put, but would reply to some of them. As to continuity, he had been able to trace it from the breast to the liver. Chloride of zinc he thought useful in destroying escaped parts, as a small slough was formed. He thought it advisable to leave the wound open. He also had seen many cases of cancer being transported from one part to another, as from the optic nerve to the *cauda equina*. Paget's earlier statistics were not favourable to operation; his later were so, as were also Mr. Sibley's.

NEW CRIMINAL ACT. — Among the amendments effected by this Act are the following:—Accused persons are to be asked if they desire to call witnesses; their depositions are to be taken, and if bound by recognisance to appear on the trial, their expenses may be allowed. Persons dangerously ill may be examined for or against a prisoner, and their depositions read. A governor of a prison may be required to produce a person in his custody without a writ of *habeas corpus*. The Act, which is not to extend to Ireland, will take effect on October 1.

NEW BOOKS, WITH SHORT CRITIQUES.

On the True First Stage of Consumption. By Horace Dobell, M.D., Physician to the Royal Infirmary for Diseases of the Chest. London: John Churchill and Sons. Pp. 75.

*** By the first stage of consumption, Dr. Dobell means that period when properly emulsified fats are no longer taken up by the blood, and when the albuminous tissues begin to be attacked. Dr. Dobell's views are purely hypothetical; they have no foundation in fact, as we have already explained, and we may be excused from entering again on the question here. With regard to his plan of treatment, apart from his theory, we think it likely to do much good, but should be heartily glad of the experiences of an unbiassed observer as to its effects.

Syphilitic Affections of the Nervous System. By Thomas Reade, M.B., L.R.C.S.I. London: John Churchill and Sons. Pp. 111.

*** Dr. Reade claims to have been the first to direct attention to syphilitic disease of the brain, and now republishes his papers as they originally appeared in the *Dublin Quarterly*. When, however, he would have us believe that quotidian ague depends on syphilis, we must demur to his conclusions. The book, however, is full of interest, and certainly indicates that, in some cases at least, constitutional syphilis is best treated by mercury.

Management of Labour in Contracted Pelvis. By W. H. Jones, M.D., M.R.C.S.E. London: Hardwicke. Pp. 59.

*** An inaugural thesis founded on three years' experience in the Hôpital des Cliniques in Paris under Dr. Paul Dubois, strongly recommending version and cephalotripsy—the one the English, the other the French favourite methods of delivery—not separately, but conjointly. Dr. Jones strongly opposes the custom of allowing the child to die spontaneously before recourse is had to any operative procedure, as at once cruel to the mother and useless to the child. The book is valuable as giving the combined results of French and English experience in a way we do not often meet. The cases are of great value.

On the Influence of Light. By Dr. F. Winslow. London: Longmans. Pp. 301.

*** A curious collection of modern scientific facts and old-world notions put together with the skill for which Dr. Winslow's writings are so much distinguished; yet our readers would hardly be inclined to believe that Dr. Winslow teaches that the periodicity of disease mainly depends on the calorific, polarising, or meteorological influence of the lunar rays. Of course we have light connected with the subject of insanity, and the influence of the moon on the latter is spoken of in no slighting manner. Whatever Dr. Winslow writes is well worth reading. Certainly the easy-flowing diction of this work is on a par with what we have seen before; the industry which has gathered so many facts together is also worthy of admiration, and the odd-looking conclusions should be studied, not contemptuously rejected.

A Handy Book of Meteorology. By Alexander Buchan, M.A., Secretary to the Scottish Meteorological Society. Edinburgh: Blackwood. Pp. 204.

*** The best and most useful treatise we have seen on the subject. The important bearing which weather has on disease renders it of great importance to all Medical men; should, therefore, any one of them have time at his disposal, and wish to undertake a series of observations, we could recommend no more useful guide than the present volume.

A Dictionary of Chemistry. Edited by Henry Watts, B.A., F.R.S., etc. Part XXXIX. London: Longmans. Pp. 433-528.

*** The present number of this valuable work contains articles on strychnine, sugar, and the peculiar products of sulphuric acid.

Hydatid Disease. By P. H. Macgillivray, A.M., Surgeon to the Bendigo Hospital. Reprint.

*** Hydatids would seem to be very common in Australia, more especially in the mining districts around Bendigo, where water is scarce and dogs numerous; in fact, a very large proportion of the diseases treated in the Bendigo Hospital seems to be due to this parasite. In this paper Mr. Macgillivray records 38 cases, the greater part ending successfully. He recommends tapping with a small trocar, except where pus is produced, under which circumstances he thinks a large drainage tube the best means of treatment. The paper is a valuable contribution to our knowledge of the disease.

Meteorological Observations on the Humidity of the Air of Scarborough. By C. B. Fox, M.D. London: Simpkin and Marshall. Pp. 41.

*** As the end of this work is charity, the profits being dedicated to the Scarborough Cottage Hospital, it should not be criticised too sharply. We may, however, congratulate Dr. Fox on the care with which, apart from the special information the book affords, its contents have been compiled from the standard works on the meteorological department of physics. We learn from it that Scarborough is a remarkably dry locality, having a rainfall of about 22 inches annually only, contrasting strongly with 153 inches at Borrowdale, and at other localities which are not so celebrated for their moist atmospheres.

Clinical Memoirs on the Diseases of Women. By Bernutz and Goupil. Translated and edited by Alfred Meadows, M.D., Physician to the Hospital for Women, etc. Vol. II. Pp. 270. New Sydenham Society.

*** The second volume of this most valuable work contains articles on pelvi-peritonitis and on uterine displacements, both of which are well calculated to attract the attention of British accoucheurs, seeing that they contain conclusions widely different from those usually accepted in this country. Were it only for this reason, we should gladly welcome the advent of the present volume. Dr. Meadows has done his work well, and the list of references appended by him will be found most useful.

Practical Observations on the Harrogate Mineral Waters, with Cases. By Andrew Scott Myrtle, M.D., L.R.C.S.E., etc. London: John Churchill and Sons. Pp. 98.

*** Not long ago we remarked favourably on a paper on this subject by Dr. Myrtle; it, in fact, constitutes the basis of the present work, and we are all the more inclined to extend to the latter the favourable opinion formerly expressed, inasmuch as its practical value has been considerably increased by the addition of a number of interesting cases. The book will be found a reliable guide to the effects of the spa of which it treats.

Report of the Committee appointed by the Manchester Statistical Society to Inquire into the Defects of the System of Registration of Deaths. By Mr. A. Aspland, Chairman. With a Memorial to the Secretary of State.

*** Grievous complaints have been from time to time recorded against a system of registration which no one ventures to defend, which is so defective that the Court of Chancery and the Bank of England refuse to accept the death certificate as a proof of decease, and which presents such anomalies as having in some cases no less than 485 deaths out of 500 uncertified by properly qualified Medical men. No wonder that men seek to remedy such a state of matters.

The Management of Workhouses. By S. W. North, M.R.C.S.

*** Mr. North finds fault with workhouses on various grounds, chiefly, however, for the want of a proper classification of their inmates. He holds that whereas the able-bodied should fare worse than the poorest classes outside, the sick and infirm should suffer no such privations. The sick and the imbecile should have separate wards, and better attendance. The Medical officer should be better paid, and not required to contract for the supply of medicines. The diet of the sick should also be more varied, and their comforts every way more consulted.

Report on the Sanitary Visitation Movement, with Suggestions as to a Permanent Scheme. By Dr. Gairdner. Glasgow.

*** Stimulated by the cholera epidemic, the citizens of Glasgow inaugurated a system of house-to-house visitation, and of attempting to prevail on their inhabitants to attend more to hygienic arrangements than they had hitherto done. The plan was most successful, and it has been determined to give the system a permanence not originally intended. In this, as in all other projects of a like kind, Dr. Gairdner is in the van, ever anxious to promote the interests of the community with whose welfare he is intrusted. We shall wait with anxiety for the result, for we confess that we see difficulties in the way of a permanent organisation, which would be powerless to affect a temporary one.

Eighth Annual Report of the Convalescent Society for Newcastle-on-Tyne, Northumberland, and Durham.

*** That most laudable plan of conjoining a country convalescent home with a city infirmary has been adopted in Newcastle, with most beneficial results. According to Dr. Philipson's report, no fewer than 241 patients have been received into the Marsden Home, chiefly (though not entirely) from the Newcastle Infirmary, with advantage in almost every case. We are glad to see that the accounts show a balance on the right side.

Code of Medical Ethics adopted by the American Medical Association. Revised to date. New York: W. Wood and Co. Pp. 39.

*** We most cordially recommend this little manual to our readers, for we are satisfied that attention to the rules it inculcates would do much to abolish the bad feelings and heart-burning jealousies which often rage among Medical men. The rules are sound, and sufficiently numerous to enable any right-thinking man to conduct himself with propriety in the awkward positions in which the Physician is occasionally placed. Not that these rules do to any extent differ from those of ordinary life; still there are peculiarities of which our Profession is very tenacious, and which hedge it about and mark it off from others. The little volume will be especially useful to junior Practitioners who may not have had opportunities of studying Medical etiquette even in its most prominent bearings.

Obstetric Aphorisms. By J. G. Swayne, M.D., Physician-Accoucheur to the Bristol General Hospital, and Lecturer on Obstetric Medicine at the Bristol Medical School. Fourth edition. London: John Churchill and Sons.

*** The value of this little manual to students commencing midwifery practice is so well known, and so firmly established in the minds of those who most require its assistance, that really we need say nothing in its favour. Suffice it to say that in the new edition the prescriptions are in accordance with the British Pharmacopœia, and that the chapter on thrombosis and embolism is improved, thus bringing the volume up to the level of the times.

Practical Dissections. By Richard M. Hodges, M.D., formerly Demonstrator of Anatomy in the Medical Department of Harvard University. Philadelphia: Lea. Pp. 286.

*** A very good little volume, not exactly to be ranked alongside of Ellis, Holden, or Heath, but good in its way; it does not aim at much, but it accomplishes what it seeks to do. It is conveniently subdivided into dissections, each for one day's work, whilst its small size renders it a useful pocket companion. The descriptions of the parts exposed are good, and printed in large type; the directions for dissecting are given in small type, greatly economising space. Again we repeat, although not everything which could be wished, it is still a work of considerable merit, and one likely to prove useful.

Shaw's Medical Remembrancer. 5th edition, enlarged and revised by Jonathan Hutchinson, F.R.C.S., Surgeon to the London Hospital, etc. London: John Churchill and Sons. Pp. 120.

*** This exceedingly useful little manual has reached its fifth edition, and, improved as it now is by Mr. Hutchinson, will doubtless continue to obtain, as it most assuredly merits, great popularity.

Royal Edinburgh Asylum Annual Report, 1866.

*** Among the Asylum reports which reach us, there are none which give us greater pleasure than Dr. Skae's. At the head of a large establishment (1017 having been under treatment last year), a gifted and cautious observer like Dr. Skae has rare opportunities, and his reports, as well as his papers in the journals, show that he does not neglect them. Among the most interesting cases remarked on are three of *aphasia*, one ending in recovery, another in death from a clot in the *left posterior* lobe of the brain. Another case is of still greater importance. The patient occasionally suffered from slight and transient symptoms of epilepsy. He was quiet and perfectly sensible during the intervals, but on the occasion of these attacks he suffered from regularly recurring fits of homicidal mania, great force being necessary to restrain him from violence to himself or those about him. Yet, in the intervals, he was aware of and deeply deplored this tendency. We recommend this case to the notice of the lawyers.

Thermometric Observations in Typhus Fever. By J. W. Grimshaw, M.D., &c. Reprint from *Dublin Quarterly*.

*** We have already had occasion to remark on the value of Dr. Grimshaw's researches on this subject. They are here given in a very concise yet satisfactory manner.

Diseases of the Eye in Cerebro-Spinal Meningitis. By H. Wilson, F.R.C.S., etc. Reprint from *Dublin Quarterly*.

*** Combined with the epidemic now prevailing in Ireland are a variety of eye affections of an inflammatory type, chiefly affecting the conjunctiva or cornea, but occasionally also the deeper structures. Mr. Wilson records five most interesting cases illustrative of these various forms of disease.

The Spas of Belgium, Germany, Switzerland, France, and Italy. By Thomas More Madden, M.R.I.A., Licentiate of the King and Queen's College of Physicians, Ireland. London: Newby. Pp. 369.

*** A readable book, conveying information in the pleasantest manner—this volume will, we think, become a favourite both with our Profession and with the public. Balneological literature offers a temptation to many men who want to see their names in print; but, were all specimens as pleasant as the one of which we now speak, we should not care though we had to encounter it even more frequently.

On Cephalotripsy. By G. H. Kidd, M.D., Assistant-Physician to the Coombe Lying-in Hospital, Dublin. Reprint from *Dublin Quarterly*.

*** Dr. Kidd strongly advocates the use of the cephalotribe (slightly modified from Simpson's original instrument) in many cases in which hysterotomy would otherwise be necessary. He accepts all as fit cases where the head has not entered the pelvis, and where he is able to introduce the instrument. Some very good cases are given.

Reports of Hospital Cases—Injuries of the Wrist and Ankle Joints. By W. MacCormac, M.D., Surgeon to the Belfast General Hospital. Reprint from *Dublin Quarterly*.

*** Careful and interesting contributions to conservative Surgery, showing how much can be done by care towards remedying injuries too often passed by as not susceptible of improvement. The cases are further illustrated by excellent lithographs.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At a general meeting of the Fellows held on Tuesday, June 25, the following gentlemen, having undergone the necessary examination, were duly admitted Members of the College:—

George Fowler Bodington, Saltburn-by-the-Sea; Stephen Monckton, M.D. Lond., Maidstone; William Henry Day, M.D. St. Andrews, 10, Manchester-square; William Ainslie Hollis, M.B. Cantab., 14, Tolmers-square; Richard Thorne Thorne, M.B. Lond., 22, Upper Seymour-street; Walter Rickards, M.D. Lond., 11, New Cavendish-street; Moses Prosser James, M.D. St. Andrews, 18, Dover-street; Philip John Hensley, M.B. Cantab., Cambridge.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, June 20, 1867:—

Richard Young Vance Packman, Liverpool; John Colston, Harleston, Norfolk; James Wood Cooke, Barnstaple, North Devon; William Alfred Renshaw, Ashton-upon-Mersey; Rowland Heathcote, Grosvenor-street, Manchester; Thomas Joseph Quicke, Brixton-lodge, Brixton; Matthew Hall Wright, Stonehouse-lane, Birmingham.

As Assistants:—

Frederic Stokes Dewson, Watery-lane, Birmingham; Edward J. Ireland, Hart-street, Bloomsbury-square.

The following gentleman also, on the same day, passed his First Examination:—

James Bilham, St. Mary's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BAUMLER, C., M.D., has been appointed a Junior Assistant-Physician to the City of London Hospital for Diseases of the Chest.

MORGAN, J. E., M.D., M.A., has been appointed Consulting Physician to the Salford Royal Hospital and Dispensary.

RICHARDSON, B. W., M.D., has been appointed Physician to the St. Marylebone Dispensary.

SPANTON, W. D., M.R.C.S.E., has been appointed Medical Officer to the North Staffordshire Infirmary, Etruria.

BIRTHS.

CURTIS.—On June 21, at Staines, the wife of A. Curtis, M.R.C.S.E., of a son.

EVANS.—On June 20, at Dyffryn-Ceri, Newcastle Emlyn, the wife of Thos. Evans, M.R.C.S. and L.S.A., of a son and heir.

GWYNN.—On June 20, at 5, Belgrave-terrace, Upper Holloway, the wife of E. Gwynn, M.D., of a daughter.

HEWAN.—On June 15, at Minera-street, Eaton-square, the wife of A. Hewan, M.D., of a daughter.

HUGHES.—On June 22, at Downs-road, Clapton, the wife of H. W. Hughes, M.R.C.S.E., of a daughter.

LEACHMAN.—On June 21, at Petersfield, Hants, the wife of A. W. Leachman, M.D., of a daughter.

MORE.—On June 14, at Rothwell, Northamptonshire, the wife of Dr. More, of a son.

WHITE.—On June 21, at Mestyn-road, Brixton, the wife of Dr. S. White, of a daughter.

MARRIAGES.

BOURNES—BURGESS.—On June 5, at the parish church of Monkstown, County Dublin, William H. Bournes, M.D., M.R.C.S., of Ballycastle, County Mayo, to Lizzie Anna, eldest daughter of Thomas Burgess, Esq., Royal-terrace, Kingstown, County Dublin.

GRIBBON—ALLAN.—On May 23, at St. Andrew's Church, Montreal, Canada, G. C. Gribbon, M.B., Assistant-Surgeon 1st Battalion 25th Regiment, to Lizzie, eldest daughter of H. Allan, Esq., Ravenscrag, Montreal.

HOOPER—DALKEN.—On May 4, at the Cathedral, Quebec, A. Hooper, Surgeon H.M. 30th Regiment, to Julia Harrison, second daughter of H. S. Dalkin, Esq., of Quebec.

MEAD—PALMER.—On June 20, at St. Mary's, Warwick, W. T. H. Mead, M.R.C.S.E., of South Hackney, Middlesex, to Selina Louisa, third daughter of J. Palmer, Esq., the Square, Warwick. No cards.

MUNRO—BELLAS.—On June 18, at Bongate, J. Munro, M.D., of Barnard Castle, to Mary, daughter of the Rev. T. Bellas, M.A., Vicar of the Parish of St. Michael, Appleby. No cards.

DEATHS.

ELLIS, H., M.R.C.S.E., of Rickinghall, Botesdale, Suffolk, at Brighton, on June 9.

GRADWELL, W., M.R.C.S., L.R.C.P. Ed., at Lytham, Lancashire, on June 5, aged 61.

INCE, J., M.D., at 70, Chester-square, on June 21.

PHIPPS, J. G., M.D., at No. 2, Belle Vue-place, Cheltenham, on June 20, aged 49.

SMITH, J., M.D., at Cromwell-street, Stornoway, N.B., on June 16.

WARD, JOSEPH, M.R.C.S.E., at East-hill-house, Epsom, on June 20, aged 67.

WOOLMER, S. E., M.R.C.S., at Bristol, on June 6, aged 37.

VACANCIES.

LOCK HOSPITAL.—Surgeon.

METROPOLITAN FREE HOSPITAL.—Assistant-Physician.

ST. MARY'S HOSPITAL, PADDINGTON.—Assistant-Physician.

ST. OLAVE'S UNION, SOUTHWARK.—Medical Officer.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Shepton Mallet Union.—The Fourth District is vacant; area 9595; population 2701; salary £65 per annum.

Torrington Union.—The Shebbear District is vacant; area 10,834; population 1893; salary £25 13s.

APPOINTMENTS.

Ashbourne Union.—Robert D. Goodwin, M.R.C.S.E., L.S.A., to the Mayfield District.

Thorne Union.—Richard W. Cooper, M.R.C.S.E., L.S.A., to the Epworth District.

Torrington Union.—Sloane Michell, M.R.C.S.E., L.S.A., to the Second District.

TESTIMONIAL TO THE PROPRIETOR OF THE "PALL-MALL GAZETTE."—On Wednesday afternoon a number of the leading members of the Profession assembled at Mr. Hill's house, 45, Queen Anne-street, Cavendish-square, for the purpose of presenting the plate (a silver vase and tray) for which the Profession had subscribed as a testimonial to the proprietor of the *Pall-mall Gazette* for his behaviour in the celebrated trial of Hunter *versus* Sharpe. Sir Thomas Watson took the chair, and Dr. Burrows made the presentation; and we need not say that both performed their duty in their usual felicitous manner. Mr. Smith replied in a feeling manner to Dr. Burrows' address and presentation. The pieces of plate were manufactured by Messrs. Ortner and Houle, St. James's-street. Both the design and workmanship were much admired. We think it only right to state that Dr. R. Quain and Dr. C. J. B. Williams both devoted the large fees they should have received for attendance at the trial to this testimonial. With votes of thanks to Sir Thomas Watson and Dr. Burrows, to the Treasurers, Mr. Pollock and Mr. Hill, and to the Secretaries, Messrs. Callender and Parkinson, the meeting separated.

WE would especially direct attention to an important discussion coming off at the meeting of the Epidemiological Society on Monday next, at the rooms, 37, Soho-square. The subject is the malignant purpuric fever now prevailing in Ireland, and papers are promised by Dr. Lyon, Dr. Mapother, and from the Army Medical Department. All interested in the subject are invited.

DEATH OF PROFESSOR TROUSSEAU.—This great clinical teacher, whose death has been reported so often before, really died last Sunday, under the most cruel suffering from cancer of the stomach. He was calm and resigned, having with clinical prevision predicted the exact period when his hopeless malady would terminate. He was dictating the pages of a new work a few days within his death. An immense number of the Profession attended his funeral, but, according to the wishes of the deceased, no oration was pronounced over his grave.

ROYAL COLLEGE OF PHYSICIANS.—The following officers were elected on June 25, 1867:—*Censors:* Henry Bence Jones, M.D.; Thomas Bevill Peacock, M.D.; William Wegg, M.D.; Richard Quain, M.D. *Treasurer:* William Emmanuel Page, M.D. *Registrar:* Henry Alfred Pitman, M.D. *Librarian:* William Munk, M.D. *Member of Council:* William Munk, M.D. *Examiners:* Anatomy and Physiology, John William Ogle, M.D., and Samuel Wilks, M.D.; Chemistry, Materia Medica, and Practical Pharmacy, Andrew Whyte Barclay, M.D., and William Marcet, M.D.; Principles and Practice of Medicine, Frederic John Farre, M.D., and Edmund Lloyd Birkett, M.D.; Midwifery and the Diseases peculiar to Women, Charles Blakely Brown, M.D., and Henry Oldham, M.D.; Principles and Practice of Surgery, George David Pollock, Esq., F.R.C.S., and John Birkett, F.R.C.S. *Curators of the Museum:* William Emmanuel Page, M.D.; George Hamilton Roe, M.D.; William Wegg, M.D.; and Francis Sibson, M.D.

QUEEN'S UNIVERSITY IN IRELAND.—At a meeting of the Queen's University, held in Dublin Castle, on Thursday, June 20, the following degrees were conferred:—The Degree of Doctor in Medicine upon Mark Edward Anthony, Q.C., Cork; John Barry, Q.C., Cork; William Fuller Bennett, Q.C., Cork; John Walton Browne, B.A. Q.C., Belfast; Robert de la Cour Corbett, Q.C., Cork; Edmund Maurice D. FizGerald, Q.C., Cork; James Frazer, Q.C., Belfast; Matthew Moriarty Gallwey, Q.C., Cork; Michael Upington Greany, Q.C., Cork; Thomas Kingston, Q.C., Cork; Frederick Lyons, Q.C., Cork; William Henry Macnamara, Q.C., Cork; Patrick Richard Martin, Q.C., Cork; Thomas Henry Sandiford, B.A., Q.C., Cork; Rosslewin Morgan, Q.C., Cork. And the Degree of Master in Surgery upon William Fuller Bennett, Q.C., Cork; Robert de la Cour Corbett, Q.C., Cork; Edmund Maurice D. FitzGerald, Q.C., Cork; James Frazer, Q.C., Belfast; Matthew Moriarty Gallwey, Q.C., Cork; William Beech Johnston, M.D., Q.C., Cork; James Leatham, M.D., Q.C., Belfast; Frederick Lyons, Q.C., Cork; Thomas Henry Sandiford, Q.C., Cork.

THE succession of the late Dr. Jobert de Lamballe has just been settled, The portion falling to each of his five heirs is £22,400, or £112,000 in all. "A handsome fortune," says *Galignani*, "when the fact is remembered that the illustrious Surgeon came to Paris a poor lad."

SIR WILLIAM LAWRENCE, BART.—This distinguished Surgeon, now in the 85th year of his age, has at last placed himself on the list of honorary retired members of the Council of the Royal College of Surgeons, on which body he was elected so long ago as 1828. This resignation having been announced since the publication of the advertisement in the *London Gazette* convening the meeting for the annual election on Thursday next, will not in any way affect the position of the retiring members of the Council; had it been made prior to the appearance of the advertisement, Mr. Kiernan would have had another tenure of office. It was generally supposed, when Sir William recently resigned his seat as an examiner, that it was his intention to include in that resignation his office of councillor, but that the deplorable state of his health prevented him from clearly expressing his wish. As it is, the seat now vacated cannot be filled up until July, 1868.

MEDICAL OFFICERS OF THE GUARDS.—The charge of the Guardsmen in the House of Commons last year on behalf of their Medical officers, although not immediately successful, has been followed by a siege operation which has carried the War Office. The ground of complaint, it will be remembered, was a proposal to change the immemorial system of regimental promotion in the Guards on the strength of a "submission paper" which was signed in 1860, but not produced till 1866, and which was to have retrospective action. General Peel stoutly maintained that the business of the Medical officers was to obey orders and submit to their lawful governors. And he protested against the "House of Commons governing the army." In the end, however, the Duke of Cambridge and Sir John Pakington have now conceded what obvious justice demanded, and what might have been granted at first with a much better grace. Officers affected by the retrospective action of the warrant will be promoted within the regiment specially in their turns, and will thus be in great measure (but not wholly) indemnified. Not wholly, for the new *régime* will bring junior men in the regiment into senior positions over their heads, and prevent

their reaching the higher grades within the time assigned by the service regulations. Thus one or more of the present Assistant-Surgeons can never become Surgeons-Major in their regiments, who otherwise would have done so.—*Pall-mall Gazette.*

ODONTOLOGICAL SOCIETY. — At the June meeting, G. A. Ibbetson, Esq., President, in the chair, Professor Owen, F.R.S., read a paper, "On the Dental Characters of New Genera and Species of Fossil Fishes, from the Low Main Seam and Shales of Coal, Northumberland."

NOT SO BLACK AS HE'S PAINTED.—In the course of one of his recent lectures on Ethnology at the Royal Institution, Professor Huxley took occasion to relieve the negro from the aspersions of sundry anthropologists. Many foolish things, said Professor Huxley, are reported by opponents of the negro, "who frequently quote as a fact what has been often refuted —that the brain of a negro *is covered with a black membranous envelope.* It is not so; and if it were, is that a reason for condemning him to slavery?" The Professor asserted that the negro is not the missing link between man and monkey, as some shallow zoologists are apt to believe. Curiously enough, the negro is in many anatomical particulars more removed from the anthropoid apes even than is the European. For example, he has woolly hair—a feature which alone at once separates him from all quadrumana except some rare species in South America. "The spur-heel of the negro has been spoken of to his disadvantage; but it is doubtful whether his heel projects more than an Englishman's, and that it is not an indentation of the part above the heel which sometimes gives the appearance of unnatural projection to the latter."

A CONFERENCE ON CHOLERA was held at Leipzig last Christmas by Profs. Griesinger, Wunderlich, and von Pettenkofer, at which Dr. John Macpherson was present by invitation. Much interesting matter was brought forward, especially by Von Pettenkofer and Wunderlich, and it was resolved that a conference on a larger scale should be held. It came off at Leipzig on April 28 and 29. Shortly after the first meeting, various notices appeared in foreign newspapers, some of which we copied into our pages, stating that the meeting was unanimous on the subject of the influence of subsoil water. The result has been some correspondence in the foreign journals between Professor von Pettenkofer and a member of the Conference who had not adopted his views fully. Notes of its proceedings were taken in shorthand, and will appear in a few weeks, with several appendices, and will no doubt contain important information. Meantime, the Weimar journals and the *Pall-mall Gazette* have noticed what appears to have been a chief incident of the meeting—the appearance of a certain architect, Von Pohl, who turned up from St. Petersburg, and is said to have refuted some statements of Prof. Ilisch opposed to Pettenkofer's views, and who brought forward the curious fact, to account for cholera outbreaks in winter, that, while the surface may be frozen, there is often water in the cellars of St. Petersburg. Prof. Ilisch, since his return, has written a reclamation against the statements of the *Weimar Gazette.* He opens up a long discussion, into which we cannot enter, as to the causes influencing the state of subsoil water, and arguing that it depends mainly on the tides and the quarter from which the wind blows. This he considers to be the most powerful influence in St. Petersburg. He concludes thus:—"On these grounds, and because cholera epidemics have broken out in various parts of Russia, even in winter with the soil frozen to the depth of several feet, and in places where no subsoil water is to be found—because it has occurred on compact rock as at Orenburg, or on bare granite rock as at Helsingfors—because, according to Indian accounts, cholera epidemics occur in many places during the rains, and therefore when the subsoil water is rising (not falling, as has been supposed to be necessary)—I remain as before of opinion that outbreaks of cholera are not dependent on conditions of subsoil water, and that Pettenkofer's theory is not admissible." We merely describe the state of the question, and offer no opinion on it at present.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

We are requested to state that Mr. A. T. Norton, Assistant-Surgeon of St. Mary's Hospital, is not a candidate for the vacant Surgeoncy at the Lock Hospital.

We understand the action brought by a lady Practitioner in midwifery against a well-known obstetric Practitioner for imputing to her unskilfulness in her profession, has been amicably arranged by the defendant giving a written apology. The case was one of mistaken identity.

We regret that, when last week speaking of the candidates for the Surgeoncy to the Lock Hospital, we omitted to mention the name of Mr. Spencer Watson, Assistant-Surgeon to King's College Hospital, amongst the intending candidates.

Q.—Petechiæ and vibices have been known in all ages to accompany every form of fever. We have seen a case of malignant scarlet fever in a puerperal woman, which completely resembled that described as purpuric fever by Dr. Crisp in the columns of a contemporary.

Female Practitioners.—We doubt the policy of encouraging women to practise Physic. Still, if they choose that line, we don't fear their competition, and wish them to have fair play. Of course, they must bear the brunt of ridicule, but they ought not to be subjected to misrepresentation. We wish some of the "friends" of female Physic would remember that no good cause can be promoted by foul means. The authors of "Prize Essays on Search," a sixpenny book published by Booth, of Regent-street, seem to forget that sobriety usually accompanies truth when it is asserted that wives and children are murdered by "a priesthood on whose *bloody and insatiable* altar these innocent victims are daily offered up"—that is to say, that male accoucheurs are fond of butchering their patients. The terms "bloody" and "insatiable" are sometimes applicable to lies and the forgers and lovers thereof.

A Staff-Surgeon.—We derived the information from "Dod's Peerage," a work containing many similar inaccuracies.

A Fellow, Devonport.—Not having signed the by-laws, your votes could not be received. The candidate may well exclaim, "Save me from my friends!" especially from one so demonstrative in his canvassing as the gentleman to whom you allude.

Dr. McA., L.S.A.—There are several Licentiates of the Society of Apothecaries on the Council of the College of Surgeons, among whom may be numbered the President and Senior Vice-President, and Messrs. Hodgson, Busk, T. Paget, Curling, Turner, &c.

HOW TO SUPPLY NURSES.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—There is, as you are aware, a great want of nurses for Hospitals, etc. Will you, then, kindly admit a suggestion which might possibly prove a means of supplying that want? Some ladies receive a village girl into their houses one day in a week to do household work, as a training for domestic service. Could not something on this plan be followed in the Hospitals? If a few parish or Union girls of about 13 or 14 were allowed, as a *reward for good conduct*, to come on a Saturday and do any kind of work required in the wards of which they were capable, receiving sixpence remuneration, I think there would be many young candidates, and that the scheme would prove a training school for nurses. What was felt as a privilege in childhood might become a profession in after years, and many intelligent, handy girls become good nurses. Perhaps, if you will admit this suggestion, it may meet with consideration. I am, &c. H. B.

CASE OF POISONING BY DISTILLED TAR.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I was requested last Monday evening to visit a labourer, aged 71 years, who had gone into a tool-house adjoining a brickyard four miles from this place, and drank three-quarters of a pint of distilled tar. He asked the brickmaker when he came out what sort of nasty oily stuff he had in the large cask, for he had got some of it. He soon lost the power of locomotion, and was carried to the vicarage in the neighbourhood, where, after receiving every attention, he died, without much apparent suffering, a quarter of an hour before I arrived, and two hours after drinking the tar. I ascertained since that he lost the senses of taste and smell some time ago, and took the oil of tar for small beer, which was contained in another cask in the same room. The tar oil is used on account of its cheapness in the casting of the bricks.

Pocklington, Yorkshire. I am, &c. J. WATMOUGH, M.D.

GREENWICH HOSPITAL AND THE SEAMAN'S HOSPITAL SOCIETY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—You have twice stated in your journal that Dr. Barnes and Dr. Ward agreed in preferring Queen Mary's Quarter to Queen Anne's. Permit me to inform you that on his first inspection Dr. Ward was decidedly in favour of Queen Anne's as the building more easily convertible into a Hospital, and more suitable to supply the place of the *Dreadnought.* He subsequently changed his opinion. I may also state that the Medical and Surgical staff are, and have been from the first, unanimous that neither quarter of Greenwich Hospital is suited for Hospital purposes. But to build a new Hospital will involve a heavy outlay of capital, and it was this consideration alone which induced the Committee to apply to Government for the loan of a portion of Greenwich Hospital or a grant of money. As the latter request could not be entertained, they were willing to accept part of the building, provided the block fronting the river were allotted them. Queen Anne's Quarter was especially named at the interview granted by the Earl of Derby.

The *Dreadnought* has been for so many years a conspicuous object on the Thames that a river frontage is considered essential to the future prosperity of the Seaman's Hospital. I need not discuss the arguments which have been advanced on either side on the merits of the respective buildings, but I cannot agree with Dr. Bristowe and Mr. Holmes in their report that "the dining hall beneath the chapel would form a magnificent ward capable of holding fifty patients." It is nearly four feet below the adjacent roadway, the windows are six feet from the floor, and the ceiling is vaulted and supported by a double row of pillars, which intersect the hall. In winter it would be badly lighted, gloomy, and depressing.

15, Gloucester-place, June 25. I am, &c. H. T. L. ROOKE.

Army Medical Department.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—On the 8th inst. you published a letter concerning the military clubs, which, although written with questionable taste, contained undeniable statements.

On the 15th inst. you also published a letter, signed "A. B. and C. D.," commenting on the former one somewhat severely.

Will you allow me to make a few remarks on the same subject? By the rules of the Senior United Service Club, all Medical officers are excluded except the Director-General, although I have been informed that efforts have been made by some of the more enlightened members to obtain the admission of Medical officers of corresponding rank with the general class of members.

Now, this exclusion of Medical officers cannot, of course, be removed, except by the voluntary concession of the majority of the members of the Club, and it is absurd to think of Parliamentary interference. We are, however, at liberty to express opinions on the conduct of a body of gentlemen who thus wantonly offer insult to an important section of the army, from individual members of which there can be no doubt that many of those gentlemen have, when on foreign stations, received various acts of kindness and fraternal regard.

There is probably no Medical officer of experience, of both home and foreign service, who cannot call to mind how differently he has been treated, as regards social matters, at different stations. At unhealthy or distant stations, the Medical officer is made much of, and invariably invited to the house of the General as frequently as other officers of equal position. But is it so at home? By no means. I can venture to assert, without fear of contradiction, that it is exceedingly rare for a general officer commanding at a home station to invite any Medical officer except the principal Medical officer to his table, although he will not fail to invite every field officer and many inferior officers; and this different treatment will be accorded to the same individual, proving that it cannot be due to any special fitness or unfitness for society.

I have heard this noticed by various Medical officers of the most unexceptionable character and undoubted fitness for any society.

The public are given to understand that "relative rank carries with it all precedence, etc., attaching to the rank with which it corresponds;" but, in reality, it is not so. Relative rank is a myth, and is ignored or disputed on every possible occasion. This jealousy of relative rank applies especially to the Medical officers, because they are the only gentlemen without titular military rank who come in contact with the general body of military officers.

The desire of the "authorities" to render relative rank ridiculous and useless is proved by their unwillingness to rectify the false position assigned the Medical officers in the *Army List*, notwithstanding the decided recommendation of the Committee which reported some time last year. I am, &c. "Fortis est Veritas."

June 24.

COMMUNICATIONS have been received from—

Dr. Burton; Mr. Bellamy; H. B.; Messrs. Ortner and Houle; Mr. W. Spencer Watson; Mr. Harry Leach; Dr. Watmough; Mr. Fulcher; "Fortis est Veritas;" Mr. Fox; Mr. Copney; Dr. Rooke; Mr. Norton; Dr. Lankester; Mr. Lewis; A Student of Medicine; Dr. Murray; Dr. Stone; Mr. J. Wood; Rev. Dr. S. Haughton; Dr. Althaus; Mr. J. Chatto.

BOOKS RECEIVED—

Ellis's Illustrations of Dissections, Parts 24 to 27—Appendix to Dr. Nevins' Prescriber's Analysis—The British Journal of Dental Science, May—The Seaside Register—Arnott's Arithmetic Simplified—Heslop's Speech—Miller's Elements of Chemistry, Part 1—Stewart and Jenkins on Sanitary Reform.

NEWSPAPERS RECEIVED—

Daily Courier—Laboratory—Gazette Hebdomadaire—Medical Press and Circular—Jamaica Gleaner.

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 22, 1867.

BIRTHS.

Births of Boys, 1142; Girls, 1092; Total, 2234.
Average of 10 corresponding weeks, 1857-66, 1811·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	531	521	1052
Average of the ten years 1857-66	592·0	540·0	1132·0
Average corrected to increased population..	..	..	1245
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Typhus.	Diarrhœa	Cholera.
West ..	463,388	1	1	3	2	9	6	1	..
North ..	618,210	8	7	4	5	8	9	3	..
Central	378,058	1	3	..	..	4	3	2	..
East ..	571,158	6	4	3	3	5	4	4	..
South ..	773,175	3	5	8	..	7	7	6	..
Total ..	2,803,989	19	20	18	10	33	29	16	..

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·934 in.
Mean temperature	55·3
Highest point of thermometer	72·1
Lowest point of thermometer	44·5
Mean dew-point temperature	50·1
General direction of wind	N.E.
Whole amount of rain in the week	0·02

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, June 22, 1867, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the Year 1867.	Persons to an Acre. (1867.)	Births Registered during the week ending June 22.	Deaths. Corrected Average Weekly Number.*	Deaths. Registered during the week ending June 22.	Temperature of Air (Fahr.). Highest during the Week.	Temperature of Air (Fahr.). Lowest during the Week.	Temperature of Air (Fahr.). Weekly Mean of the Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3082372	39·5	2234	1421	1052	72·1	44·5	55·3	0·02	2
Bristol (City) . .	165572	35·3	130	74	‡64	69·5	45 4	56·0	0·06	6
Birmingham (Boro')	343948	43·9	260	167	115	68·6	45·4	56·0	0·00	0
Liverpool (Borough)	492439	96·4	403	285	231	67·3	45·8	56·7	0·06	6
Manchester (City) .	362823	80·9	329	205	‡181	68·8	48·0	55 6	0·04	4
Salford (Borough) .	115013	22·2	103	58	62	66·3	44·8	56·4	0·05	5
Sheffield (Borough).	225199	9·9	224	119	94	68·0	45·0	53·6	0·36	36
Leeds (Borough) .	232428	10·8	196	118	106	70·0	43·5	54·7	0·11	11
Hull (Borough) .	106740	30·0	76	49	40	..	..	..	..	..
Nwestl-on-Tyne, do.	124960	23·4	120	66	55	59·0	44·0	51·8	0·12	12
Edinburgh (City) .	176081	39·8	125	85	71	68·7	46·0	55·3	0·10	10
Glasgow (City) .	440979	87·1	371	257	209	65·3	41·4	53·9	0·12	12
Dublin (City and some suburbs) .	319210	32·8	175	†157	136	76·9	40·8	58·2	0·00	0
Total of 13 large Towns . . .	6187764	34·8	4746	3061	2416	76·9	40·8	55·3	0·09	9
					Week ending June 15.	Week ending June 15.				
Vienna (City) . .	(1863) 560000	..	..	..	349	..	..	§61·9	..	..

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·934 in. The barometrical pressure, which was 30·01 in. at 9 p.m. on Monday, June 17, decreased to 29·84 in. on Wednesday, June 19, rose to 30·02 in. by 9 a.m. on Saturday, June 22, and was 29·95 in. at the end of the week.

The general direction of the wind was N.E.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 59·9°.

APPOINTMENTS FOR THE WEEK.

June 29. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

July 1. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

Epidemiological Society, 8 p.m. Papers "On the New Epidemic in Ireland (Purpuric Fever, Cerebro-spinal Meningitis)," by Dr. Lyon, Dr. Mapother, and from the Army Medical Department.

Harveian Society of London, 8 p.m. Special Meeting for the purpose of receiving the Report of the Committee on Venereal Diseases.

Royal Institution, 2 p.m. General Monthly Meeting.

2. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

3. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 2 p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.

Metropolitan Association of Medical Officers of Health, 4 p.m. Meeting for Election of Officers.

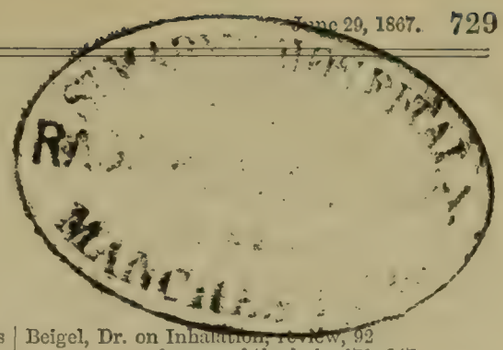
Obstetrical Society of London. 7 p.m.: Council Meeting. 8 p.m.: Thomas Skinner, M.D. (Liverpool), "The Salivation of Pregnancy successfully Treated, with a Case." William Squire, Esq., "Puerperal Temperatures." And other Papers by Robert Ellis, Esq., and J. B. Curgenven, Esq.

4. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

5. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.



INDEX.

A

Abdomen, gunshot wound of the, case of, 225
operation for large tumour of the, case of, 259
rupture of the viscera of the, without symptoms, case of, 522
Aberdeen, University of, as a School of Medicine, 289
pass-list of, 456
Abortion, criminal, frequency of, in India, Dr. Shortt on the, 74
in the United States, 143
Absorption, cutaneous, M. Hoffmann's experiments on, 419
Academy of Sciences, the French, awards of prizes by the, 312, 315
prize questions of the, 339
of Medicine, the Belgian, jubilee and prize questions of the, 173, 468
Acarus scabiei, destruction of, by heat, "X. Y. Z." on the, 407, 460
Acland, Mr. W. death of, 132
Acupressure, Drs. Pirrie and Keith on, review, 428
Mr. Tait's note on, 332
Adams, Dr. A. L. on cholera in relation to meteorology, 276, 305
Mr. William, on Club Foot, review, 561
on the treatment of hip-joint disease, 97
Addison, Mr. W. J. death of, 321
Advertising, unprofessional, 460
Africa, Central, in its Medical aspects, 503
Air, change of, Dr. Althaus on, 268
entrance of, into the circulation, Mr. Heckford on cases of, 137
Albuminuria, uric acid in the brain in, 212
Alexander prize question, the, 592
Alger, Mr. J. S. death of, 406
Alkali Act, operation of the, 718
Alkaloids, Professors Rodgers and Taylor on the detection of, 17, 50, 70
Allbutt, Dr. on the prunus virginiana, 161, 217
on a clinical thermometer, 182, 316
on improved dwellings for the poor as a preventive of disease, 666
Alopecia, almost complete, in a girl, 537
Althaus, Dr. on the electrolytic treatment of tumours, 131, 526
Amiens, Dr. Ballard on a visit to, 16
Amputation, drawing ligatures through the flaps after, 525
at the hip-joint, cases of, 116, 141
Amyloid degeneration, Dr. Dickenson on, 209, 237
Anæmia, tropical, with ancylostomum duodenale, 293
Anæsthesia in midwifery, Mr. Isaac Brown on, 511
by mixtures, Mr. Ellis on, 246
with ether spray, Dr. Haward on, in diagnosis, 30
Dr. Richardson on, in veterinary Medicine, 288
by refrigeration, Dr. Arnott on question of priority in, 345, 509
Dr. Richardson's reply to Dr. Arnott, 403
"S." on the antiquity of, 480
Ancylostomum duodenale associated with tropical disease, specimen of, 293
Andrews, St. pass-lists of, 484
"Graduates' Association" of, 666
Androgynism, observations on, 145
Aneurism of the aorta, specimens of, 51, 211
of the innominata treated with success, Mr. Heath's case of, 18
popliteal, specimen of, 455
amputation after treatment of, Professor Fayrer's case of, 335
Aneurisms, small, of the cerebral artery, specimens of, 537
Anthropological congress, programme of the, 361
Antrum, myeloid tumour of the, 250
Aorta, aneurism of the, specimens of, 51, 211
rupture of the valves of the, specimen of, 155
Ape, differences of, with man, 381
Aphasia, disease of the brain producing, case of, 537
Apothecaries' Society, dinner given by the, to the Medical Council, 635
pass-lists of the, 25, 76, 132, 157, 213, 240, 265, 295, 321, 347, 379, 406, 430, 457, 485, 513, 539, 568, 598, 635, 671, 705, 725
question of admitting female licentiates of the, 199, 229
Appendix vermiformis, ulceration of the, specimen of, 74
Archaic man, 396
Archæological psychology, 337
Arm, injury to the nerves of the, case of, 278
Army Medical Department, successful candidates in the, 205, 229, 266
returns of rejected candidates to the Medical Council, 680
"Observer" on the discontent in the, 105
the new warrant for the, 359
appointment of Dr. Logan as director of the, 378
rules of precedence in the, 515
exclusion of the, by the United Service Club, 637, 673, 728
Army, the Indian, Medical Service of, 'Medicus" on the discontent of the, 50
hopes for the, 525
the old Bengal Medical Service of the, "Surgeon-Major" on the condition of, 351
the French, improved stature of recruits for the, 121
the Prussian, losses of the, 173
the United States, report of the Surgeon-General on the Medical Department of the, 230
Arnott, Dr. on priority in producing anæsthesia by refrigeration, 345, 509
reply of Dr. Richardson to, 403
Artery, brachial, ligature of the, case of, 279
carotid, rupture of, in fracture of the base, 444
external iliac, ligature of the, Dr. Buchanan's cases of, 273
subclavian, Dr. Smyth's operation on the, Sir William Fergusson on, 260
vide Aneurism
Arytenoid cartilage expectorated, specimen of, 73
Ashton, Dr. J. death of, 379
Askesis, Dr. MacCormac on, 317
Asphyxia, Professor Pacini's mode of artificial respiration in, 722
Asslin, Dr. T. death of, 431
Association, Cork Medical, memorial of, on Medical education, 597
meeting of the, 297
French Medical, annual meeting of the, 500
British Medical, and the Vaccination Bill, 631
dissolution of the Provident Society of the, 233
Irish Medical, meeting of the, 706
of Medical Teachers, formation of the, 527, 593
of Metropolitan Officers of Health, meetings of the, 20, 130
of Poor-law Medical Officers, resolutions on the new Workhouse Act, 268, 323
Astruc, notice of the writings of, 299
Ataxy, locomotive, cases of, 32, 494
Atkinson, Dr. views of, on change of air, 268
Mr. G. P. on the treatment of cholera, 708
Mr. B. death of, 53
Atropine, immunity of rabbits from poisoning by, Dr. Ogle on, 466
Austin *v.* the Great Western Railway, 459
Aztecs, account of the, 201
marriage of the so-called, 53

B

Bachelors, greater mortality of, questioned, 209
Bacon, Dr. M. on cholera in Italy, 307
Baillière, M. Hippolyte, death of, 540
Bain, Prof. on the correlation of mental force, 557
Baker, Mr. Alfred, Origin of Pyæmia, review, 101
Bakers' ovens, poisoning by, 296
Ballard, Dr. on a visit to Amiens, 16
on a renewed outbreak of cattle plague, 149, 154
influence of weather and season on public health, 565, 601
Bandage, glue, in fractures, 525
Barclay, Dr. Gout and Rheumatism, review, 421
Barlow, Dr. J death of, 240
Barnes, Dr. address of, to the Obstetrical Society, 75
Barnett, Dr. A. death of, 431
Bartholomew's (St.) Hospital, cases treated at, 250, 470
Barwell, Mr. cases of deformity, 85
Bath, the Japanese warm, Dr. Henderson on the, 249
Order of the, and the Medical Profession, 311
Beale, Dr. microscopical researches in cholera, 1
fundamental structure and arrangement of the nervous apparatus, 55, 107, 163, 190
on vital force, Mr. Hinton's criticism on, 177
on clinical teaching, 534
Beamish, Dr. practical observations on cholera, 379
Beaney, Dr. testimonial to, 200
Beaumont, "Dr." the pretended, 29
Beef-tea and essence, Dr. Druitt on, 292
Beer and wine compared, 122
Béhier, Professor, lectures on clinical Medicine, 435
Beigel, Dr. on Inhalation, review, 92
on a new fungus of the hair, 270, 347
the second case of plica polonica in England, 509
Belladonna, immunity of rabbits from poisoning by, 466
Bellis, Mr. B. death of, 76
Bernard, Dr. *Sull' Utilità e Necessità della Chirurgia*, review, 212
Bernutz and Goupil, Drs. Diseases of Women, review, 724
Bevan and Fleming's patent thermoterion, 101
Bick, Mr. A. death of, 457
Birmingham, letters from, 93, 234, 452, 670
General Hospital, cases treated at the, 550
Bismuth, discovery of, in South Australia, 514
Black, Dr. James, of Edinburgh, obituary notice of, 538
"Black-death," reported re-appearance of, in Ireland, *vide* Ireland
Bladder, epithelioma of the, specimen of, 51
congenital deficiency of the anterior wall of the, case of, 470
structure of the, Dr. Pettigrew on the, 703
Blake, Dr. chemical changes in living beings, 386
Mr. case of prolonged gestation, 263
Mr. Carter, on ancient British skulls, 316
Blenkarne, Mr. H. death of, 132
Blindness in one eye, procedure in, Mr. Walton on the, 109
Blister, general paralysis apparently produced by a, Dr. Taylor's case of, 487
Blistering, rapid, by *liq. ammon.* 524
Blood as an article of food, Dr. Wray on, 407, 433
Drs. Bull and Poole on, 459, 460
Blood-cyst of the thigh, case of, 155
Blood-letting at a discount in France, 159
Bloxam, Mr. Chemistry, new edition, review, 429
Bohemia, condition of the Hospitals of, during the war, 515
Boils, epidemic, Professor Laycock on, 235
Bombay, sanitary state of, 474
Bones, hereditary syphilitic inflammation of, Mr. Jordan on, 274, 304
syphilitic or carcinomatous, specimens of, 52
medullary cancer of, cases of, 442
Bonnafont, M. on otorrhœa in children, 448
Books, reviews and notices of, 13, 25, 41, 46, 52, 92, 101, 123, 151, 156, 180, 184, 205, 212, 233, 258, 264, 291, 314, 321, 343, 379, 400, 428, 450, 479, 484, 505, 511, 533, 561, 668, 704, 724
Borham, Mr. on a case of supposed poisoning by veratria, 128
Boudin, Monsieur le Docteur, death of, 322
Boulton, Dr. note in rectification, 105
Boys, besetting trials of, Dr. Meadows on the, 16
Rev. E. Thring on the, 49
Mr. Dixon on the, 71
unknown among the Jews, 79
Dr. Pusey on the, 126
Messrs. Orton and Soper on the, 133
circumcision in relation to the, 133
editorial observations on the, 141
Brady, Mr. on a case of sublingual tumour, 386
Brain, Convolutions of the, Mr. Turner on the, review, 13
effects of freezing the, Dr. Richardson on the, 513, 545
syphilitic disease of the, case of, 389
Braithwaite, Mr. on leather-felt splints, 423
Breslau, Professor, obituary notice of, 100
Bridgford, Assistant-Surgeon, R.N. death of, 539
Brinton, Dr. obituary notice of, 98
on Intestinal Obstructions, review, 429
Britons, ancient, the Rev. Canon Greenwell on the, 281
Broca, Dr. on degeneration of race in France, 362
Bromide of potassium as a sedative, 334
Bromley, Mr. H. W. death of, 672
Bronchitis, iodide of potassium and antimony in, 195
Bronchocele, large, Mr. James on the treatment of, 222
Brown, Mr. Baker, on Dr. Greenhalgh's statements, 14
letter of, on clitoridectomy, 49
correspondence of, with the Commissioners in Lunacy, 96
expulsion of, from the Obstetrical Society, 252, 336, 356, 366
letter of the clergy of the Surgical Home to, 447
Mr. Isaac, on anæsthetics in midwifery, 511
Thomas, bequest of, to University College, award concerning and observations on the, 513, 561, 705

Brown-Séquard, Dr. introductory lecture of, 13
Bruce, Mr. on a scirrhous tumour after acetic acid treatment, 183
Dr. W. death of, 185
Brunton, Dr. on position in protracted labour, 515
Bryant, Mr. case of internal strangulation, 319
Clinical Surgery, review, 205
Buchan on Meteorology, review, 724
Buchanan, Professor, Classification of Functions of the Human Body, review, 429
Dr. a fortnight's operative surgery, 273
Building Acts, necessity of amendment of, 667
Bullets, extraction of, Professor Roser on the, 530
Bullock, Mr. E. J. death of, 347
Burdett, Mr. W. death of, 485
Burn, Dr. R. D., death of, 265
Bursa, enlarged, chloroform injection of an, case of, 62
Burton, Dr. testimonial to, 77

C

Cahill, Surgeon A. death of, 53
Calabar bean, physiological action of the, Dr. Fraser on the, 94
Calculi, M. Civiale's collection of, 636
renal, in an abdominal cyst, case of, 537
Calculus, prostato-vesical, case of, 250
Calcutta Medical College Hospital, cases treated at the, 278, 335
Callender, Mr. on a testimonial to the *Pall Mall Gazette*, 49
Cancer, relations of, to phthisis, Mr. Weedon Cooke on the, 538
wards for, at the Middlesex Hospital, 524
treatment of, by injection of acetic acid, 193, 524
Mr. Moore on inadequate operations for, 723
fatal case of, Dr. Martyn's, 486
Mr. Bruce on the examination of a case after the, 183
of the cerebrum, case of, 443
epithelial, recurrence of, after amputation, Professor Fayrer's case of, 468
of the gall-bladder, specimen of, 239
of the humerus, case of medullary, 442
of the lung, specimens of, 51, 455
of the orbit, case of, 155
of the ovaries, specimen of, 455
of the supra-renal capsules, case of, 293
of the tongue, specimen of, 74
excision in a case of, 273
Cape Town, climate of, 242
Carbonis (liquor detergens), 76
Cardigan, niggardly conduct of poor-law guardians of, 171
Carotid artery, rupture of, in fracture of the base, 444
Cartilage, semilunar, loose, specimen of, 239
Cataract, Mr. Soelberg Wells's lectures on, 29, 81, 135, 189, 301, 327
on modified flap extraction of, 29
linear extraction of, 81
on scoop-extraction of, 135
von Graefe's modified linear extraction of, 189
reclination, division and solution of, 301
operation for lamellar or zonular, 327
removal of soft, by suction, 328
paracentesis in, 328
operations for capsular and secondary, 328
traumatic, operations for, 327
treated by the scoop, case of, 496
extraction of, followed by hæmorrhage, case of, 495
Professor Macnamara on operations for, at Calcutta, 233
treatment of, at the Ophthalmic Hospital, 7
Cattle-plague, reports on the fresh outbreaks of, 77, 103, 241, 267, 322, 406, 458, 498, 541, 599, 636, 706
Dr. Ballard on the reappearance of the, 149, 154
editorial observations on the, 552
the home of the, 592
in Belgium, Professor Bouley on the, 340
in Germany, Professor Bouley on the, 719
prize question of the Belgian Academy on the, 468
disinfectants in, observations on, 590
Cautery, a new gas, 598
Centenarians of 1866, 104
Cephalic index explained, 350
Cerebellum, effects of extreme cold on the, Dr. Richardson on the, 545
Cerebro-spinal typhus, Dr. Clapham on a case of, 709
in Ireland, *vide* Ireland
Ceylon, polyandry in, 173
Chambers, Dr. The Indigestions, review, 25
Chapman and Co. dietetic farina, 671
Dr. on the treatment of epilepsy, 456
Charcot, Dr. Lectures on Chronic Diseases and Diseases of Old Age, 245, 463
Charing-cross Hospital, account of the, 249
cases treated at the, 85
Chemical changes in living bodies, Dr. Blake on the, 386
Chemists, banquet of, in Paris, 594
Child, Dr. "Benedicite," review, 705
Children, otorrhœa in, Dr. Bonnafont on, 448
Children, splenic-cachexia in, Dr. Gee on, 404
nightmare and screaming in, Dr. Ringer on, 465
vide Infants
Chimpanzee, Professor Humphry on the anatomy of the, 214
Chloroform and ether in mixture, Mr. Ellis on, 246
Cholera, microscopical researches in, Dr. Beale on, 1
transudation of fluids through the vascular walls in, Dr. Beale on the, 1
scientific inquiry into the alleged causes of, Professor Haughton's, 84, 164, 247, 329, 439, 490, 713
astronomical causes of, 164
meteorological causes of, 247
terrestrial causes of, 329
contact theory of, 439, 490
mortality curves of, 713
meteorological phenomena in connexion with the, Dr. Leith Adams on the, 276, 305
Dr. George Johnson's theory of, controversy with Dr. Moxon on, 56, 82, 96, 127, 152, 207, 236, 260
debate on, at the Medico-Chirurgical Society, 444, 481
anatomical condition of the lungs and heart in the collapse of, Dr. G. Johnson on the, 303
influence of the discharges and nervous shock in, Dr. Cockle on the, 238
the water theory of, 130
Mr. Radcliffe on the, 510
Mr. Jones on the, 324
"stuff," queries in the House of Commons concerning, 285
"poison," existence of a, Mr. Jones on the, 351
cause of, Dr. Mudge on the, 534
Dr. Macloughlin's theory of, 242
conference of German Doctors on the, 133
conference on the, in Germany, 727
notices of works on, 41
influence of hygienic precautions in, 157
introduction of fluids into the veins in, by gravity, Mr. Little on the, 354
treatment of, Drs. McCloy and Robertson on the, 481
Mr. Atkinson on the, 708
early seats of, in India, Dr. Macpherson on the, 510
at Amiens, Dr. Ballard's observations on the, 16
in France, of 1849, report of the Academy of Medicine on the, 478
in England in 1866, 172
at Liverpool, Dr. Trench on the, 311
in Ireland, 401, 422
at Jersey in 1867, 203, 288
Dr. Kitchener on the, 316
at Ivinghoe, Holland, 130
at Utrecht, Dr. Snellen on the, 402
in Italy, Dr. Bacon on the, 307
at St. Kilda and at sea, Dr. Macpherson on the, 454
outbreak of, on board ship, Dr. Waring on the, 480
in the United States, statistics of the, 88
action for payment during the, 284
inadequate remuneration for, Dr. MacCormack on the, 339
Chorea, employment of strychnine in, by Professor Trousseau, 344
Churchill, Mr. F. on Dr. Richardson's subsuture incision, 95
Circulation, entrance of air into the, Mr. Heckford's fatal cases of, 137
and respiration, balance of, Dr. Richardson on the, 110
Civiale, M. obituary notice of, 707
collection of calculi of, 636
Clapham, Dr. on a case of cerebro-spinal typhus, 709
Clark, Dr. Andrew, Croonian lectures of, abstracts of the, 291, 313, 399
on the inoculation of tubercle, 346, 399, 426
Clarke, Mr. W. Fairlee, on Medical education at Oxford, 79
Mr. F. Winter, specimen of the risks of Medical practice, 480
Clavicle, regeneration of the, after removal, case of, 259
Clinical Medicine, requisite and aids of, Professor Behier on the, 435
Clinical teaching, Dr. Beale on, 534
Clitoridectomy, controversy of Mr. Brown and Dr. Greenhalgh on, 14, 48, 49
Dr. Cooke on, 15
Mr. Holt Dunn on, 71
suspension of Mr. Brown's operations, 154
in relation to Medical ethics, 391
action of the Obstetrical Society respecting, *vide* Society, Obstetrical
Club, the Medical, Dr. Lory Marsh on the, 708
Club-Foot, Mr. William Adams on, review, 561
Cockle, Dr. The Algide Stage of Cholera, review, 41
on the influence of discharges and nervous shock in, 238
Cod-liver oil, Möller's Norwegian, 265
yield of, 296
Cold, effects of, on the nervous system, 77
extreme, influence of on the nervous system, Dr. Richardson's experiments on the, 489, 517, 545
effects of, on the increase of mortality, 65, 88
death from, appearances in, 89
as an anæsthetic agent, antiquity of its employment, "S." on the, 480
vide Anæsthesia
Collins, Dr. J. death of, 485
Collis, Mr. Contributions to Operative Surgery, review, 379
Colney-hatch, treatment of ungovernable lunatics at, 269
Colon, ulcer of the sigmoid flexure of the, specimens of, 238
Colotomy, sequel of a case of, Mr. Holmes on the, 72
Colston, Mr. Peter, obituary notice of, 512
Competition under monopoly, 169
Coniferæ, chemical characters of the, 241
Conium, Prof. John Harley's experiments with preparations of, 320, 364
"A Practical Man" on the activity of, 346
Contagious and infectious diseases, Sir J. C. Jervoise on, 501
Contagious Diseases Prevention Act, provisions of the, 36, 86
progress of the working of the, 311
at the Female Lock Hospital, 113
Conti, Dr. Ophthalmic Dispensary of, at Florence, 722
Convulsions, puerperal, *vide* Puerperal
Cooke, Dr. on clitoridectomy, 15
Mr. Weedon, on the relations of cancer and phthisis, 538
Coote, Mr. Holmes, On Joint Diseases, review, 184
Copland, Mr. gallant conduct of, 65
Cork Medical Protective Association, meeting of the, 297
memorial of, on Medical education, 597
Cornea, opacities of the, sulphate of soda in, M. de Luca on, 668, 703
Coroner, court of, employment of experts in the, Dr. Lankester on the, 473
for Middlesex, report of the, 204
Corpulence, juvenile, query concerning a case of, 78, 105
Cottam, Mr. R. death of, 76
Coucher, Dr. M. S. death of, 295
Cowan, Mr. C. death of, 598
Coward, Mr. J. E. death of, 157
Cowell, Mr. on Medical education at Oxford, 70
Cowie, Dr. G. death of, 569
Crab, a colossal, 350
Crabtree, Dr. J. death of, 706
Crane, Dr. on a heated disinfecting chamber, 292
Cranium, *vide* skull
Crawford, Dr. A. G. death of, 598
Dr. G. case of attempted suicide by sulphuric acid, 182
on a case of ovarian dropsy, 318
Criminals, experiments on, 541
Crisp, Dr. Malignant Cholera, review, 93
Crooke, Dr. E. G. death of, 636
Crookes, Mr. researches of, on disinfectants in the cattle plague, 590
Croonian lectures, by Dr. Clark, abstracts of the, 291, 313, 399
Croup, Dr. O'Hare's case of, treatment by nitrate of silver, 433
Dr. Pauli's Treatise on, review, 400
Cryptopia, a new alkaloid from opium, 702
Curricula, damaging effects of, 64
Cust, Mr. J. C. death of, 672
Cyder, a desirable drink for the Indian army, 449
Cyon, Dr. experiments on the innervation of the heart, 399
Cyst (blood) in the thigh, case of, 155
Cysticercus cellulosæ of the brain, case of, 565
in meat, connexion of, with tape-worm, Dr. Letheby on the, 23

D

Darby, Surgeon W. death of, 321
Davey, Dr. J. G. Life Insurance Offices and Suicide, review, 484
Davies, Mr. J. R. death of, 321
Mr. R. death of, 185
Davis, Dr. H. G. Conservative Surgery, review, 484
Dawkins, Mr. on British fossil oxen, 241
Dawson, Dr. R. on the formation of tubercle, 425
Day, Mr. H. G. death of, 213
Deas, Inspector-General, invested with the Order of the Bath, 484
Decapitation, sensibility after, question of, 398
Deformities, Mr. Salt's Treatise on, review, 704
Deformity, Mr. Barwell's cases of, 85
multiple congenital, Mr. Taylor's case of, 300
Degrees, colonial, debate on, at the Medical Council, 641, 643
foreign, "M.D." on the registration of, 350
debate at the Medical Council on the registration of, 675
Delivery, employment of mechanical force for, M. Joulin on the, 42
Demarquay, M. on urethrotomy without a conductor, 255

Demarquay, M. *Essai de Pneumatologie Médicale*, review, 479
Depaul, M. report on vaccinal syphilis, 231
Desmond, Dr. J. death of, 53
Dewar, Dr. on sulphurous medication, 492, 548
apparatus for sulphurous spray, 671
Diabetic phthisis, Dr. Richardson on, 219
Diabetes, Dr. Hare's mode of treating, 33
Dialysis and endosmosis, Mr. Graham on, 187
"Diana," the Surgeon of the, 418
Diaphragm, injuries to the, Mr. Solly on the, 547
Diarrhœa of enteric fever, differences of opinion on the, 323
Dr. Downie on laxatives in the, 509
Diatheses, observations on, by Mr. James, 221
Dickinson, Dr. on waxy, lardaceous, or amyloid degeneration, 209, 237
Dictionaries, the new Medical and Scientific, notices of the, 502
Diesing, Dr. Carl Moritz, obituary notice of, 296
Dietary, Dr. E. Smith on the new workhouse, 531
of schools, necessity of reform in the, 269
Digestion, artificial, Dr. Marcet's new process of, 633
Digitalis, therapeutical employment of, M. Oulmont on the, 448
Dinosaurian, discovery of a, in New Jersey, 136
Diphtheria, Dr. Wynn Williams on, 184
carbolic acid in, Mr. Sedgwick on, 216
Disease, observations on the cost of, 307
preventible, and pauperism, observations on, 472
in relation to rain, 715
Disinfectant, M. Demarquay's powder as a, 459
the heated chamber as a, Dr. Crane on, 292
Dislocation of the cervical vertebræ, Mr. Hill on, 129
Dispensaries, public, the promised, 226
Ditrema argenteum, peculiarities of, 187
Dix, Mr. John, death of, 569
Dixon, Mr. on Dr. Pusey's statements, 71
on the New York milk from the cow, 515
Dobell, Dr. on Tuberculosis, review, 123
on the True First Stage of Consumption, review, 724
Doctors (lady) at Boston, Dr. Lucy Sewall on the, in the United States, 629
at their studies, 673
as naval and military Surgeons, 270
Dolfuss, Monsieur, plan of, for diminishing the mortality of infants, 90
Dolman, Dr. J. T. death of, 321
Donkin, Dr. on puerperal uræmic eclampsia, 191
Downie, Dr. on laxatives and opiates in diarrhœa, 509
Drowned, appearances of the, 89
attitude of the, Dr. Turner on the, 133
Drowning, Professor Pacini's method of artificial respiration in cases of, 722
Druitt, Dr. on beef-tea and essence of beef, 292
Drummond, Dr. H. death of, 347
Dublin, letters from, 95, 125, 235, 401, 422, 596
sanitary condition of, 39
Mater Misericordiæ Hospital at, meeting for the, 235
malignant epidemic fever in, 529, 561, 595, 596, 663, 666
Duke, Dr. Causes of Consumption, review, 265
Duckworth, Dr. on the artificial production of oxaluria, 219
Dunn, Mr. Holt, on clitoridectomy, 71
Dura mater, with fibro-cellular growths, specimen of, 51
Dwellings of the poor, report of the Society for the, 158
Dr. Allbutt on, in relation to prevention of disease, 666
Dyce, Dr. on the postural treatment of prolapsus of the funis, 128
Dyer, Dr. T. death of, 213

E

Eardley, Dr. John, death of, 132
Earle, Dr. "Who is a Surgeon?" 262
case of puerperal inflammation of the shoulder, 354
Earth closets, observations on, 28
Eclampsia, puerperal, *vide* Puerperal
Ecthymatous sores, permanganate of potash in, 471
Edinburgh, letters from, 94, 533
Education, physical, Dr. M'Cormac on the importance of, 317
Medical, the monopoly in, 64
competition under monopoly in, 169
memorial of the Cork Medical Association on, 597
and the Medical Council, "Hibernicus" on, 564
preliminary, debate on, at the Medical Council, 604
minimum of, debate on the, at the Medical Council, 609
at the universities, Professor Humphry on, 69
at Oxford, Mr. Cowell on, 70
Mr. W. F. Clarke on, 78
"A Correspondent" on, 122
"Oxoniensis" on, 126
Egg and grain, analogy of, 306
Egypt, dermatology of, Dr. Fox on the, 111, 165
Elbow, injury of the, specimen of, 211
excision of the, case of, 277
Ellis, Mr. on chloroform and ether in mixture, 246
Mr. H. death of, 726
Elsdale, Mr. R. death of, 213
Embolism, death from, cases of, 455
Emmerson, Mr. R. death of, 379
Emphysema of the lungs, in relation to wind-instruments, 416
Empyema after fracture of the ribs, case of, 444
Endoscope, application of the magnesian light to the, 570
Endosmosis and dialysis, Mr. Graham on, 187
Epidemiological Society, notices of meetings of the, 297, 510
Epilepsy, analysis of the urine in, Dr. Gibson on, 404
with disease of the optic nerve, case of, 404
treatment of, Dr. Chapman on the, 456
by strychnine, Mr. Tyrrell on, 519
by bromide of potassium, 33
Epiphysis, detachment of the, case of, 61
Epithelioma of the bladder, specimen of, 51
Ergotæ (extractum liquidum), 671
Erysipelas, lead and opium as a lotion in, 523
traumatic, case of, 470
Ether, death from inhalation of, at Lyons, case of, 633
-spray as an aid in diagnosis, Dr. Haward on, 30
Ethnological Society, Transactions of, vol. v. review, 505
Evans *versus* Forshaw, 380
Mr. W. death of, 295
Evidence, Medical, Dr. Russell Reynolds on, 342, 364
in railway accidents, discussion on, at the Midland Medical Society, 453
Examinations, papers of, observations on the, 11
visitations of, by the Medical Council, reports on the, 586
debates on the, 618
reports of the committee on the, 684, 692
concentration and combination of, Dr. Acland's motion for a, 649
preliminary, debate and report on, at the Medical Council, 604, 681, 682
Excision of the elbow, case of, 277
of the carpal end of the radius and ulna, case of, 279
of the knee, Mr. Smith's case of, 239
of the scapula, Mr. Buchanan's case of, 273
Exhibition, the French International, reports on the, 400, 452, 507, 563
Exostosis, separation of an, and reunion, case of, 443
Experts, Medical, Dr. Reynolds on, 342
attached to the coroner's court, Dr. Lankester on, 473
Eye, Diseases of, Professor Macnamara on, review, 233
loss of one, procedure in the case of the, Mr. Walton on the, 109
rupture of the globe of the, case of, 495
injury of the, with ophthalmoscopic examination, case of, 496

F

"Facts and figures," 116
Fæces, accumulation of the, in the cæcum, case of, 525
Fairhead, Mr. J. death of, 295
Falconer, Dr. Bath Waters, review, 185
Hospital Economics, review, 213
Farina, Chapman's dietetic, 671
Farr, Mr. Joseph, death of, 321
Farrar, Mr. on the aptitude of races, 506
Fatty degeneration of muscle, Professor Macnamara on, 412
in phosphorus poisoning, Dr. Habershon on, 405
Fayrer, Professor, statistics of operations for hernia in Bengal, 137
case of recurrence of epithelial cancer, after amputation at the shoulder, 468
case of rupture of the liver and spleen, without symptoms, 522
on opium in ulceration, 585
Fees, table of, by the South Australian Association, 670
Felstead Grammar School, notice of the, 88
Femoral vein, impervious, case of, 334
Fergusson, Sir William, on Dr. Smyth's operation on the subclavian artery, 260
Fever, malignant, epidemic of, in Ireland, 529, 561, 595, 596, 663, 666, 719
outbreak of, at Warrington, 44
prevention of, by improved dwellings, Dr. Allbutt on the, 666
enteric, differences of opinion concerning the diarrhœa of, 323
symptomatic or inflammatory, Mr. James on the pathology of, 520
typhoid, *vide* Typhoid
yellow, *vide* Yellow
Ffolliott, Dr. T. death of, 706
Fibro cellular growths from the dura mater, specimen of, 51
Fibro-plastic tumours, specimens of, 426
Field, Mr. failure of action against, 333
testimonial to, 364
Fillet, rotatory, Dr. Sheraton on the application of the, 58
Fisher, Dr. A. death of, 213
Fitzpatrick, Dr. action of, for payments for cholera, 284
Fletcher, Mr. F. D. of Liverpool, obituary notice of, 99
Flight and aëronautics, Dr. Pettigrew on, 349
Florence, letter from, 722
Fœtus, hydatidiform, degeneration of a, Dr. Spender on the, 307
Follin, Monsieur, obituary notices of, 594, 705
Food, movement of the Society of Arts respecting, 64
improvidence of the working classes as to, 242
Foot, anatomy of the, in man and the ape, Professor Halford on the, 299
Forbes, Sir John, Happiness in Relation to Work and Knowledge, review, 511
Fordyce, Dr. habits of eating, 515
Forman, Mr. erasure of name from the Medical Register, 607
Surgeon G. E. death of, 379
Foster, Dr. on the application of the graphical method, 410
Fox, Dr. Tilbury, on the dermatology of Egypt, 111, 165
on the causes of leprosy, 297
Dr. C. B. on Scarborough, review, 724
Fracture of the frontal bone, case of compound, 250
of the base of the skull, with rupture of the carotid, case of, 444
of the leg, mode of making extension in, 167
Neville's splint in, 383
of the patella, cases of, 166
of the pelvis, in a pregnant woman, case of, 74
of the ribs, pneumonia and empyema after, case of, 443
Fractures, glue bandage in, 525
leather splints for, Dr. Braithwaite on, 423
France, population question in, Père Hyacinthe on the, 11
M. Guérin on the, 719
insanity in, Dr. Béhic's report on, 37
payment of Hospital Medical officers in, 201
alleged degeneration of race in, M. Broca on the, 362
increased military aptitude in, Baron Larrey on the 500
mortality of infants in, 67, 121, 173
Freezing, Mr. Warner's apparatus for, 103
nervous structure, Dr. Richardson's experiments on, 489, 517, 545
French, Mr. H. J. death of, 185
Inspector-General, Dr. J. death of, 379
Frontal bone, compound fracture of the, case of, 250
Fruit, chemical changes in, during ripening, 593
Funis, presentation of the, Dr. Dyce on the treatment of, 128

G

Gairdner, Dr. W. death of, 485
Professor, and the Glasgow merchants, 666
Gall-bladder, cancer of the, specimen of, 239, 425
Gall-stones, rapid death from, Mr. Leigh on a case of, 248
Gamgee, Mr. on Medical evidence in relation to railway accidents, 453
Gangrene, hospital, Mr. James on, 31
cases of, 333
query as to bromine in, 433
Gas, nuisances from, note on, 242
cautery, 598
Gatehouse, Mr. C. death of, 485
Gee, Dr. on enlargement of the spleen in hereditary syphilis, 404
Generation, spontaneous, M. Donné's experiments on, 298
George's (St.) Hospital, cases treated at, 277
German Hospital at Dalston, account of the practice at, 222
cases treated at the, 387
Gestation, prolonged, Mr. Blake's case of, 263
Gibb, Dr. on the Laryngoscope, review, 429
inheritance of a baronetcy by, 513
Gibbon, Dr. on gratuitous services for the Privy Council Office, 208, 236, 315
on the Vaccination Bill, 597, 673
"Gibbon's Hydrocele," 514
Gibson, Dr. on the urine in epilepsy, 404
Gilchrist, Dr. W. death of, 240
"Ginger-beer case," the, 90
Giraud-Teulon, Dr. and the Paris Faculty, 67
Glasgow University, pass list of the, 598
Faculty of Physic and Surgery, pass list of the, 457
Glue bandages for fractures, 525
Goldin, Surgeon W. C. 213
Goodsir, Professor, biographical sketch of, 294
proposed memorial to, 349
Goodwin, Dr. F. C. death of, 379
Gordon, Deputy-Inspector-General, Army Hygiene, review, 258
Gosselin, Professor, on observation in Surgery, 150

Gout as a resolving inflammation, Mr. James on, 221
history and geography of, Professor Charcot on the, 245, 463
and Rheumatism, Dr. Barclay on, review, 421
cases of, 524
iodine in collodion in, 524
deposits of, treated by water, 335
Gradwell, Mr. W. death of, 726
Gratuitous services, Miss Cobbe on, 283
Gravel, injurious removal of, by builders, 703
Green, Dr. Horace, obituary notice of, 240
Mr. J. death of, 406
Greenhalgh, Dr. correspondence of, relating to clitoridectomy, 14, 48
Greenway, Mr. note as to priority in suction-curettes, 78
Greenwell, Canon, on the ancient Britons, 281
Greenwich Hospital and the Seaman's Hospital Society, dispute between, 254, 414, 453, 627
Grierson, Dr. testimonial to, 322
Griffin, Mr. on the Metropolitan Poor-law Bill, 262
Grimshaw, Dr. sphygmographic observations in typhus fever, 321
Guérin, M. Jules, on his defeat at the Académie des Sciences, 703
on the population question in France, 719
Guersant, M. tongue-depressor and fauces-irrigator, 563
Gulstonian lectures, abstracts of Dr. Southey's, 232, 257, 290
Gunshot wounds, extraction of bullets in, Professor Roser on the, 530
of the abdomen, case of, 225
Guy, Dr. on the mortality of Hospitals, 417, 427
Guy's Hospital, cases treated at, 138, 442

H

Habershon, Dr. case of acute phosphorus-poisoning, 405
Haden, Mr. note on the discussion at the Obstetrical Society, 403
Hæmorrhages, use of wine in, 123
Hæmaturia, intermittent, case of, 525
Hair, Dr. Beigel on a new fungus of the, 270, 347
Hake, Dr. Vital Force, review, 511
Halford, Professor, on the analogy of the foot in man and the ape, 299
Hammick, Sir Stephen Love, obituary notice of, 723
Hands, Mr. F. death of, 569
Hare-lip, metallic sutures for, discussion on, 226
Harley, Dr. George, Histological Demonstrations, review, 101
on Diabetes, review, 152
Dr. John, experiments of, on the properties of conium, 320, 364
case of cysticercus cellulosæ of the brain, 565
case of dermoid cyst of the ovary, 565
Harris, Sir Wm. Snow, obituary notice of, 125
Harveian Society, *vide* Society
Haschisch-candy, great consumption of, in the United States, 27
Haslehurst, Mr. T. death of, 76
Haslop, Mr. G. H. death of, 132
Haughton, Rev. Professor, Hospital sermon of, 234
scientific inquiry into the alleged causes of cholera, 84, 164, 247, 329, 439, 490, 713
Haward, Dr. on ether-spray in diagnosis, 30
Hawkesly, Dr. Matter: its Ministry, review, 101
Prevention of Pauperism, review, 511
Headland, Dr. Action of Medicines, review, 25
Healing by first intention, Dr. Richardson on the, 409
Health, public, influence of weather and season on the, Dr. Ballard on the, 565
Heart, innervation of the, Dr. Cyon on the, 399
disease of the, application of the graphical method to, Dr. Foster on, 410
cases of the, illustrating the use of the sphygmograph, 114
prognosis in, Dr. Thorowgood on, 486
disguised, Dr. Leared on, 695
the prunus virginiana in, Dr. Allbutt on, 161, 217
with choreic movements, case of, 523
obstructive mitral, Dr. Peacock on, 131
opening in the septum ventriculorum of the, case of, 33
rupture of the, Dr. Blandford's case of, 26
prolonged lodgment of a bullet in the, 97
Heat, animal, M. Peter's researches on, 362
Heath, Mr. case of aneurism of the innominata, 18
Hebra, Professor, jubilee of, 173
Diseases of the Skin of, by Dr. Fagge, review, 451
Heckford, Mr. cases of entrance of air into the circulation, 137
Hemiplegia, cases of, at St. George's, 278
with lead-poisoning, case of, 32
on the right side, with loss of speech, case of, 155
Henderson, Dr. on the Japanese warm bath, 249
Hernia, femoral, notes of cases of, 61, 277
strangulated, Dr. Buchanan's case of, 273
inguinal, strangulated, cases of, 277, 469
with internal strangulation, Mr. Bryant's case of, 319
Hernia, scrotal, statistics of operations for, in Bengal, Professor Fayrer on the, 137
Hewitt, Mr. on a consultation with a "specialist," 182
Hewson, Mr. John, obituary notice of, 184
Hicks, Dr. on the pathology of puerperal eclampsia, 24
Hill, Mr. case of dislocation of the cervical vertebræ, 129
Hilton, Mr. delivery of the Hunterian oration by, 176
Hinton, Mr. criticism on Beale's doctrine of vital force, 177
Hip-joint, amputation at the, cases of, 116, 141
disease, treatment of, Mr. Adams on the, 97
deformity from, Mr. Barwell's case of, 85
incipient, specimen of, 537
new institution for the treatment of, 119
Hitchman, Mr. T. death of, 295
Hockin, Inspector-General W. death of, 457
Hoffmann, M. experiments of, on cutaneous absorption, 419
Hog, the domestic, origin of, 187
Holmes, Mr. on the sequel to a case of colotomy, 72
Homœopathists *versus* Homœopathy, 230
Horses, operations performed on living, at Alfort, 365
Hospital practice, notes on, 4, 32, 60, 85, 113, 138, 166, 193, 222, 249, 277, 333, 387, 442, 469, 523, 550, 714
Birmingham General, cases treated at the, 550
Calcutta Medical College, cases treated at the, 278, 335
Charing-cross, cases treated at the, 85, 249
German, at Dalston, cases treated at the, 222, 387
Greenwich, and the Seaman's Hospital Society, dispute between, 254, 414, 453
Guy's, cases treated at, 138, 442
King's College, cases treated at, 168, 390, 469, 714
circular to the students at, 66
Leeds (Infirmary), cases treated at the, 494
Lincoln General, unsatisfactory condition of the, 88
Lock (Female), account of the, 113
enlargement of the, 633
London, general account of the, 60
cases treated at the, 35, 116, 141, 195
prevalence of pyæmia in the, 312
Marylebone (Workhouse), cases at the, 194
Mater Misericordiæ, Dublin, meeting for the, 235
Middlesex, cases treated at the, 115, 193, 493, 523
cancer wards of the, 524
Ophthalmic (Royal London), description of, and practice at the, 4
(Central London), cases treated at the, 495
Samaritan, cases treated at the, 714
St. Bartholomew's, cases treated at, 250, 470
St. George's, cases treated at, 277
St. Mary's, cases treated at, 333
St. Thomas's, cases treated at, 62, 166, 389
University College, cases treated at, 32, 114
Hospitals, "special" *versus* "general," 7
mortality of, Dr. Guy on the, 417, 427
elections at, bad system of, 452
resident officers of, faulty mode of electing, 418
registration and reports of observations on, 38
Bohemian, during the late war, 515
French, increase of payment to Medical officers of the, 201
Hudson, Dr. Lectures on the Study of Fever, review, 429
Humerus, medullary cancer of the, case of, 442
Humpage, Mr. J. death of, 569
Humphry, Mr. A. death of, 295
Professor, on university education for Medical men, 69
Hunter, John, original letters of, 515
Hunterian oration, Mr. Hilton's, 176
Society, meeting of the, 130
Hydatidiform degeneration of the fœtus, Dr. Spender's case of, 307
Hydrocele, enormous, case of, 514
large, treated by incision, Mr. Smyth's case of, 382
Hydrocephalus, the "cerebral maculæ" in, Prof. Trousseau on, 344
Hydropathy *versus* allopathy, note on, 78
Hydrophobia, Rev. E. Bligh on the "Birling cure" in, 477
smothering to death in, 380

I

Ice, accidents on the, effects of, 77
Iconoscope, M. Javal's, 269
Idiocy and its Treatment, M. Seguin on, review, 46
Illegal practice, prosecution for, 215
"In bondage," 63
Ince, Dr. J. death of, 726
Incision, Dr. Richardson's subsuture Surgical, 3
Incontinence and infanticide, 142
India, cyder as a beverage in, 449
sanitary science in, 474
the army in, *vide* Army
Infant, milk in the breast of an, Mr. Mitchell on a case of, 460
Infanticide, action of the Harveian Society respecting, 35
and incontinence, 142
proposed provisions of a new Bill against, 202
Infants, mortality among, in towns, Mr. Sadler on, 311
mortality of, in France, 67, 121, 173
M. Dolfuss' mode of diminishing the, 90
French Society for the Protection of, 173
Inflammations, non-limited, Mr. James on the characters of, 31
resolving, Mr. James on, 220
pathology of fever in, Mr. James on the, 520
Inhalation, Dr. Beigel on, review, 92
Insanity, Dr. Maudsley's views on the causes of, 669
absence of motive as a proof of, Dr. Winslow on the, 339
plea of, case of, 418
in France, M. Béhic's report on, 37
in the Department of the Seine, 340
vide Lunatics
Instruments, Surgical, at the Paris Exhibition, 507, 563
wind, control of the respiration in playing, 415
Insurance company, feigning disease to defraud an, 433
Interment in churches, query on, 432
Intestinal obstruction from cocoa-nut fibre, 74
Intoxications, Surgical, M. Maisonneuve on, 13
Iodine in collodion, in rheumatic gout, 524
Ireland, the malignant epidemic in, 529, 561, 595, 596, 663, 666, 719
vide Dublin
Itch insect, question of destruction of, by heat, 407, 433
treatment of the, Dr. Hillier's, 34

J

Jamaica, small-pox in, Dr. Miller on, 441
James, Mr. on non-limited inflammations, 31
on resolving inflammations, 220
on sympathetic or inflammatory fever, 520
Jaw, lower, cyst of the, case of, 470
excision of adenoid tumour from below the, case of, 273
Jenings, Mr. T. death of, 102
Jenner, Dr. note of, as to his belief in drugs, 63
Jersey, outbreak of cholera at, 203, 288
Dr. Kitchener on the, 316
Job, diseases of, M. Rollet on the, 255
Jobert de Lamballe, M. death of, 452
Johns, Mr. Blind People, review, 429
Johnson, Dr. George, controversy of, with Dr. Moxon, 96, 152, 236
on the changes in the lungs and heart in the collapse of cholera, 303
on the pathology and treatment of cholera, 481
Dr. Walter, the Anatriptic Art, review, 212
Johnston, Surgeon-Major T. D. death of, 706
Jones, Dr. Bence, Lectures on Pathology and Therapeutics, review, 429
Dr. W. H. Management of Labour in Contracted Pelvis, review, 724
Mr. E. P. death of, 240
Mr. J. on "cholera-stuff" in water, 324
on cholera poison, 351
Mr. W. A. death of, 185
Mr. Wharton, Defects of Sight and Hearing, review, 93
Jordan, Mr. Furneaux, on hereditary syphilitic inflammation of bones, 274, 304
on hereditary syphilis in relation to strumous diseases, 697
Robert Jacob, prosecution of, by the College of Surgeons, 558, 567, 708
Joulin, M. on the employment of mechanical force in delivery, 42
Juries, query as to exemption from, 188

K

Kearns *v.* Stokes, 149
Kendrick, Mr. case of puncture of the medulla oblongata, 585
Kidney, cyst of a, mistaken for ovarian disease, specimen of, 537
King's College Hospital, circular to the students of, 66
cases treated at, 168, 390, 469
Kirkpatrick, Dr. obituary notice of, 432
Kirkwood, Mr. J. G. death of, 706
Kitchener, Dr. on the cholera at Jersey, 316
Kittson, Mr. J. B. death of, 53
Knapsack, improvement of the, required, 360
an improved, 395
Dr. Massy on the mode of carrying a, 480
Knee-joint, periodical inflammation of the, Mr. Moore's cases of, 130
incised wound of the, Mr. Orton's case of, 412
excision of the, Mr. Smith's case of, 239
inflammation of the, ligature of the femoral artery for, 707

L

Labour, extraordinary easy, case of, 500
protracted, position in, Dr. Brunton on, 515

Labour, protracted, position in, Dr. Wake on, 542
Mr. Clarke on, 580
premature, induction of, in narrow pelvis, Dr. Lee's case of, 424
persistent pain in the sacrum after, query on, 542
Lady-doctors, *vide* Doctors
Lagneau, M. on syphilis, as observed in different countries, 121
Lamps, cause of the explosion of, 27
Lankester, Dr. Notes on Sanitary Legislation, review, 379
coroner's report of, 204
and the question of "experts," 473
Laryngismus stridulus, Professor Trousseau on, 343
Larynx, forceps for the removal of tumours from the, 563
Lawson, Mr. Injuries of the Eye, review, 533
Lawton, Mr. S. death of, 539
Laycock, Professor, on epidemic phlegmons and boils, 235
on a cause of nyctalopia, 330
resumption of his lectures by, 533
Lead-poisoning, with hemiplegia, case of, 32
with spasm of the face, case of, 33
in a tailor, case of, 140
Leamington sewage case, the, 97
Leach, Mr. Hygienic Condition of the Mercantile Marine, review, 429
Leared, Dr. on disguised disease of the heart, 695
Leather, anhydrous, 27
Lectures, Medical, not remunerative, 116
Lee, Dr. Robert, case of induction of premature labour in narrow pelvis, 424
Mr. Henry, on the non-immunity from syphilisation, 152
Leeds Infirmary, cases treated at the, 494
Leg, fracture of the, mode of making extension in, 167
Neville's splint in, 383
Leigh, Dr. case of rapid death from gall-stones, 248
Leprosy, report of the College of Physicians on, 197
causes of, Dr. Fox on the, 297
Letheby, Dr. on diseased and unwholesome meat, 20
Licensing bodies, returns of the, to the Medical Council, 692
Liebig, Baron, speech of, at the Paris banquet of chemists, 594
Ligatures drawn through flaps, 525
Limbs, artificial, number of, in the U. S. army, 27
Lincoln General Hospital, unsatisfactory state of the, 88
Liquor Carbonis Detergens, 76
Lithotomy, with diseased bladder, Mr. Wood's case of, 212
Lithotrity, cases of, under Mr. Thompson, 34
Little, Mr. on the introduction of fluids into the veins by gravity, 354
Liver, yellow atrophy of, specimen of, 211
fibroid nodules of the, specimen of, 293
Liverpool, letters from, 48, 259, 723
mortality of, 259
Dr. Trench's report on the health of, 308, 311
report of the Committee of Health of, 151
Livingstone, Dr. reported death of, 268
Llewellyn, Surgeon J. H. death of, 569
Lock Hospital (Female), account of the, 113
enlargement of the, 633
Lockhart, Dr. W. R. N. death of, 102
Lombard, Dr. on the influence of temperature on mortality, 634
London, vital statistics of, 28, 54, 79, 106, 134, 160, 188, 216, 243, 272, 300, 325, 352, 382, 408, 434, 460, 488, 516, 543, 570, 601, 637, 674, 709, 728
review of the Registrar-General's report on, for 1866, 252
observations on the reports of the Medical officers of health of, 308
condition of the waters of, 27, 159, 298, 407, 514, 700, 708
Hospital, general account of the, 60
cases treated at the, 35, 116, 141, 195
prevalence of pyæmia in the, 312
Medical Society, *vide* Society
University, pass-lists of the, 543
Wall, organic remains found near, 120
Longevity, influence of marriage on, Dr. Stark on the, 94
criticisms on Dr. Stark's views, 209, 227
Lowe, Mr. E. death of, 265
Luca, M. de, on sulphate of soda in opacities of the cornea, 668, 703
Lumleian Lectures, by Dr. Russell Reynolds, abstracts of the, 342, 364, 420
Lunatic Asylum, the Middlesex, charges for the, 103
Lunatic, prosecution for the illegal reception of a, 361
murder by a, 133
Lunatics, indiscriminate sequestration of, Dr. Maudsley on the, 669
vide Insanity
Lung, primary miliary cancer of the, specimen of, 51

M

Macadam, Dr. Practical Chemistry, review, 156
Macé, M. History of a Bit of Bread, review, 151
Mackenzie, Dr. Use of the Laryngoscope, review, 291
McCann, Dr. N. death of, 132
MacCormack, Dr. Henry, Askesis, 317
on the inoculation of tubercle, 351
Dr. M. J. on inadequate remuneration for cholera cases, 335
Macgillivray, Surgeon, on Hydatid Disease, review, 724
Macloughlin, Dr. on the non-existence of venereal virus, 105
theory of cholera, 242
note of, to Mr. Simons, 515
M'Cloy and Robertson, Drs. on the treatment of cholera, 481
Macnamara, Professor, Diseases of the Eye, review, 233
on the fatty degeneration of muscle, 412
Macpherson, Dr. query as to a case of cholera, 433
cholera at St. Kilda and at sea, 454
early seats of cholera in India, 510
Madden, Dr. Criminal Responsibility of the Insane, review, 157
Maisonneuve, M. on Surgical intoxications, 13
Malloch, Mr. W. S. death of, 431
Man, archaic, 396
superiority over woman, Professor Vogt on the, 298
Mapother, Dr. Lectures on Public Health, review, 181
Marcet, Dr. process of artificial digestion, 633
Marriage, Dr. Stark on its influence on longevity, 94
strictures on Dr. Stark's views on, 209, 227
Marsden, Dr. William, obituary notice of, 98
Marsh, Dr. Lory, on the Medical Club, 708
Marsupials, dentition of, Mr. Flower on the, 529
Martin, Dr. George Anne, obituary notice of, 99
Mr. Thomas, death of, 213
Martineau, Mr. rejection of, by the Council of University College, 146
Martyn, Dr. fatal case of injecting cancer with acetic acid, 486
Mary's (St.) Hospital, cases treated at, 333
Marylebone Workhouse Infirmary, cases treated at the, 194
Mason, Mr. W. death of, 157
Massingham, Mr. censured by a jury, 39
charges against, 66, 92
Massy, Dr. Pamphlets on Brighton, review, 379
on carrying a knapsack, 480
Masturbation, instrument for preventing, 323
vide Boys
Maude, Mr. F. W. death of, 406
Maudsley, Dr. Physiology and Pathology of the Mind, review, 668
Maurice, Mr. T. B. death of, 457
Mauritius, outbreak of yellow fever in the, 541, 592, 719
Meadows, Dr. on Dr. Pusey and the besetting trials of our boys, 16
Meall, Mr. prosecution of, for illegal practice, 215
Meat, essences of, Dr. Druitt on, 292
diseased and unwholesome, Dr. Letheby on, 20
Dr. Marcet's process for preparing, 633
Medical Act, amendment of the, debate in the Medical Council on the, 607, 609, 648
Dr. Williams on the proposed amendment of the, 324
prosecution of Jordan under the, 558, 567
and Chirurgical Society, *vide* Society
Club, Dr. Lory Marsh on the, 708
Council of Education and Registration, reports of meetings of the, in 1867, 571, 603, 639, 675
address of the president to the, 571
debates on amendment of the Medical Act, 571, 607, 648, 675
debate on the report of the executive committee of the, 580
debates and report on preliminary examinations, 603, 681, 682
erasure of Mr. Forman's name ordered by the, 607
debates on Professional studies and examinations, 609, 691
debate on the registration of the place of study by students, 617
reports and debate on the reports of visitors of examinations, 586, 618
report of the committee on visitations, 484, 692
debate on the functions of the executive committee, 581, 639
debate on colonial Medical degrees, 641, 643, 675
report of the pharmacopœia committee to the, 642
and unlicensed Practitioners of Midwifery, 645
and the qualification of Master in Surgery in relation to poor-law appointments, 645
decision of, in the case of Richard Organ, 645, 679
debate on the concentration and combination of examinations, 649
debate on the registration of foreign degrees 675
Medical Council of Education and Registration, and the returns of the Army and Navy Medical Departments, 680
financial report of the, 684
debate on the qualifications required for registration, 687
returns of the licensing bodies to the, 691
editorial observations on the proceedings of the, 629, 660, 698
and Medical education, "Hibernicus" on the, 564
dinner to the, at Apothecaries' Hall, 635
Licensing Bodies, returns of the, to the Medical Council, 692
Officers of Health (Metropolitan), meetings of the, 20, 130
Provident Society of the British Medical Association, dissolution of the, 233
Profession, discontent of the, 8
Schools in Paris and Germany compared, 91
Teaching, bondage of, 91
unremunerative character of, 116
Teachers' Association, 527, 593
Medulla oblongata, effects of extreme cold on the, Dr. Richardson on the, 546
puncture of the, case of, 585
Meggy, Mr. F. death of, 240
Meningitis, cerebro-spinal, epidemic, in Ireland, 529, 561, 595, 596, 663, 666
tubercular, the thermometer in the diagnosis of, 524
specimen of, 347
pulse and temperature in, 388
Mental and physical forces, correlation of, Professor Bain on the, 557
Mercantile navy, hygienic condition of the, 87
prevalence of scurvy in, 261, 395, 595
Society for the Improvement of the, 395
Mercurial tremor, case of, 225
Methylated medicines prohibited by the Excise, 78
Middlesex Hospital, cancer wards of the, 524
cases treated at the, 115, 193, 493, 523
Midwifery, anæsthetics in, Mr. Isaac Brown on, 511
unqualified Practitioners in, and the Medical Council, 644
Milk diet, Dr. S. Thompson on, 238
"from the cow" at New York, 419
Mr. Dixon on, 515
Moller, Dr. on small-pox in Jamaica, 441
Milroy, Dr. on yellow fever and quarantine, 147
Mind, correlation of the power of the, Professor Bain on, 557
Mitral disease, diagnosis of, Dr. Peacock on, 131
prunus virginiana in, Dr. Allbutt on, 217
Mitchell, Mr. case of milk in the breast of an infant, 460
Monday, Mr. J. R. death of, 265
Moore, Mr. cases of periodical inflammation of the knee-joint, 130
on inadequate operations for cancer, 723
Mr. J. F. death of, 706
Mr. W. F. Marwar, the Land of Death, and Malaria, reviews, 321
Morris, Mr. W. death of, 240
Assistant-Surgeon, court martial on, 267
Mortality, influence of temperature on the, 634
influence of weather and temperature on the, Dr. Ballard on the, 565, 601
as observed in cities, 187
rate of mortality in the United States, 297
of bachelors, question of the, 94, 209, 227
of infants in France, 67, 121, 173
Morton, Surgeon-Major D. T. death of, 457
Mouth, large congenital tumours of the, specimen of, 347
Moxon, Dr. strictures on Dr. Johnson's views on cholera, 56, 82
controversy of, with Dr. Johnson, 127, 152, 207, 236, 260
Mudge, Deputy Inspector-General, on the cause of cholera, 534
Mumps, Mr. James on, 220
Munro, Dr. James, testimonial to, 186
Muscle, distribution of nerves to, Dr. Beale on the, 56
fatty degeneration of, Dr. Macnamara on, 412
Mushet, Dr. case of hypertrophy of the spleen, 275
Myrtle, Dr. on the Harrogate Waters, review, 724

N

Naegele, Professor, anecdotes of, 541
Nævus, enucleation of, Mr. Teale on the, 264
Narcotics, volatile, Dr. Sansom on, 238
Naso-pharyngeal polypus, specimen of, 293
Navy, report on the health of the, for 1865-66, 309
Medical service of the, project for recruiting cadets for the, 91
returns of rejected candidates for the, and the Medical Council, 680
the circular of 1867 respecting the, observations on the, 203
"A Naval Medical Officer" on the, 237
"A Staff-Surgeon" on the, 292
and the Companionship of the Bath, 284
mercantile, hygienic condition of the, 87
prevalence of scurvy in the, 261, 395, 595

Navy, mercantile, Society for the Improvement of the Condition of the, 395
Nayler, Mr. Diseases of the Skin, review, 450
Necrosis, acute, specimen of, 212
of the tibia, case of, 249
excision for the, case of, 273
Negro, defence of the, Professor Huxley's, 726
Nerve-trunks and fibres, Dr. Beale on, 107
centres, Dr. Beale on, 163
cells and apparatus, Dr. Beale on, 190
median, division of the, case of, 61
optic, disease of the, employment of the ophthalmoscope in, cases, 495
Nerves, distribution of the, to the peripheral organ, Dr. Beale on the, 55
of the arm, injury, case of, 278
Nervous apparatus, structure and arrangement of the, Dr. Beale on the, 55
system, influence of extreme cold on the, Dr. Richardson on the, 489, 517, 545
pathology of the, illustrated by physiological researches, Prof. Behier on the, 436
Neuralgia, subcutaneous injections in, Mr. Hunter's case of, 241
Newcastle-on-Tyne, letter from, 125
epidemics from fever, cost of, at, 308
Night-blindness, Prof. Laycock on a cause of, 330
Nightmare in children, Dr. Ringer on, 465
Nitrogen, elimination of, Dr. Parkes on the, 393
Nitrous oxide as an anæsthetic, 27
Noel, Mr. Vincent E. obituary notice of, 100
Nolan, Mr. J. M. death of, 240
Noma, Mr. James on, 31
Nurse-children, mortality of, in France, 67, 121, 173
Nurses, gratuitous services of, Miss Cobbe on, 283
how to supply, 727
Nyctalopia, Prof. Laycock on a cause of, 330

O

Obesity, fucus vesiculosus in, 350
O'Brien, Mr. on Dysentery, review, 185
Observation, Surgical, M. Gosselin on, 150
Obstetrical Society, action of, for the expulsion of Mr. Baker Brown, 336, 356, 366
notices of meetings of the, 24, 74, 183
teaching in Paris in 1831, Von Siebold on, 514
Œdema, local, nervous or mechanical origin of, 141
Ogle, Dr. Wm. on the immunity of rabbits to atropine, 466
O'Hare, Dr. case of croup treated by nitrate of silver, 433
Olliffe, Sir Joseph, note on the case of Kearns *v.* Storks, 172
Operations, Surgical intoxications after, M. Maisonneuve on, 13
Ophthalmia, sympathetic, Mr. Lawson on, 533
Ophthalmic Hospital, the London Royal, description of the practice at the, 4
the Central London, cases treated at the, 495
Dispensary at Florence, Dr. Conti's, practice at the, 722
Ophthalmology, low position of, in France, 67
Ophthalmoscope, use of the, in Physicians' practice, 494
Opium, cryptopia, a new alkaloid from, 702
smoking in India described, 529
Orbit, scirrhus of the, case of, 155
Orchitis, acute, treated by puncture and compression, cases of, 390
Organ, Richard, action of the Medical Council respecting, 645, 679
Orton, Mr. on the besetting sin of boys, 133
case of incised wound of the knee, 412
Otorrhea in children and soldiers, M. Bonnafont on, 448
Oulmont, M. on the therapeutical effects of digitalis, 448
Ovariotomy, Stilling's extra-peritoneal treatment of the pedicle, Mr. Wells on, 2
Dr. Murray on a new trocar in, 24
Mr. Bryant's experience in, 206
in France, M. Boinet's report on, 447
cases at the Samaritan Hospital, 714
Dr. Graham's case of, 723
Ovary, dropsy of, Dr. Crawford on a case of, 318
dermoid cyst of the, case of, 565
disease of, on both sides, specimen of, 183
Owen, Dr. J. L. death of, 240
Oxalic acid, synthetic production of, 296
Oxaluria, artificial production of, Dr. Buckworth on the, 219
Oxen, British fossil, Mr. Dawkins on, 241
Oxford University, examination papers for natural science, 542
Medical education at, observations on, 43
Professor Humphry on, 69
Mr. Cowell on, 70
Mr. W. F. Clarke on, 78
"A Correspondent" on, 122
"Oxoniensis" on, 126
Ozone curves during cholera, 248
and vegetation, Professor Daubeny on, 298

P

Pacinian corpuscles, Dr. Beale on the, 56
Paget, Dr. Harveian Oration for 1866, review, 101
Pall-mall Gazette, Mr. Callender on a testimonial to the, 49
presentation of testimonial to the proprietor of the, 726
Pancreas, action of the, in relation to tuberculosis, Dr. Dobell on, 123
Paraffin lamps, cause of the explosion of, 27
Paralysis, cases of, 168
during pregnancy, case of, 74
from exhaustion of the spinal cord, Dr. Russell's cases of, 550
facial, Professor Trousseau on, 343
general, from a blister, Dr. Taylor's case of, 487
Paresis of the cerebral nerves, case of, 226
Paris, letters from, 47, 181, 314, 344, 452, 507, 563, 705, 721
International Exhibition, letters on the, 400, 452, 507, 563
census of, in 1866, 90
number of lunatics in, in 1866, 340
obstetrical teaching in, in 1831, 514
Faculty of Medicine of, doctrines of the, Professor Béhier on the, 435
decadence of the, 47
disturbances at the, 340, 344
contrasted with the German Medical schools, 91
Parkes, Dr. on the elimination of nitrogen, 393
Parliamentary intelligence, 53, 174, 202, 231, 256, 286, 313, 340, 398, 420, 501, 559, 594, 634, 668, 704, 720
Parochial liberality, specimen of, 96
Patella, fracture of the, cases of, 166
Pathological Society, *vide* Society
Pauli, Dr. *Der Croup*, review, 490
Pauperism and preventible disease, 472
Peacock, Dr. Malformations of the Heart, review, 25
on the diagnosis of obstructive mitral disease, 131
Peaty divorce case, observations on the, 120
Peebles, Mr. J. H. death of, 406
Pelvic cellulitis, Dr. Hewitt on, 241
Pelvis, fracture of, in pregnancy, case of, 74
narrow, induction of premature labour in, Dr. Lee's case of, 424
Pepsine, Dr. Beale's mode of preparing, 348
Dr. Buchner's mode, 312
Pericarditis in a boy, fatal case of, 115
Perry, Mr. G. death of, 706
Petechial fever in Ireland, *vide* Ireland
Peter, M. on animal temperature, 362
Pettenkofer, Prof. on the physiology of respiration, 9
Pettigrew, Dr. on flight and aeronautics, 349
on the structure of the bladder, 703
Phagedæna, hospital, Mr. James on, 31
Pharmacopœia, the British, of 1867, account of the, 148, 170, 231, 257
"Omega's" suggestions concerning the, 318
report of the committee on the, 642
Phelan, Dr. Obstetric Attendance for the Poor, review, 430
Phillips, Dr. H. C. death of, 569
Phipps, Dr. J. G. death of, 726
Phlegmons, epidemic, Prof. Laycock on, 235
Phosphorus, acute poisoning by, Dr. Habershon on, 405
Phthisis, Dr. Southey's Gulstonian lectures on, 232, 257, 290
Dr. Andrew Clark on the pathology of, 291, 313, 399
with diabetes, Dr. Richardson on, 219
and cancer, Mr. Cooke on the relations of, 538
aneurism of the pulmonary artery in, specimen of, 239
vide Tubercle
Phymosis, treatment of, by compression, 695
Physicians, diminution of "pure," in provincial districts, 361
Royal College of, pass-lists of the, 213, 430, 538
report of, on leprosy, 197, 725
and Surgeons, Edinburgh, pass-lists of the, 430, 538
King and Queen's College of, in Ireland, 131
Pickthorn, Assistant-Surgeon G. R. death of, 53
Pigs, contagious fever of, specimens of intestine in the, 537
Pike, Mr. the English and their Origin, review, 206
Piper, Dr. L. A. death of, 102
Pirondi et Fabre, Drs. *Etude sur le Choléra*, review, 429
Pirrie and Keith, Drs. Acupressure, review, 428
Placenta prævia, prosecution for a death from, 239
Playfair, Dr. case of sudden death from thrombosis, with report by Dr. Wilks, 455, 536
Plica polonica, the second case of, in England, Dr. Beigel on, 509
Pliocene skull, geological address to a, 271
Pneumonia and empyema after fracture of the ribs, case of, 443
Pneumothorax, traumatic, case of, 224
Poisoning by atropine, immunity of rabbits from, Dr. Ogle on the, 466
by phosphorus, Dr. Habershon on acute, 405
by sulphuric acid, Dr. Crawfurd's case of attempted, 182
Poisoning by distilled tar, case of, 727
suspected, action of Tully *v.* Corrie in a ca of, 718
Pollard, Mr. C. F. death of, 157
Polyandry in India, Dr. Waring on, 345
Polypus, naso-pharyngeal, specimen of, 293
Poole, Dr. on blood as food, 459
Poor, dwellings of the, Dr. Allbutt on the improv ment of the, 666
metropolitan, new Act for the, *vide* Worl house
Law Medical Officers' Association, resolutio on the new Workhouse Act, 268, 323
in France, rural Medical service for the, 464
Population of the world, 303
question in France, M. Guérin on the, 719
Pork, concretions observed in, 323
Porter, Dr. Lithotrity, review, 185
Portsea Board of Guardians, shabby conduct the, 149, 230
Powell, Dr. H. death of, 560
Dr. Lewis, obituary notice of, 212
Mr. D. death of, 213
Pregnancy, fracture of the pelvis in, case of, 74
sickness of, pyroxylic spirit in, 242
Prescribing, unprofessional mode of, 738
Prichard, Mr. J. death of, 406
Prickett, Mr. G. B., death of, 295
Prizes, award of, by the Académie des Sciences 312, 315
by the College of Surgeons, 431
at University College, 540
Prize questions of the Académie des Sciences, 33 of the College of Surgeons, 431, 540
of the Belgian Academy of Medicine, 173, 46 of the Paris Hospital Medical Society, 266
on vaccination and tobacco, 284
the Alexander, 592
Prostate, calculus of the, specimen of, 250
Protoxide of nitrogen as an anæsthetic, 315
Prunus virginiana, Dr. Allbutt on the medicina uses of the, 161, 217
Prurigo senilis, Dr. Hillier's treatment of, 34
Prussian army, losses of the, 173
Psychology, archæological, 337
Puerperal eclampsia, Dr. Hicks on the pathology of, 24
Dr. Suckling's case of, 59
Dr. Donkin on uræmic, 191
inflammation of the shoulder, Dr. Earle's case of acute, 354
Pulse, normal and diseased, Dr. Sanderson on the, 353
Pulverisation of fluids, instruments for the, 564
Pumps, the City, proposed closing of the, 700
Pusey, Dr. on the besetting trial of our boys, 126
vide Boys
Pyæmia, suspected case of, in a boy, 115
prevalence of, in the London Hospital, 312
Pyroxylic spirit in the sickness of pregnancy, 242

Q

Quain's Anatomy, new edition, review, 428
Queen's University in Ireland, application in Chancery respecting the, 457, 708
"Quid rides?" 8

R

Rabbits, rapid multiplication of, 478
immunity of, from poisoning by atropine, Dr. Ogle on the, 466
Races, aptitude of, Mr. Farrar on the, 506
Radcliffe, Mr. on the propagation of cholera by water, 510
reply of, to Dr. Gibbon, 261
Railway accidents, liability of companies for attending their servants in, 458
to children, liability of companies for, 459
discrepancy of Medical evidence on, 431
discussion on Medical evidence on, at the Midland Medical Society, 453
case of renewed compensation for, 717
vide Evidence, Medical
Rainbow, Mr. F. death of, 321
Rain and disease, 715
Ramadge, Dr. F. R. death of, 672
Ranking, Dr. W. H. death of, 636
Reade, Dr. Syphilitic Affections of the Nervous System, review, 724
Rectum, fissure of the, Mr. Cooper on, 65
Registrar-General's Returns, 159, 472, 479
observations on the, 254
Registration of places of study, the Medical Council on the, 617
Reichenhall, the baths of, 502
Respiration, Professor Pettenkofer's views of the physiology of, 9
and circulation, Dr. Richardson on the mechanism and balance of, 110
control of, in relation to wind-instrument playing, 415
artificial, Professor Pacini's mode of inducing, 722
Respiratory therapeutics, M. Sales-Girons on, 286
Reviewing, M. Amadeé Latour on, 104
Reynolds, Dr. Russell, Lumleian lectures of, 342, 364, 420
Rheumatism as a resolving inflammation, Mr. James on, 222

Rheumatism, acute, Dr. Searle on, 460
digitalis in, M. Oulmont on, 448
blister treatment of, cases of, 62
and gout, cases of, 524
Rhinoplasty, sub-periosteal, case of, 524
Mr. Wood's clinical lecture on, 711
Rib, fracture of, followed by pneumonia, case of, 443
Richardson, Dr. B. W. on subsuture Surgical incision, 3
on the balance of the respiratory and circulating mechanism, 110
on diabetic phthisis, 219
on local anæsthesia in Veterinary Medicine, 288
lectures on experimental and practical Medicine, 383, 409, 489, 499, 517, 545
on styptic colloid, 383
on local anæsthesia in relation to Dr. Arnott, 403
on healing by the first intention, 409
on the influence of extreme cold on the nervous system, 489, 517, 545
Poisons of Spreading Diseases, review, 511
Dr. F. H., R.N. death of, 406
Rickets, artificial production of the, specimen of, 455
Ricord, M. election of, as President of the Académie de Médecine, 13
Ringer, Dr. on nightmare in children, 465
Ringworm, Dr. Coster's treatment of, 34
Roberts, Mr. P. N. death of, 25
Robertson, Dr. Alexander, Pathology of Aphasia, review, 156
Dr. T. death of, 379
Rodgers, Professor, on toxicological discrepancies, 70
Rooke, Dr. on the Greenwich Hospital question, 453, 727
Romberg, Professor, jubilee of, 559
Roser, Professor, on the extraction of bullets, 530
Ross, Dr. Charles Emilius, obituary notice of, 100
Assistant-Surgeon J. Tucker, death of, 53
Mr. J. Brown, death of, 379
Rotherham Infirmary, note from the Medical Officers of the, 72, 119
Dispensary, Dr. Foote's letter on the, 119
Routh, Dr. note on the meeting of the Obstetrical Society, 402
Rudall, Dr. on a recent trial at Melbourne, 270
Rumsey, Mr. T. H. death of, 598
Mr. Amendment of the Vaccination Laws and Life Tables, review, 430
Russell, Dr. cases of paralysis from exhaustion of the spinal cord, 550
Dr. J. Rutherfurd, death of, 25
Ryan, Dr. J. death of, 539.

S

Sagar, Mr. on the improvidence of the working classes as to food, 242
Sales-Girons, Dr. on respiratory therapeutics, 286
Salmon, acclimatisation of, in Australia, 450
Salt, Mr. Treatise on Deformities, review, 704
Sanderson, Dr. on the pulse and the sphymograph, 353
Sandwich, Dr. T. death of, 295
Sanitary Act of 1866, review, 180
Sansom, Dr. Arrest and Prevention of Cholera, review, 151
on volatile narcotics, 238
Scapula, excision of the, Dr. Buchanan's case of, 273
Schools, necessity of a reform in the diets of, 269
Scientific careers, Professor Frémy on the encouragement of, 286
Scoresby-Jackson, Dr. death of, 158
Scotland, report on the Vaccination Act in, 554
Scrofula, as a resolving inflammation, Mr. James on, 222
in relation to hereditary syphilis, Mr. Jordan on, 697
Scurvy, prevalence of, in the mercantile marine, 261, 395, 595
Mr. Wrench on an outbreak of, 317
Searle, Dr. case of acute rheumatism, 460
Seasons, influence of, on the health, Dr. Ballard on the, 565
Seaton, Dr. on registration under the Vaccination Act, 535
note on the new Vaccination Bill, 673
Sedgwick, Mr. on carbolic acid in diphtheria, 216
Self, Mr. W. death of, 598
Sewall, Dr. Lucy, on lady Doctors at Boston, 12
Sexual instinct, aberrations of the, 141
Sheldon, John, epitaph of, 350
Sheraton, Dr. on the application of the rotatory fillet, 58
Shillitoe, Mr. on Zittman's method of treating syphilis, 491
Shortt, Dr. on criminal abortion in India, 74
Short-sight, prevalence of, among German students, 459
Shoulder, amputation at the, recurrence of cancer after, case of, 468
malignant tumour of the, case of, 73
acute puerperal inflammation of the, Dr. Searle on, 354
Simon, Mr. experiments of, in the inoculation of tubercle, 346
Simpson, Dr. A. death of, 431
Sir James, Notes on the Progress of Acupressure, review, 511
Skevington, Mr. John, death of, 485
Skey, Mr. Lectures on Hysteria, review, 429
Skin, disease of, cases of, under Dr. Hillier, 34
in Egypt, Dr. Fox on, 111, 165
Skull, fracture of the base of the, with rupture of the carotid, 444
pliocene, geological address to the, 271
types of, in man and woman, 302
Skulls, ancient British, Dr. Thurnam on the two types of, 261, 268
Rev. Canon Greenwell on, 282
Mr. Blake on, 316
note on the discussion on, at the Anthropological Society, 325
Slade, Dr. John, Death of, 132
Small-pox, spread of, prevention of the, 117
Dr. Ballard on the, 104
epidemic of 1866, observations on the, 458, 498
query on the mortality from, 433
in Jamaica, Dr. Miller on the, 441
Smiles, Mr. prosecution of, for reception of a lunatic, 361
Smith, Dr. Abbotts, Hay Fever, review, 429
Dr. J. death of, 726
Mr. Henry, address of, at the London Medical Society, 320
Mr. Stevenson, Pneumonia in Children, review, 101
Smyth, Dr. A. W. and the operation on the subclavian, Sir W. Fergusson on, 260
Mr. J. E. case of large hydrocele, 332
Society, Epidemiological, notices of meetings of the, 297, 510
Ethnological, Transactions of the, vol. v. review, 505
Harveian, notices of meetings of the, 39, 97, 511
committee of the, on syphilis, 296
report of the, on infanticide, 35
Hunterian, notice of meeting of the, 130
London Medical, notices of meetings of the, 65, 131, 238, 456, 538
anniversary of the, 297
address of Mr. H. Smith to the, 320
and the resignation of Mr. Baker Brown, 446
Royal Medical and Chirurgical, notices of meetings of the, 18, 72, 129, 209, 264, 319, 404, 424, 481, 565, 723
anniversary meeting of the, 263
Obstetrical, notices of meetings of the, 24, 74, 183
Mr. Baker Brown's expulsion from the, 252, 336, 356, 366
Pathological, notices of meetings of the, 50, 73, 135, 211, 238, 293, 346, 425, 455, 536
Western Medical and Surgical Society, notices of meetings of the, 241, 486
Solar radiation in relation to crops, 267
Soldiers, question of employment for, 360
improved knapsacks for, 360, 395
liability of to otorrhœa, 448
supply of, in France, Baron Larrey on the, 500
Solly, Mr. on injuries of the diaphragm, 547
Southampton Infirmary, charges of Mr. Scrase against the, 200
Southey, Dr. Gulstonian lectures, abstracts of, 232, 257, 290
Speech, loss of, with right hemiplegia, case of, 155
Spencer, Earl, note of, on the "London Surgical Home," 523
Surgeon G. death of, 132
Mr. Joseph, acquitted for accidental poisoning, 255
Spender, Dr. on hydatid degeneration of the fœtus, 307
Sphygmograph, Dr. Sanderson on the, 353
Dr. Foster on the application of the, 410
Dr. Grimshaw on the employment of, in typhus, 125
cases illustrating the uses of the, 114
Spinal cord, influence of extreme cold on the, Dr. Richardson on, 546
exhaustion of the, paralysis from, Dr. Russell's cases, 550
Spine, dislocation of the cervical, Mr. Hill's case of, 129
trephining the, followed by pyæmia, case of, 195
Spiritus juglandis, employment of, in sickness, 140
Spleen, enlargement of the, specimen of, 73
hypertrophy of the, Dr. Mushet's case of, 275
enlargement of, in syphilis, Dr. Gee on the, 404
and liver, rupture of the, without symptoms, Dr. Fayrer's case of, 522
Splenic cachexia in children, Dr. Gee on, 404
Squire, Mr. attack on, 338
Star on fire, 396
Stark, Dr. doctrine of, on the effects of marriage on mortality criticised, 94, 209, 227
Statham testimonial, the, 133
Stephenson *v.* North-Eastern Railway Company, 431
Stethoscope, an improved, 546
Dr. Thorowgood on the binaural, 671
Stilling, Dr. extra-peritoneal treatment of the pedicle in ovariotomy by, Mr. Wells on the, 2
Stokes, Mr. on the Professional jumble and the remedy, 134
Stomach, ulcer of the, case of, 455
Stone, Dr. W. D. on the scurvy in the mercantile navy, 260
Storer, Professor, refutation of the statements of, by Dr. Lucy Sewall, 12
Stott, Mr. T. B. death of, 598
Strabismus, treatment of, at the Ophthalmic Hospital, 7
neglect of the operation for, in France, 122
Stricture, Mr. Marshall's mode of treating, 33
with extravasation, modern practice in, 251
with encysted calculus, case of, 33
Struthers, Professor, Edinburgh Anatomical School, review, 429
Styptic colloid, Dr. Richardson on the, 383
Subsuture Surgical incision, Dr. Richardson on the, 3
Mr. F. Churchill on the, 95
Suckling, Dr. case of puerperal eclampsia, 59
Suction-curettes, Mr. Greenway on priority in, 78
Sulphuric acid, attempted poisoning by, Dr. Crawford's case of, 182
Sulphurous acid medication, Dr. Dewar on, 492, 548
apparatus for the, 671
Sunderland, letter from, 124
Supra-renal capsules, cancer of the, case of, 293
Surgeons, Royal College of, of England, pass-lists of the, 76, 101, 131, 157, 405, 430, 456, 484, 512, 538, 568, 598
admission of Fellows by the, 671
examination papers of the, 103, 487, 600
anatomical preparations for the examinations at the, 89
award of the Jacksonian prize by the, 431
prize-questions of the, 431, 540
elections into the Council of the, observations on the, 471
Royal College of, of Scotland, pass-lists of the, 430, 539
Surgery, observation in, M. Gosselin on, 150
Master in, and Poor-law appointments, 645
Sutherland, Dr. Alexander, obituary notice of, 149
Swim, Dr. D. E. death of, 347
Symons, Mr. on British rainfall, 716
Syphilis, operation of the Contagious Diseases Act with respect to, 36, 86, 311
Committee of the Harveian Society on the prevention of, 296
and primogeniture, 459
as observed in different countries, M. Lagneau on, 121
conveyed by vaccination, M. Depaul on cases of, 231
hereditary inflammation of bone in, Mr. Jordan on, 274, 304
relation of hereditary, to struma and to acquired syphilis, Mr. Jordan on, 697
disease of the brain in, case of, 389
disease of internal organs in specimens of, 52
of the liver in, specimen of, 211
enlargement of the spleen in, Dr. Gee on, 404
tertiary, sore on the penis from, case of, 61
Zittmann's treatment in, Mr. Shillitoe on, 491

T

Tait, Mr. note on acupressure, 332
Tallent, Mr. E death of, 76
Tancred charities, award concerning the, 513
Tar, distilled, poisoning by, Dr. Watmough's case of, 727
Tardieu, Prof. on science and practice, 42
Taylor, Professor Alfred, on a case of suspected poisoning by veratria, 17
on the detection of alkaloids, 50
Dr. R. B. on general paralysis from a blister, 487
Dr. James, death of, 598
Mr. Henry, case of multiple congenital deformity, 300
Teale, Mr. on the enucleation of nævus, 264
Temperature, influence of, on health and mortality, Dr. Ballard on the, 565
Dr. Lombard on the, 634
animal, M. Peter's researches on, 362
Temperley, Mr. G. death of, 406
Testis, swollen, treated by puncture and compression, 390
cystic disease of the, specimen of, 51
hard cancer of the, specimen of, 73
inflammatory infiltration of the, specimen of, 73
Tetanus, traumatic, subcutaneous injection of sedatives in, 277
Therapeutical Society, establishment of a, at Paris, 285
Thermometers, short clinical, Dr. Allbutt on, 182, 516
Thermoterion, Bevan and Fleming's, 101
Thomas's (St.) Hospital, cases treated at, 62, 166, 389
Thompson, Dr. Symes, on milk diet, 238
Mr. F. F. death of, 76
Surgeon-Major M. death of, 431

Thorowgood, Dr. on prognosis in disease of the heart, 486
on the binaural stethoscope, 671
Thring, Rev. Edmund, on the besetting trial of our boys, 49
Thrombosis, sudden death from, Dr. Playfair's case of, 455
Dr. Wilks' report on Dr. Playfair's case of, 536
Thurnam, Dr. on two types of ancient British skulls, 261, 268
Thymus, enlarged, specimen of, 293
Thyroid, cyst of the, iodine injection in case of, 193
Tiger, operation on the claws of a, 271
Tinsley, Mr. N. W. death of, 406
Tofts, Dr. and the Guildford guardians, 229, 556, 560
Tongue, congenital hypertrophy of the, case of, 470
cancer at the base of the, specimen of, 74
paralysis of one side of the, from cancer of the hypoglossal, 140
tumour under the, Mr. Brady's case of, 386
excision of a lateral half of the, case of, 273
Tracheotomy, new instruments for, 507
Traer, Mr. J. R. death of, 513
Trench, Dr. report on health of Liverpool, observations on, 308, 311
Trichiniasis, Dr. Letheby on, 22
Trousseau, Prof. Clinical Medicine, by Bazire, review, 343
obituary notice of, 721
Tubercle, what is it 414
Dr. Southey's Gulstonian Lectures on, 232, 257, 290
Dr. Andrew Clark's Croonian Lectures on, 291, 313, 399
Dr. Dobell on, review, 123
Dr. Richard Dawson on, 425
inoculation of, Mr. Simon's experiments on the, 346
Dr. Andrew Clark on the, 346, 399, 426
Dr. MacCormac on the, 351
Tubercular meningitis, specimen of, 347
the pulse and temperature in, 388
the thermometer in the diagnosis of, 524
Tully *v.* Corrie, 718
Tumour, fibro-plastic, specimen of, 426
malignant, of the shoulder, case of, 73
large congenital, from the mouth, specimen of, 347
sublingual, Mr. Brady's case of, 386
Tumours, fatty multiple, cases of, 426
removal of, by the subsuture incision, Dr. Richardson on the, 3
injection of, with pepsine, Prof. Thiersch on, 312
electrolytic treatment of, Dr. Althaus on the, 131, 526
Turner, Mr. Convolutions of the Cerebrum, review, 13
elected Professor of Anatomy, 481
testimonial to, 381
Dr. on the attitude of the drowned, 133
Daniel, lines by, 299
Tylor, Mr. on archæological psychology, 327
Typhoid fever, double attack of, case of, 138
diagnosed from tubercular meningitis by the thermometer, 524
diarrhœa of, difference of opinion on the, 323
Dr. Downie on laxatives in the, 509
Typhus, clinical observations on, Dr. Murchison's, 493
employment of the sphygmograph in, Dr. Grimshaw on the, 125
the pulse and temperature in, cases illustrative of the, 388
cerebro-spinal, in Ireland, *vide* Ireland
Tyrrell, Mr. on strychnia in epilepsy, 519

U

Ulcer, sloughing, treatment of, by bromine, 33
Ulceration, opium in, Professor Fayrer on, 585
United States, rate of mortality in the, 297
army of the, report on the Medical department of the, 230
Universities, the British, dates of foundation of the, 542
representation of, 552
Medical education at the, *vide* Education
Scottish, candidates for representing the, 701
University College, distribution of prizes at, 540
controversy at, on the election of a Professor of Mental Philosophy, 146
University College, cases treated at the Hospital of, 32, 114
Urea, excretion of, Dr. Parkes on the, 393
Urethrotomy without a conductor, M. Demarquay on, 255
Uterus, epithelioma of the cervix of the, specimen of, 184

V

Vaccination, protective power of, Dr. Paget on the, 397
in Scotland, report on, 554
and revaccination, M. Danet's report on, 201
"animal," report of the Académie de Médecine in favour of, 419
Bill compared with the Act of 1853, 496
progress of, in the House of Commons, 699
resolutions of the British Medical Association on the, 631
mode of rewarding vaccinators by the, 717
registration under, Dr. Seaton on, 535, 673
reply to Dr. Seaton's observations on, 589
Dr. Gibbon on, 597, 673
Vaccine lymph, Dr. Pissin on the transmission of, 458
transmission of syphilis by means of, M. Depaul's report on, 231
infection by, through the air-passages, M. Chauveau's experiments on the, 201
Varicose veins, Mr. Marshall's treatment of, 33
Varus, congenital, case of, 85
Venous cyst, specimen of, 239
Veratria, poisoning by, Mr. Borham on a supposed case of, 128
testing for, Professors Taylor and Rodgers on, 17, 50, 70
Vise, Mr. C. death of, 53
Vital force, Mr. Hinton on Dr. Beale's doctrine of, 177
Vivisections, opposition to, at New York, 397
Voltolini, *Anwendung der Galvanokaustik*, review, 314

W

Wake, Dr. on position in protracted labour, 542
Walker *versus* Great Western Railway, 458
Walnut leaves, spirit of, in sickness, 140
Walton, Mr. on the procedure when one eye is blind, 109
Ward, Mr. J. death of, 379
Surgeon J. R. death of, 636
Mr. Joseph, death of, 726
Waring, Dr. on an outbreak of cholera on board ship, 480
on polyandry in India, 345
Warrington, outbreak of fever at, 44
Water and wells, impurities of, Dr. Hill on the, 234
Waters, metropolitan, composition and quality of the, 27, 159, 298, 407, 514, 700, 708
Watmough, Dr. case of poisoning by distilled tar, 727
Watson, Dr. of Derby, death of, 381
Weather, influence of, on the public health, Dr. Ballard on the, 565
Weights and measures, absurd, in England, 323
Wells, Dr. Soelberg, lectures on cataract, 29, 81, 135, 189, 301, 327
Mr. Spencer, a year's progress in ovariotomy, 2
Westcote, Mr. T. death of, 569
Western Medical and Surgical Society, notices of meetings of the, 241, 486
Whately, Mr. T. death of, 485
White, Inspector-General B death of, 706
Wight *versus* Wight and Field, 338
Williams, Dr. James, on the Medical Acts Amendment Bill, 324
Dr. Wynn, on diphtheria, 184
Wilson, Mr. Erasmus, Diseases of the Skin, 6th edition, review, 484
Dr. J. death of, 76
Mr. J. A. death of, 485
Wilton, Mr. J. W. death of, 598
Wind-instrument playing and controlled respiration, 415
Wine, further notes on, 45, 68, 122
and beer compared, 122
Winslow, Dr. on motiveless crime, 339
Influence of Light, review, 724
Woman, superiority of man to, Professor Vogt on the, 298
Women as naval and military Surgeons, 270
Wood, Dr. Chemical Notes, review, 511
Mr. Clinical Lecture on Rhinoplasty, 711
Woodfall, Dr. of Maidstone, obituary notice of, 512
Woodfield, Dr. A. H. death of, 157
Woolmer, Mr. S. E. death of, 726
Workhouses, metropolitan, provisions of Mr. Hardy's Bill for the sick poor in the, 171, 174, 199, 287
Mr. Griffin on the new Bill for the, 262
the Poor-law Medical Officers' Association on the new Bill for the, 268, 323
new rules and regulations concerning the, 553
improvements in the condition of the, 280
new dietary for the, Dr. E. Smith on a, 531
new Board of Managers under the new Act for the, 718
Wormald, Mr. lines on, 382
testimonial to, 514
Worthington, Mr. on a Pavilion Hospital, review, 484
Wounds, healing of, by the first intention, Dr. Richardson on, 409
gunshot, *vide* Gunshot
Wray, Dr. on blood as food, 407, 433
Wrench, Mr. on an outbreak of scurvy, 317
Wright, Dr. Medical Students of the Period, review, 185
Wurtz, Professor, Introduction to Chemical Philosophy, by Crookes, review, 429

Y

Yellow fever, outbreak of, in the Mauritius, 541 592, 719
on board the *La Plata*, at Southampton, 102
and quarantine, Dr. Milroy on, 147

LIST OF ILLUSTRATIONS.

1. Alterations in the Intestinal Villi in Cholera, 2
2. Dr. Richardson's Subsuture Surgical Incision, 4
3. Peripheral Nerve Apparatus, 55
4. Linear Extraction of Cataract, 81
5. Mr. F. Churchill's Hook and Eye Suture, 96
6. Nerve-trunks and Nerve-fibres, 107
7. Messrs. Bowman and Critchett's Cataract-scoops, 136
8. Central Nervous Apparatus, 163
9. Diagram of Meteoric Streams, 164
10. Professor v. Graefe's Instrument for Modified Linear Extraction of Cataract, 189
11. Ozone Curves during Cholera, 248
12. Japanese Warm Bath, 249
13. Ancient British Crania, 282
14. Mr. Bowman's Fine-stop Cataract Needle, 302
15. Artificial Pupil in Cataract, 327
16. Operation for Secondary Cataract, 329
17. Mr. Little's Apparatus for Introducing Fluids into the Veins by Gravity, 355
18. Dr. Foster's Sphygmographic Tracings, 411
19. Professor Haughton's Cholera Map of Ireland, 440
20. New Tracheotomy Instruments in the Paris Exhibition, 507
21. Tube for Dilating the Windpipe, 563
22. Forceps for Laryngeal Tumours, 563
23. M. Guersant's Tongue-depressor and Fauces-irrigator, 563
24. Instruments for the Pulverisation of Fluids at the Paris Exhibition, 564
25. Dr. Dewar's Instrument for Sulphurous Spray, 671
26—28. The Operation of Rhinoplasty, 711
29. Mortality Curves of Cholera, 714

LIST OF ERRATA.

Page 41, col. 2, line 12, *for* "Goodwood," *read* "Girdwood."
Page 85, col. 2, line 27, omit the words "followed by tetanus."
Page 324, col. 2, line 4 from bottom, *for* "dolichocephalic," *read* "brachycephalic."
Page 402, col. 1, line 8 from bottom, *for* "17 per cent." *read* "27·86 per cent."
Page 573, col. 2, line 4 from bottom, *for* "Sieveking," *read* "De Mussey," and *for* "Farre," *read* "Brown-Séquard."
Page 584, col. 1, line 19, *for* "extravasation," *read* "exacerbation." Ibid. line 22, *for* "Underwood," *read* "Andrew Wood."
Page 599, col. 1, line 21, *for* "reverend," *read* "revered."

END OF VOLUME I., 1867.

WELLCOME LIBRARY INSTITUTE
GUY'S HOSPITAL RADFORD LIBRARY MANCHESTER

LONDON:
PRINTED BY BENJAMIN PARDON, LOVELL'S-COURT, PATERNOSTER-ROW.